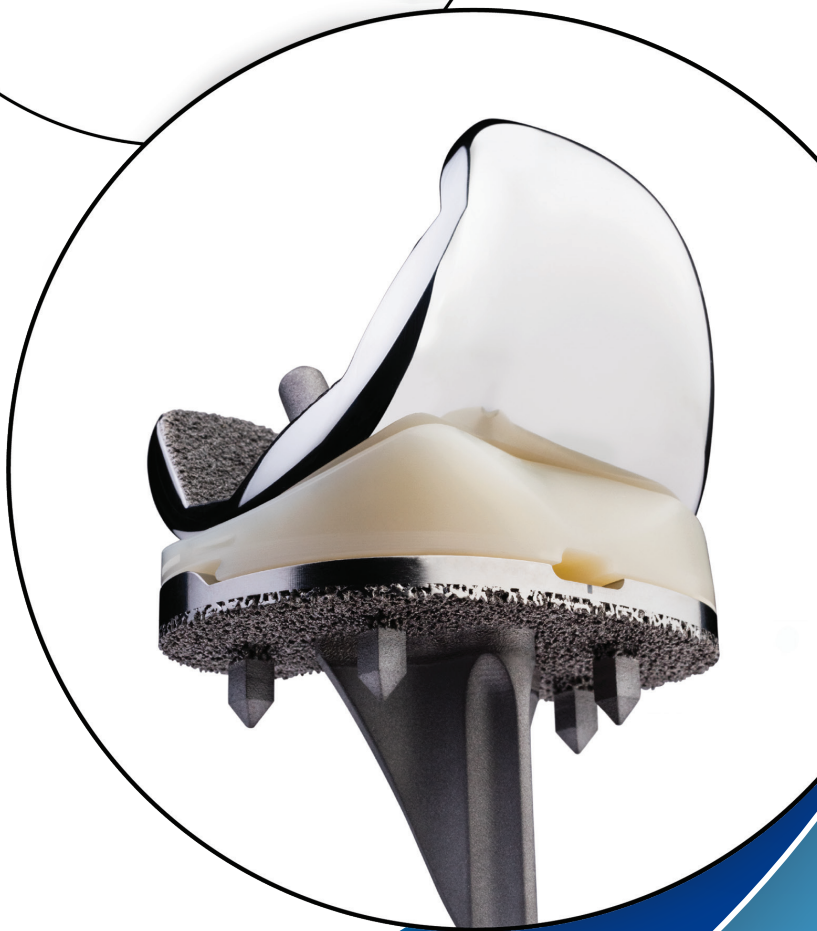


ZIMMER BIOMET

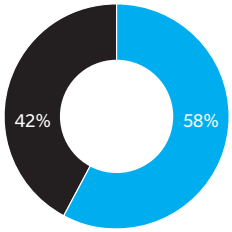
Moving You Forward.™

ANNUAL REPORT 2022

ZIMMER BIOMET HOLDINGS, INC.

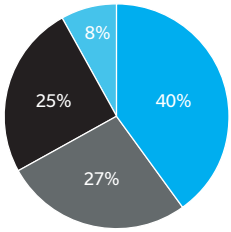
Financial Highlights* (Dollars in millions except per share amounts)

Sales by Geography



	2020	2021	2022	% Change 2021-2022 Reported	% Change 2021-2022 Constant Currency[1]
United States	$3,508	$3,854	$4,012	4%	4%
International	2,620	2,973	2,928	(2%)	10%
Consolidated	$6,128	$6,827	$6,940	2%	7%

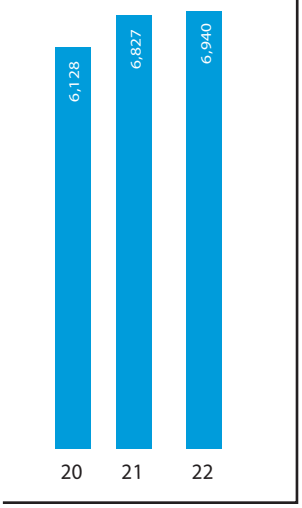
Sales by Product Category



	2020	2021	2022	% Change 2021-2022 Reported	% Change 2021-2022 Constant Currency[1]
Knees	$2,378	$2,648	$2,778	5%	10%
Hips	1,751	1,856	1,895	2%	8%
S.E.T.	1,526	1,728	1,697	(2%)	2%
Other	473	595	570	(4%)	1%
Consolidated	$6,128	$6,827	$6,940	2%	7%

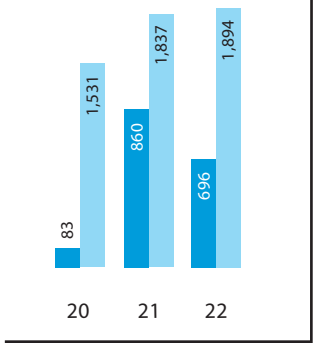
Net Sales

Zimmer Biomet recorded net sales of $6.940 billion in 2022, our net sales increased by 1.6% compared to 2021 primarily due to recovery in surgical procedures as COVID-19 cases subsided, partially offset by the negative impacts of changes in foreign currency exchanges rates on International sales.



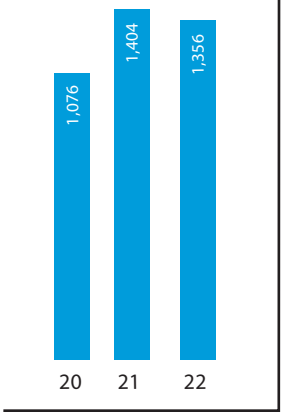
Operating Profit

Our 2022 reported operating profit declined primarily due to a goodwill impairment charge of $289.8 million related to our EMEA reporting unit. Our 2022 adjusted operating profit improved from 2021 primarily due to the recovery of elective surgical procedures as COVID-19 cases subsided.



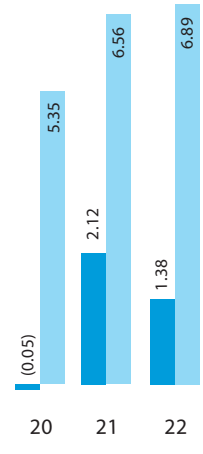
Operating Cash Flow

The decrease in cash flow from operating activities in 2022 from 2021 was primarily the result of higher tax and restructuring-related payments.



Diluted Earnings (Loss) per Share

Reported diluted earnings (loss) per share declined in 2022 primarily due to a goodwill impairment charge of $289.8 million related to our EMEA reporting unit. Adjusted diluted earnings (loss) per share improved in 2022 primarily due to the recovery of elective surgical procedures as COVID-19 cases subsided.



GRAPH KEY Reported Adjusted[2]

(1) "Constant Currency" refers to changes in sales resulting from translating current and prior-period sales at the same predetermined foreign currency exchange rate. The translated results are then used to determine year-over-year percentage increases or decreases that exclude the effect of changes in foreign currency exchange rates. See the reconciliation of this non-GAAP financial measure to the most directly comparable GAAP measure on page 87.

(2) "Adjusted" refers to performance measures that exclude the effects of inventory step-up; certain inventory and manufacturing-related charges, including charges to discontinue certain product lines; intangible asset amortization; goodwill and intangible asset impairment, as applicable; quality remediation expenses; restructuring and other cost reduction initiatives; acquisition, integration, divestiture and related expenses; certain litigation gains and charges; expenses to establish initial compliance with the European Union Medical Device Regulation; other charges; loss on early extinguishment of debt; any related effects on our income tax provision associated with these items; the effect of Swiss tax reform; the effect of U.S. tax reform; other certain tax adjustments; and, with respect to earnings per share information, provide for the effect of dilutive shares assuming net earnings in periods of a reported net loss. See the reconciliations of these non-GAAP financial measures to the most directly comparable GAAP measures on pages 84-86.

*All historical information is presented on a continuing operations basis.

To Our Shareholders,

In 2022, the Zimmer Biomet team remained intensely focused on serving our customers and their patients and creating value for our shareholders. This was against the backdrop of another year impacted by the global pandemic, as well as broader economic headwinds such as inflation, unfavorable foreign currency exchange rates and supply chain challenges.

I am extremely proud to report that we continued to execute our corporate strategy, made great progress in the ongoing transformation of our business and further strengthened our position as a leading global MedTech innovator.

I want to thank all of our Zimmer Biomet team members for demonstrating incredible resilience, innovative thinking and dedication to getting the job done throughout 2022. Our exceptional team is the engine driving us forward and we are very honored to be on this journey together.

Key Achievements in 2022

Zimmer Biomet continued to drive innovation across the patient journey in 2022. Our "innovation flywheel" is spinning and as we develop – or acquire – and launch a steady cadence of new products and technologies into the marketplace, we're seeing our business momentum build and our Vitality Index continue to grow.

Highlights of Zimmer Biomet's 2022 accomplishments include:

- **Innovative, Enabling Technologies and Solutions:** Zimmer Biomet executed multiple product launches, including the WalkAI™ artificial intelligence model for mymobility® digital care management platform, the Omni™ Suite Intelligent Operating Room and the Identity™ Shoulder system, and we received regulatory clearance of the Persona® OsseoTi® Keel Tibia, our new cementless knee offering.
- **Active Portfolio Management:** We successfully completed the spinoff of our Dental and Spine businesses ahead of schedule on March 1, 2022, enabling the Company to focus more fully on our prioritized strategic growth areas. We also acquired differentiated technologies and products through several exciting business development transactions.
- **Navigating the Macroeconomic Landscape and the Global Pandemic:** Global companies like us faced challenges around inflationary pressures, supply chain disruption and unfavorable foreign currency exchange rates in 2022, but Zimmer Biomet was able to navigate these headwinds and mitigate their impact on our business. For example, our continued commitment to supply chain optimization and efficiency helped us adapt to and manage a variety of challenges to be able to deliver products to our customers and their patients. Additionally, while we saw fewer COVID-19 cases in 2022 than in 2021, the global pandemic still caused surgical procedure cancellations and customer staffing shortages that affected our business. Our team remained vigilant around safety and addressed those challenges through continued strong execution–which we believe puts Zimmer Biomet in a favorable position as we enter 2023.

- **Team Member Engagement and Our Commitment to Good Corporate Citizenship:** Zimmer Biomet continued to focus on engaging our team members and building a Best and Preferred Place to Work. In fact, in 2022, the Company was certified as a Great Place to Work®[1] in the United States based on achieving key criteria and the direct feedback of our team members. We also established a corporate function responsible for building and executing against a comprehensive Environmental, Social and Governance (ESG) strategy for Zimmer Biomet. We are dedicated to being a Trusted Partner to our key stakeholders and a responsible corporate citizen, and we take these genuine commitments seriously. You can learn more about how Zimmer Biomet is delivering on these commitments in our annual Sustainability Report.

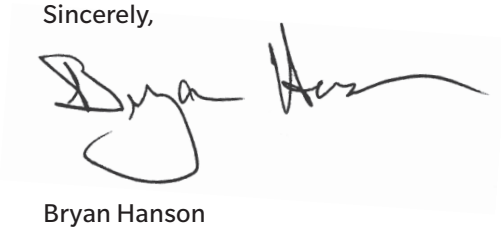
Our notable progress in 2022 was further evidenced by Zimmer Biomet delivering Total Shareholder Return in the top 25% of our defined peer group.[2] In addition, the Company received several external recognitions during the year, including being named one of *Fast Company's* Most Innovative Companies for 2022, one of America's Best Large Employers as well as Best Employer for Diversity by *Forbes Magazine* 2022, and a 2022 China Top Employer Award winner.

The Year Ahead: Moving Our Mission Forward in 2023

I continue to remain highly confident in the Zimmer Biomet team and our business momentum. While some macroeconomic and market challenges remain, we believe in our ability to navigate them successfully and that our strategy is working. The transformation of our business is well underway, and I am excited about the value we can deliver to our customers and create for our shareholders.

On behalf of all of us at Zimmer Biomet, I thank you for your support. I look forward to continuing to share our progress with you as we move forward.

Sincerely,



Bryan Hanson
Chairman, President and CEO, Zimmer Biomet

Leadership (As of March 3, 2023)

Board of Directors

Christopher B. Begley
Lead Independent Director of Zimmer Biomet Holdings, Inc. and Retired Executive Chairman and Chief Executive Officer, Hospira, Inc.

Betsy J. Bernard
Retired President, AT&T Corp.

Michael J. Farrell
Chief Executive Officer, ResMed Inc.

Robert A. Hagemann
Retired Senior Vice President and Chief Financial Officer, Quest Diagnostics Incorporated

Bryan Hanson
Chairman of the Board, President and Chief Executive Officer, Zimmer Biomet Holdings, Inc.

Arthur J. Higgins
Operating Advisor to Abu Dhabi Investment Authority

Maria Teresa Hilado
Retired Executive Vice President and Chief Financial Officer, Allergan plc

Syed Jafry
Retired Senior Vice President and President, Regions, Thermo Fisher Scientific, Inc.

Sreelakshmi Kolli
Executive Vice President and Chief Digital Officer, Align Technology, Inc.

Michael W. Michelson
Retired Senior Advisory Partner, KKR Management LLC, the general partner of KKR & Co. L.P.

Management Team

Bryan Hanson
Chairman of the Board, President and Chief Executive Officer, Zimmer Biomet Holdings, Inc.

Rachel Ellingson
Senior Vice President, Chief Strategy Officer

David Kunz
Senior Vice President, Global Quality and Regulatory Affairs

Angela Main
Senior Vice President, Global Chief Compliance Officer and Associate General Counsel, Asia Pacific

Keri Mattox
Senior Vice President, Chief Communications and Administration Officer

Chad Phipps
Senior Vice President, General Counsel and Secretary

Paul Stellato
Vice President, Controller and Chief Accounting Officer

Zeeshan Tariq
Senior Vice President, Chief Information Officer

Ivan Tornos
Chief Operating Officer

Kenneth Tripp
Senior Vice President, Global Operations and Logistics

Suketu Upadhyay
Executive Vice President, Chief Financial Officer

Lori Winkler
Senior Vice President, Chief Human Resources Officer

Sang Yi
President, Asia Pacific

Wilfred van Zuilen
President, Europe, Middle East and Africa

Forward-Looking Statements

This 2022 Annual Report includes forward-looking statements that are subject to significant risks, uncertainties and changes in circumstances that could cause actual results to differ materially from the forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements" immediately following the cover page of our Annual Report on Form 10-K included herein.

1 Certified by Great Place to Work®

2 Consisting of Agilent Technologies, Inc.; Align Technology, Inc.; Baxter International Inc.; Becton, Dickinson and Company; Boston Scientific Corporation; DexCom, Inc.; Edwards Lifesciences Corporation; Hologic, Inc.; Intuitive Surgical, Inc.; Laboratory Corporation of America Holdings; Quest Diagnostics Incorporated; Stryker Corporation; TELEFLEX Incorporated; and The Cooper Companies.

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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 year ended December 31, 2022
Commission file number 001-16407

ZIMMER BIOMET HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**13-4151777**
(State of Incorporation)	*(IRS Employer Identification No.)*
345 East Main Street Warsaw, Indiana	**46580**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(574) 373-3121**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	ZBH	New York Stock Exchange
2.425% Notes due 2026	ZBH 26	New York Stock Exchange
1.164% Notes due 2027	ZBH 27	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 checkmark 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. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of shares held by non-affiliates was $22,002,934,091 (based on the closing price of these shares on the New York Stock Exchange on June 30, 2022 and assuming solely for the purpose of this calculation that all directors and executive officers of the registrant are "affiliates"). As of February 7, 2023, 208,980,256 shares of the registrant's $.01 par value common stock were outstanding.

Documents Incorporated by Reference

Document	**Form 10-K**
Portions of the Proxy Statement with respect to the 2023 Annual Meeting of Stockholders	Part III

Cautionary Note Regarding Forward-Looking Statements

This Annual Report contains forward-looking statements within the meaning of federal securities laws, including, among others, statements regarding sales and earnings guidance and any statements about our expectations, plans, intentions, strategies or prospects. We generally use the words "may," "will," "expects," "believes," "anticipates," "plans," "estimates," "projects," "assumes," "guides," "targets," "forecasts," "sees," "seeks," "should," "could," "would," "predicts," "potential," "strategy," "future," "opportunity," "work toward," "intends," "guidance," "confidence," "positioned," "design," "strive," "continue," "look forward to" and similar expressions to identify forward-looking statements. All statements other than statements of historical or current fact are, or may be deemed to be, forward-looking statements. Such statements are based upon the current beliefs, expectations and assumptions of management and are subject to significant risks, uncertainties and changes in circumstances that could cause actual outcomes and results to differ materially from the forward-looking statements. These risks, uncertainties and changes in circumstances include, but are not limited to: the effects of business disruptions such as the COVID-19 pandemic, either alone or in combination with other risks on our business and operations; the risks and uncertainties related to our ability to successfully execute our restructuring plans; control of costs and expenses; our ability to attract, retain and develop the highly skilled employees, senior management, independent agents and distributors we need to support our business; the possibility that the anticipated synergies and other benefits from mergers and acquisitions will not be realized, or will not be realized within the expected time periods; the risks and uncertainties related to our ability to successfully integrate the operations, products, employees and distributors of acquired companies; the effect of the potential disruption of management's attention from ongoing business operations due to integration matters related to mergers and acquisitions; the effect of mergers and acquisitions on our relationships with customers, suppliers and lenders and on our operating results and businesses generally; the ability to form and implement alliances; dependence on a limited number of suppliers for key raw materials and other inputs and for outsourced activities; the risk of disruptions in the supply of materials and components used in manufacturing or sterilizing our products; supply and prices of raw materials and products; breaches or failures of our information technology systems or products, including by cyberattack, unauthorized access or theft; challenges relating to changes in and compliance with governmental laws and regulations affecting our U.S. and international businesses, including regulations of the U.S. Food and Drug Administration ("FDA") and foreign government regulators, such as more stringent requirements for regulatory clearance of products; the outcome of government investigations; dependence on new product development, technological advances and innovation; shifts in the product category or regional sales mix of our products and services; competition; pricing pressures; changes in customer demand for our products and services caused by demographic changes or other factors; the impact of healthcare reform and cost containment measures, including efforts sponsored by government agencies, legislative bodies, the private sector and healthcare purchasing organizations, through reductions in reimbursement levels and otherwise; the impact of substantial indebtedness on our ability to service our debt obligations and/or refinance amounts outstanding under our debt obligations at maturity on terms favorable to us, or at all; changes in tax obligations arising from examinations by tax authorities and from changes in tax laws in jurisdictions where we do business, including those expected to occur as a result of the "base erosion and profit shifting" project undertaken by the Organisation for Economic Co-operation and Development and otherwise; challenges to the tax-free nature of the ZimVie Inc. ("ZimVie") spinoff transaction and the subsequent liquidation of our retained interest in ZimVie; the risk of additional tax liability due to the recategorization of our independent agents and distributors to employees; the risk that material impairment of the carrying value of our intangible assets, including goodwill, could negatively affect our operating results; changes in general domestic and international economic conditions, including interest rate and currency exchange rate fluctuations; changes in general industry and market conditions, including domestic and international growth, inflation and currency exchange rates; the domestic and international business impact of political, social and economic instability, tariffs, trade restrictions and embargoes, sanctions, wars, disputes and other conflicts, including on our ability to operate in, export from or collect accounts receivable in affected countries; challenges relating to changes in and compliance with governmental laws and regulations affecting our U.S. and international businesses, including regulations of the FDA and foreign government regulators relating to medical products, healthcare fraud and abuse laws and data privacy and security laws; the success of our quality and operational excellence initiatives; the ability to remediate matters identified in inspectional observations or warning letters issued by the FDA and other regulators, while continuing to satisfy the demand for our products; product liability, intellectual property and commercial litigation losses; and the ability to obtain and maintain adequate intellectual property protection.

See also the section titled "Risk Factors" (refer to Part I, Item 1A of this report) for further discussion of certain risks and uncertainties that could cause actual results and events to differ materially from the forward-looking statements. Readers of this report are cautioned not to rely on these forward-looking statements, since there can be no assurance that these forward-looking statements will prove to be accurate. Forward-looking statements speak only as of the date they are made, and we expressly disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. This cautionary note is applicable to all forward-looking statements contained in this report.

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Item 1. **Business**

Overview

Zimmer Biomet is a global medical technology leader with a comprehensive portfolio designed to maximize mobility and improve health. We design, manufacture and market orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; craniomaxillofacial and thoracic ("CMFT") products; surgical products; and a suite of integrated digital and robotic technologies that leverage data, data analytics and artificial intelligence. We collaborate with healthcare professionals around the globe to advance the pace of innovation. Our products and solutions help treat patients suffering from disorders of, or injuries to, bones, joints or supporting soft tissues. Together with healthcare professionals, we help millions of people live better lives. In this report, "Zimmer Biomet," "we," "us," "our," "the Company" and similar words refer collectively to Zimmer Biomet Holdings, Inc. and its subsidiaries. "Zimmer Biomet Holdings" refers to the parent company only.

Zimmer Biomet Holdings was incorporated in Delaware in 2001. Our history dates to 1927, when Zimmer Manufacturing Company, a predecessor, was founded in Warsaw, Indiana. On August 6, 2001, we were spun off from our former parent and became an independent public company. In 2015, we acquired LVB Acquisition, Inc. ("LVB"), the parent company of Biomet, Inc. ("Biomet"), and LVB and Biomet became our wholly-owned subsidiaries. In connection with the merger, we changed our name from Zimmer Holdings, Inc. to Zimmer Biomet Holdings, Inc.

On March 1, 2022, we completed the spinoff of our spine and dental businesses into a new public company, ZimVie Inc. ("ZimVie"). The transaction was intended to benefit our stockholders by enhancing the focus of both Zimmer Biomet and ZimVie to meet the needs of patients and customers and, therefore, achieve faster growth and deliver greater value for all stakeholders.

Customers, Sales and Marketing

Our primary customers include orthopedic surgeons, neurosurgeons, and other specialists, hospitals, stocking distributors, healthcare dealers and, in their capacity as agents, healthcare purchasing organizations or buying groups. These customers range from large multinational enterprises to independent clinicians.

We market and sell products through two principal channels: 1) direct to healthcare institutions, such as hospitals and ambulatory surgery centers, referred to as direct channel accounts; and 2) through stocking distributors and healthcare dealers. With direct channel accounts and some healthcare dealers, inventory is generally consigned to sales agents or customers. With sales to stocking distributors, some healthcare dealers and some hospitals, title to product passes upon shipment. Consignment sales represented approximately 85 percent of our net sales in 2022. No individual customer accounted for more than 1 percent of our net sales for 2022.

We stock inventory in our warehouse facilities and retain title to consigned inventory in an effort to have sufficient quantities available when products are 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.

We also carry trade accounts receivable balances based on credit terms that are generally consistent with local market practices.

We utilize a network of sales associates, sales managers and support personnel, some of whom are employed or contracted by independent distributors and sales agencies. We invest a significant amount of time and expense in training sales associates in how to use specific products and how to best inform surgeons of product features and uses. Sales force representatives must have strong technical selling skills and medical education to provide technical support for surgeons.

In response to the different healthcare systems throughout the world, our sales and marketing strategies and organizational structures differ by region. We utilize a global approach to sales force training, marketing and medical education to provide consistent, high quality service. Additionally, we keep current with key surgical developments and other issues related to orthopedic surgeons, neurosurgeons, other specialists, and the medical procedures they perform.

We allocate resources to achieve our operating profit goals through three regional operating segments. Our operating segments are comprised of the Americas; Europe, Middle East and Africa ("EMEA"); and Asia Pacific. The following is a summary of our operating segments. See Note 19 to our consolidated financial statements for more information regarding our segments.

Americas. The Americas operating segment is our largest operating segment. This segment is comprised principally of the U.S. and includes other North, Central and South American markets. This segment also includes research, development engineering, medical education and brand management for our product category headquarter locations. The U.S. accounts for approximately 95 percent of net sales in this region. The U.S. sales force consists of a combination of employees and independent sales agents, most of whom sell products exclusively for Zimmer Biomet. The sales force in the U.S. receives a commission on product sales and is responsible for many operating decisions and costs.

In this region, we contract with group purchasing organizations and managed care accounts and have promoted unit growth by offering volume discounts to customer healthcare institutions within a specified group. Generally, we are designated as one of several preferred purchasing sources for specified products, although members are not obligated to purchase our products. Contracts with group purchasing organizations generally have a term of three years, with extensions as warranted.

EMEA. The EMEA operating segment is our second largest operating segment. France, Germany, Italy, Spain and the United Kingdom (the "UK") collectively account for approximately 55 percent of net sales in the region. This segment also includes other key markets, including Switzerland, Benelux, Nordic, Central and Eastern Europe, the Middle East and Africa. Our sales force in this segment is comprised of direct sales associates, commissioned agents, independent distributors and sales support personnel. In most European countries, healthcare is sponsored by the government and therefore government budgets impact healthcare spending, which can affect our sales in this segment.

Asia Pacific. The Asia Pacific operating segment includes key markets such as Japan, China, Australia, New Zealand, Korea, Taiwan, India, Thailand, Singapore, Hong Kong and Malaysia. Japan is the largest market within this segment, accounting for approximately 50 percent of the region's sales. In Japan and most countries in the Asia Pacific region, we maintain a network of dealers, who act as order agents on behalf of hospitals in the region, and sales associates, who build and maintain relationships with orthopedic surgeons and neurosurgeons in their markets. The knowledge and skills of these sales associates play a critical role in providing service, product information and support to surgeons. In certain countries of this region, healthcare is sponsored by governments. Most notably, in 2021 the Chinese government began to implement a nationwide volume-based procurement ("VBP") process across certain of our product categories that negatively affected our net sales due to distributor inventory reductions, ongoing pricing negotiations with distributor partners, revaluation of channel inventory and volume reductions as patients deferred procedures until after VBP pricing became effective in 2022.

Seasonality

Our business is seasonal in nature to some extent, as many of our products are used in elective procedures, which typically decline during the summer months and can increase at the end of the year once annual deductibles have been met on health insurance plans. Additionally, with sales to customers where title to product passes upon shipment, these customers may purchase items in large quantities if incentives are offered or if there are new product offerings in a market, which could cause period-to-period differences in sales. Due to the COVID-19 global pandemic, typical seasonal patterns were disrupted in 2020 and 2021, but started to return to normal in 2022.

Distribution

We distribute our products both through large, centralized warehouses and through smaller, market specific facilities, depending on the needs of the market. We maintain large, centralized warehouses in the U.S. and Europe to be able to efficiently distribute our products to customers in those regions. In addition to these centralized warehouses, we maintain smaller distribution facilities in the U.S. and in each of the countries where we have a direct sales presence. In many locations, our inventory is consigned to the healthcare institution.

We generally ship our orders via expedited courier. Since most of our sales occur at the time of an elective procedure, we generally do not have firm orders.

Products

Our products include orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; CMFT products; surgical products; and a suite of integrated digital and robotic technologies.

KNEES

Total knee replacement surgeries typically include a femoral component, a patella (knee cap), a tibial tray and an articular surface (placed on the tibial tray). Knee replacement surgeries include first-time, or primary, joint replacement procedures and revision procedures for the replacement, repair or enhancement of an implant or component from a previous procedure. There are also procedures for partial reconstruction of the knee, which treat limited knee degeneration and involve the replacement of only one side, or compartment, of the knee with a unicompartmental knee prosthesis. Our significant knee brands include the Persona® Knee, NexGen® Knee Implants, Vanguard® Knee, and Oxford® Partial Knee. Additionally, our ROSA® Robot utilizes robotic technologies to assist a surgeon with implant positioning in total knee arthroplasty or partial knee arthroplasty.

HIPS

Total hip replacement surgeries replace both the head of the femur and the socket portion of the pelvis (acetabulum) of the natural hip. Hip procedures include first-time, or primary, joint replacement as well as revision procedures. Hip implant procedures involve the use of bone cement to attach or affix the prosthetic components to the surrounding bone, or are press-fit into bone, which means that they have a surface that bone affixes to through either ongrowth or ingrowth technologies. Our significant hip brands include the Taperloc® Hip System, Avenir Complete® Hip System, Arcos® Modular Hip System, and G7® Acetabular System. In 2021, we entered the robotic assistance market for hips with our ROSA® Robot.

S.E.T.

Our S.E.T. product category includes sports medicine, biologics, foot and ankle, extremities, trauma and CMFT products. Our sports medicine products are primarily for the repair of soft tissue injuries, most commonly used in the knee and shoulder. Our biologics products are used as early intervention for joint preservation or to support surgical procedures. Our foot and ankle and extremities products are designed to treat arthritic conditions and fractures in the foot, ankle, shoulder, elbow and wrist. Our trauma products are used to stabilize damaged or broken bones and their surrounding tissues to support the body's natural healing process. Our CMFT product division includes face and skull reconstruction products as well as products that fixate and

stabilize the bones of the chest in order to facilitate healing or reconstruction after open heart surgery, trauma or for deformities of the chest. Our significant S.E.T. brands include the JuggerKnot® Soft Anchor System, Gel-One® Cross-linked Hyaluronate, Comprehensive® Shoulder, Natural Nail® System, and SternaLock® System. Gel-One® is a registered trademark of Seikagaku Corporation.

OTHER

Our other product category primarily includes our robotic, surgical and bone cement products.

Research and Development

We have extensive research and development activities to develop new surgical techniques, including robotic techniques, materials, biologics and product designs. The research and development teams work closely with our strategic brand marketing function. The rapid commercialization of innovative new materials, biologics products, implant and instrument designs and surgical techniques remains one of our core strategies and continues to be an important driver of sales growth.

We are broadening our offerings in certain of our product categories and exploring new technologies, including artificial intelligence and machine learning, with possible applications in multiple areas. Our primary research and development facility is located in Warsaw, Indiana. We have other research and development personnel based in, among other places, Canada, China, France, Switzerland and other U.S. locations. As of December 31, 2022, we employed approximately 2,100 research and development employees worldwide.

We expect to continue to identify innovative technologies, which may include acquiring complementary products or businesses, establishing technology licensing arrangements or strategic alliances.

Government Regulation and Compliance

Our operations, products and customers are subject to extensive government regulation by numerous government agencies, both within and outside the U.S. We are subject to supranational, national, regional and local regulations affecting, among other things, the development, design, manufacturing, product standards, packaging, advertising, promotion, labeling, marketing and postmarket surveillance of medical products and medical devices in many of the countries in which our products are sold. Our global regulatory environment is increasingly stringent, unpredictable and complex. There is a global trend toward increased regulatory activity related to medical products and medical devices.

Medical Product and Medical Device Regulation

In the U.S., numerous laws and regulations govern the processes by which our products are brought to market. These include the Federal Food, Drug and Cosmetic Act, as amended ("FDCA"), and associated regulations. U.S. Food and Drug Administration ("FDA") regulations control all aspects of the development, manufacturing, advertising, promotion, marketing, distribution and postmarket surveillance of medical products and medical devices. All of our devices marketed in the U.S. have been cleared or approved by the FDA, except for those exempt from FDA premarket clearance and approval and those in commercial distribution prior to May 28, 1976. The process of obtaining FDA clearance or approval to market a product is resource intensive, lengthy, and costly. FDA review may involve substantial delays that adversely affect the marketing and sale of our products. Most of our new products fall into a classification that requires the submission of a Premarket Notification (510(k)) to the FDA before we can market the new device. This process requires us to demonstrate that the device to be marketed is at least as safe and effective as, that is, substantially equivalent to, a legally marketed device. Other devices we develop and market require stringent FDA clinical investigation and Premarket Approval ("PMA") requirements, including submission of clinical and laboratory data that establishes that the new medical device is safe and effective. Additionally, certain of our new products incorporate innovations related to artificial intelligence, machine learning and software as a medical device, which are subject to emerging FDA oversight and regulation.

We are subject to FDA Quality System regulations governing design and manufacturing practices, testing, manufacturing quality assurance, labeling and record keeping and reporting requirements for our products, which apply both to our own and to our third-party manufacturers' operations. We are required to establish a quality system by which we monitor our (and our third-party manufacturers') manufacturing processes and maintain records that show compliance with FDA regulations and manufacturers' written specifications and procedures.

There are also requirements of state and local governments with which we must comply in the manufacture and marketing of our products.

The FDA conducts announced and unannounced periodic and on-going inspections of medical device manufacturers to determine compliance with its Quality System, and other applicable, regulations. If in connection with these inspections the FDA believes the manufacturer has failed to comply with applicable regulations and/or procedures, it may issue inspectional observations on Form FDA-483 ("Form 483") that would necessitate prompt corrective action. If FDA inspectional observations are not addressed and/or corrective action is not taken in a timely manner and to the FDA's satisfaction, the FDA may issue a warning letter (which would similarly necessitate prompt corrective action) and/or proceed directly to other forms of enforcement action, including the imposition of operating restrictions, including ceasing operations on one or more facilities, enjoining and restraining legal violations pertaining to products, seizing products, negotiating the entry of a consent decree and permanent injunction against us, recommending prosecution to the U.S. Department of Justice (the "DOJ"), and assessing civil or criminal penalties against our officers, employees or us. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations. For information regarding a warning letter and certain Form

483 inspectional observations that we are addressing at a single Zimmer Biomet site, see Note 21 to our consolidated financial statements.

The FDA, in cooperation with U.S. Customs and Border Protection ("CBP"), administers controls over the import of medical devices into the U.S. and can prevent the importation of products the FDA deems to violate the FDCA or its implementing regulations. The CBP imposes its own regulatory requirements on the import of our products, including inspection and possible sanctions for noncompliance. We are also subject to foreign trade controls administered by certain U.S. government agencies, including the Bureau of Industry and Security within the Commerce Department and the Office of Foreign Assets Control within the Treasury Department ("OFAC"). In addition, exported medical products are subject to the regulatory requirements of each country to which the medical product is exported.

The European Union (the "EU") adopted the European Medical Device Directive (the "MDD"), which created a single set of medical device regulations for products marketed in all member countries. The EU Medical Device Regulation (the "EU MDR") took effect in May 2021, replacing the MDD. The EU MDR imposes significant additional premarket and postmarket requirements. Products currently certified per the existing MDD regulations must be certified to the new EU MDR regulation prior to the current MDD certificate expiry or May 2024, whichever comes first. Industry members, EU Notified Bodies and individual EU country heath administrations have voiced concern over the lack of progress in the issuance of MDR certifications and the subsequent impact on product availability on the European market as the May 2024 deadline nears. Subsequently the EU Commission recommended action to ensure medical device access to patients, which we expect to be detailed and forthcoming in 2023. The UK additionally is in the process of creating a new medical device framework (the "UK MDR") following its exit from the European Union. The new regulation, initially scheduled to be implemented in 2023, is anticipated to be delayed until 2024. The UK, in the meantime, continues to allow product meeting the current EU regulations to be marketed.

Our quality management system is based upon the requirements of ISO 13485, the FDA Quality System regulations, the MDD, the EU MDR, the UK MDR and other applicable regulations for the markets in which we sell. Our principal manufacturing sites are certified to ISO 13485 and audited at regular intervals. Additionally, our principal sites are certified under the Medical Device Single Audit Program ("MDSAP"), a voluntary audit program developed by regulatory authorities in Australia, Brazil, Canada, Japan, and the United States to assess compliance with the quality management system regulatory requirements of those countries. MDSAP audits are conducted by an MDSAP-recognized auditing organization and can fulfill the needs of the participating regulatory jurisdictions, replacing standard surveillance audits by the regulatory authorities in those countries.

We are subject to supranational, national, regional, state and local laws and regulations concerning healthcare cost containment, including price regulation, competitive pricing, coverage and payment policies, comparative effectiveness reviews and other methods, including through efforts to reduce healthcare fraud and abuse, false claims and anti-kickback laws as well as the U.S. Physician Payments Sunshine Act and similar state and foreign healthcare professional payment transparency laws. Many authorities have increased their enforcement activities with respect to medical products manufacturers in recent years. Violations of these laws are punishable by criminal and/or civil sanctions, including, in some instances, fines, imprisonment and exclusion from participation in certain government healthcare programs.

Foreign Corrupt Practices Act and Related Laws

Our operations outside the U.S. are subject to the extraterritorial application of the U.S. Foreign Corrupt Practices Act (the "FCPA"). Our global operations are also subject to non-U.S. anti-corruption laws, such as the United Kingdom Bribery Act. As part of our global compliance program, we seek to address anti-corruption risks proactively. On January 12, 2017, we resolved previously-disclosed FCPA matters involving Biomet and certain of its subsidiaries. As part of that settlement, we entered into a Deferred Prosecution Agreement with the DOJ, which concluded on February 9, 2021, six months following certification to the DOJ and the U.S. Securities and Exchange Commission (the "SEC") by an independent compliance monitor that our compliance program, including its policies and procedures, is reasonably designed and implemented to prevent and detect violations of the FCPA and is functioning effectively.

Environmental Laws

All of our facilities and operations are subject to complex national, state and local environmental and occupational safety laws and regulations, including those relating to discharges of substances in the air, water and land, the handling, storage and disposal of wastes and the clean-up of properties contaminated by pollutants. We do not expect that the ongoing costs of compliance with these environmental requirements will have a material impact on our consolidated earnings, capital expenditures or competitive position.

Data Privacy Laws

We are subject to evolving supranational, national, state and international data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, location, storage, disposal and protection of health-related and other personal information, including laws and regulations that regulate and restrict cross-border data transfers. Certain of these laws and regulations impose time-sensitive notification requirements to governmental authorities or consumers. We are also subject to emerging guidance governing data security and cyber risk management for medical devices. Failure to comply with any such data protection laws and regulations could result in government enforcement actions (which could include civil and/or criminal penalties), private litigation and/or adverse publicity and could negatively affect our operating results and business. Information regarding the risks associated with data privacy and protection laws may be found

in *Item 1A. Risk Factors – If we fail to comply with data privacy and security laws and regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.*

Competition

The orthopedics and broader musculoskeletal care industry is highly competitive. In the global markets for our knees, hips, and S.E.T. products, our major competitors include the DePuy Synthes Companies of Johnson & Johnson, Stryker Corporation and Smith & Nephew plc. There are smaller competitors in these product categories as well who have success by focusing on smaller subsegments of the industry.

Competition within the industry is primarily based on technology, innovation, quality, reputation, customer service and pricing. A key factor in our continuing success in the future will be our ability to develop new products and technologies and improve existing products and technologies.

Manufacturing and Raw Materials

We manufacture our products at various sites. We also strategically outsource some manufacturing to qualified suppliers who are highly capable of producing components.

The manufacturing operations at our facilities are designed to incorporate the cellular concept for production and to implement tenets of a manufacturing philosophy focused on continuous improvement efforts in product quality, lead time reduction and capacity optimization. Our continuous improvement efforts are driven by Lean and Six Sigma methodologies. In addition, at certain of our manufacturing facilities, many of the employees are cross-trained to perform a broad array of operations.

We generally target operating our manufacturing facilities at optimal levels of total capacity. We continually evaluate the potential to in-source and outsource production as part of our manufacturing strategy to provide value to our stakeholders.

In most of our manufacturing network, we have improved our manufacturing processes to harmonize and optimize our quality systems and to protect our profitability and offset the impact of inflationary costs. We have, for example, employed computer-assisted robots and multi-axis grinders to precision polish medical devices; automated certain manufacturing and inspection processes, including on-machine inspection and process controls; purchased state-of-the-art equipment; in-sourced core products and processes; and negotiated cost reductions from third-party suppliers.

We use a diverse and broad range of raw materials in the manufacturing of our products. We purchase all of our raw materials and select components used in manufacturing our products from external suppliers. In addition, we purchase some supplies from single sources for reasons of quality assurance, sole source availability, cost effectiveness or constraints resulting from regulatory requirements. We work closely with our suppliers to assure continuity of supply while maintaining high quality and reliability. To date, we have not experienced any significant difficulty in locating and obtaining the materials necessary to fulfill our production schedules.

Intellectual Property

Patents and other proprietary rights are important to the continued success of our business. We also rely upon trade secrets, know-how, continuing technological innovation and licensing opportunities to develop and maintain our competitive position. We protect our proprietary rights through a variety of methods, including confidentiality agreements and proprietary information agreements with suppliers, employees, consultants and others who may have access to proprietary information. We own or control through licensing arrangements over 6,000 issued patents and patent applications throughout the world that relate to aspects of the technology incorporated in many of our products.

Human Capital

As of December 31, 2022, we employed approximately 18,000 employees worldwide, including approximately 2,100 employees dedicated to research and development. Approximately 8,000 employees are located within the U.S. and approximately 10,000 employees are located outside of the U.S., primarily throughout Europe and in Japan and China. We have approximately 7,600 employees dedicated to manufacturing our products worldwide.

Our mission is to alleviate pain and improve the quality of life for people around the world. Our commitment to patients shapes all day-to-day decisions at Zimmer Biomet. To be able to accomplish our mission, we have established guiding principles. These guiding principles are central to our human capital management policies and practices. The guiding principles are:

- Respect the contributions and perspectives of all employees
- Commit to the highest standards of patient safety, quality and integrity
- Focus our resources in areas where we will make a difference
- Ensure the company's return is equivalent to the value we provide our customers and patients
- Give back to our communities and people in need.

Diversity, Equity and Inclusion

We believe that each of us as individuals can drive change every day. We remain wholly committed to creating, supporting and celebrating diverse and equal workplaces and communities. Together, we will continue to foster and embrace diversity and inclusion within our team and our communities, and commit our voices and our resources to community groups, business platforms and other organizations united to driving meaningful change and sustained improvement.

We believe that representation matters. As of December 31, 2022, women made up approximately 35 percent of our total employee population, and approximately 25 percent of positions at Director level and above. People of Color ("POC") made up approximately 23 percent of our total employee population in the U.S., and comprised approximately 15 percent of positions at Director level and above. We have established 2026 representation goals for women and POC at all levels of the organization, guided by internal data and external benchmarking.

Core to our values is our commitment to stand together against hatred, discrimination and injustice, and we advance these values through our actions and investments. With this in mind, we have committed to the following initiatives to drive and accelerate change both within our own organization and around the globe. We have shared these commitments publicly and are tracking our progress against them:

- Engage our 18,000 global employees in cultural awareness and inclusion programming;
- Invest $1 million and provide executive sponsorship to support ongoing programs and elevate the impact of our employee resource groups;
- Commit at least $5 million over five years through the Zimmer Biomet Foundation to non-profit organizations dedicated to combating racism and supporting diversity, equality and justice. The Zimmer Biomet Foundation is an independent, non-profit organization established in 2018 to address the needs of our global community;
- Match, through the Zimmer Biomet Foundation, employee financial contributions to non-profit organizations, including those dedicated to combating racism and supporting diversity, equality and justice;
- Expand our student and early career internship programs to attract and develop more Black leaders; and
- Continue our financial support of Movement is Life, Inc., a nonprofit multidisciplinary coalition seeking to eliminate racial, ethnic and gender disparities in muscle and joint health.

Employee Engagement

We value our employees' input and to that end, from time to time, we conduct comprehensive employee engagement surveys that ultimately inform our actions towards improving employee engagement. Surveys attempt to assess five drivers of engagement including purpose, culture, leadership, personal growth and belonging. The key results of surveys, and commensurate action plans, are shared with our Board of Directors and with our employee base. Employee engagement is the degree to which employees invest their cognitive, emotional, and behavioral energies toward positive organizational outcomes. While we strive for engagement scores to sequentially improve, the outcomes of the surveys can be influenced by many factors that are internal and external to the company.

We believe it is critical to keep our employees engaged through frequent and transparent communication. This is accomplished through town halls, video and written messages, news and recognition on our intranet site, and various other methods.

Health, Safety and Wellness

The physical and mental health, financial wellbeing, and work/life balance of our employees is vital to accomplishing our mission. We sponsor wellness programs designed to enhance physical, financial and mental wellbeing for our employees. We encourage participation in these programs through regular communications, educational sessions and other incentives.

We are also intensely focused on the health and safety of our team members in the workplace. Our environmental, health and safety team constantly monitors various metrics to ensure we are providing a safe environment in which to work. In 2022, our Total Recordable Incident Rate was 0.29 and our Lost Time Incident Rate was 0.11. These results are shared with relevant regulatory agencies as required and presented to our Board of Directors.

Cybersecurity

We have established a cybersecurity program intended to protect the confidentiality, integrity and availability of our systems, data and products in a manner consistent with industry best practices and the NIST Cybersecurity framework. We are currently ISO 27001 certified for our surgery planning ecosystem and continue to maintain this industry certification while expanding its scope. The Audit Committee of the Board of Directors receives cybersecurity updates at least quarterly. The Audit Committee considers cybersecurity risk individually and within our overall risk management framework. We obtain periodic assessments of our cybersecurity program from independent third-party experts, the results of which assessments are reported to our Audit Committee. Our Chief Information Security Officer ("CISO") leads our cybersecurity program through our global information security operations team. Our CISO reports to our Chief Information Officer, who in turn reports to our Chairman, President and Chief Executive Officer.

Under our program, cybersecurity issues are analyzed by subject matter experts, including in IT, risk and compliance, for potential financial, operational, legal, reputational and other risks, based on, among other factors, the nature of the matter and the potential breadth of impact. Matters involving potential data breaches are considered against applicable data breach notification requirements. Matters determined to present potential material impacts to our financial results, operations, and/or reputation are required to be immediately reported to the Audit Committee, as appropriate, in accordance with our escalation framework. In addition, we have established procedures providing that members of management responsible for overseeing the operation of our disclosure controls and procedures are informed in a timely manner of known cybersecurity risks and incidents that may materially impact our operations and that timely public disclosure is made, as appropriate.

Our cybersecurity program includes a variety of policies, procedures and attributes including training requirements, threat monitoring and detection, threat containment, risk assessments, third-party penetration testing and security requirements for third-party vendors. From time to time, the program adds new types of artificial intelligence and machine learning processes, techniques and procedures in an effort to combat evolving and adaptive cybersecurity threats. Our global cybersecurity program involves strict separation of duties from other IT functional areas and has established roles that define the responsibility of cybersecurity within our organization. Our global cybersecurity team has a process to address organizational risk through an IT risk committee to evaluate and determine the best approach to mitigate the risk internally and externally. We maintain business continuity, contingency and recovery plans to be used if we experience a cybersecurity

incident. We refine our cybersecurity procedures, policies and program based on a variety of factors including lessons learned from previous successful and unsuccessful cyber attacks. Like other large multi-national corporations, we have experienced instances of successful phishing attacks on our email systems and expect to be subject to similar attacks in the future. We also are subject to other cyber-attacks, including state-sponsored cyberattacks, industrial espionage, insider threats, computer denial-of-service attacks, computer viruses, ransomware and other malware, payment fraud or other cyber incidents. However, as of December 31, 2022, we had not yet detected any material information security breaches. Based on our cybersecurity program, we do not maintain dedicated cybersecurity insurance as of December 31, 2022. We continue to evaluate our cybersecurity posture for any changes that could affect the long-term organizational strategy and adjust it based on threats globally. Additional information regarding cybersecurity risks may be found in *Item 1A. Risk Factors—We are increasingly dependent on sophisticated information technology and if we fail to effectively maintain or protect our information systems or data, including from data breaches, our business could be adversely affected*.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following table sets forth certain information with respect to our executive officers as of February 15, 2023.

Name	Age	Position
Bryan Hanson	56	Chairman, President and Chief Executive Officer
Rachel Ellingson	53	Senior Vice President and Chief Strategy Officer
Chad Phipps	51	Senior Vice President, General Counsel and Secretary
Paul Stellato	48	Vice President, Controller and Chief Accounting Officer
Ivan Tornos	47	Chief Operating Officer
Suketu Upadhyay	53	Executive Vice President and Chief Financial Officer
Wilfred van Zuilen	53	President, Europe, Middle East and Africa
Lori Winkler	61	Senior Vice President, Chief Human Resources Officer
Sang Yi	60	President, Asia Pacific

Mr. Hanson was appointed President and Chief Executive Officer and a member of the Board of Directors in December 2017. He was subsequently named Chairman of the Board of Directors in May 2021. Previously, Mr. Hanson served as Executive Vice President and President, Minimally Invasive Therapies Group of Medtronic plc from January 2015 until joining Zimmer Biomet. Prior to that, he was Senior Vice President and Group President, Covidien of Covidien plc from October 2014 to January 2015; Senior Vice President and Group President, Medical Devices and United States of Covidien from October 2013 to September 2014; Senior Vice President and Group President of Covidien for the Surgical Solutions business from July 2011 to October 2013; and President of Covidien's Energy-based Devices business from July 2006 to June 2011. Mr. Hanson held several other positions of increasing responsibility in sales, marketing and general management with Covidien from October 1992 to July 2006. Mr. Hanson has also served as a member of the board of directors of Walgreens Boots Alliance, Inc. since October 2022.

Ms. Ellingson was appointed Senior Vice President and Chief Strategy Officer in April 2018 and was designated as an executive officer in January 2021. Prior to joining Zimmer Biomet, Ms. Ellingson served as a member of the executive leadership team of St. Jude Medical in positions of increasing responsibility from 2012 until 2017, most recently as Vice President, Corporate Strategy from 2015 until 2017. Before joining St. Jude Medical, Ms. Ellingson served as Vice President, Business Development and Investor Relations at AGA Medical Corporation. Prior to joining AGA Medical, Ms. Ellingson had more than 15 years of experience in investment banking, rising to the position of Managing Director, Medical Technology Investment Banking with Bank of America. She has served as a member of the board of directors of Biolife Solutions, Inc. since April 2021.

Mr. Phipps was appointed Senior Vice President, General Counsel and Secretary in May 2007. He has global responsibility for the Company's Legal Affairs and he serves as Secretary to the Board of Directors. Mr. Phipps also oversees the Company's Government Affairs activities. Previously, Mr. Phipps served as Associate General Counsel and Corporate Secretary from December 2005 to May 2007. He joined the Company in September 2003 as Associate Counsel and Assistant Secretary. Prior to joining the Company, he served as Vice President and General Counsel of L&N Sales and Marketing, Inc. in Pennsylvania and he practiced law with the firm of Morgan, Lewis & Bockius in Philadelphia, focusing on corporate and securities law, mergers and acquisitions and financial transactions. Since June 2022, Mr. Phipps has served as a director of Movement is Life, Inc., a 501(c)(3) charity focused on reducing healthcare disparities and for which we are a principal financial donor.

Mr. Stellato was appointed Vice President, Controller and Chief Accounting Officer in May 2022. Previously, he served as Vice President Finance, Global Business Services from March 2019 through April 2022, with Xylem Inc. ("Xylem"), a global provider of water technology products and services. He joined Xylem upon its spinoff from ITT Corporation ("ITT") in October 2011 and served as Xylem's Vice President Finance, Financial Planning and Analysis through August 2017. He was

promoted to Vice President, Controller and Chief Accounting Officer in August 2017 after serving as Interim Corporate Controller starting in August 2016, and became Vice President Finance, Global Business Services in March 2019. Prior to Xylem's spinoff from ITT in October 2011, Mr. Stellato served with ITT beginning in May 2003, having served most recently as ITT's General Auditor and prior to that, as Manager - Investor Relations. He began his career in public accounting with Ernst & Young LLP and Arthur Andersen LLP and is a certified public accountant.

Mr. Tornos was appointed Chief Operating Officer in March 2021. Previously, he served as the Company's Group President, Global Businesses and the Americas since December 2019 and prior to that as Group President, Orthopedics since joining the Company in November 2018. Prior to joining Zimmer Biomet, Mr. Tornos served as Worldwide President of the Global Urology, Medical and Critical Care Divisions of Becton, Dickinson and Company ("BD") (and previously, C. R. Bard, Inc. ("Bard")) from June 2017 until October 2018. From June 2017 until BD's acquisition of Bard in December 2017, Mr. Tornos also continued to serve as President, EMEA of Bard, a position to which he was appointed in September 2013. Mr. Tornos joined Bard in August 2011 and, prior to his appointment as President, EMEA, served as Vice President and General Manager with leadership responsibility for Bard's business in Southern Europe, Central Europe and the Emerging Markets Region of the Middle East and Africa. Before joining Bard, Mr. Tornos served as Vice President and General Manager of the Americas Pharmaceutical and Medical/Imaging Segments of Covidien International from April 2009 to August 2011. Before that, he served as International Vice President, Business Development and Strategy with Baxter International Inc. from July 2008 to April 2009 and, prior to that, Mr. Tornos spent 11 years with Johnson & Johnson in positions of increasing responsibility. He has also served as a member of the board of directors at PHC Holdings Corporation since September 2021.

Mr. Upadhyay was appointed Executive Vice President and Chief Financial Officer in July 2019. Prior to joining Zimmer Biomet, Mr. Upadhyay served as Senior Vice President, Global Financial Operations at Bristol-Myers Squibb Company from November 2016 until June 2019. Before joining Bristol-Myers Squibb, he served as Executive Vice President and Chief Financial Officer of Endo International plc from September 2013 to November 2016. Prior to his tenure at Endo International, Mr. Upadhyay served as Interim Chief Financial Officer as well as Senior Vice President of Finance, Corporate Controller and Principal Accounting Officer of BD. Prior to his role as BD's Interim Chief Financial Officer and Corporate Controller, Mr. Upadhyay was the Senior Vice President of Global Financial Planning and Analysis and also held the role of Vice President and Chief Financial Officer of BD's international business. Before joining BD in 2010, Mr. Upadhyay held a number of leadership roles across AstraZeneca PLC and Johnson & Johnson. Mr. Upadhyay spent the early part of his career in public accounting with KPMG. He has also served as a member of the board of directors of Vertex Pharmaceuticals Incorporated since May 2022.

Mr. van Zuilen was appointed President, Europe, Middle East and Africa in June 2021. Prior to joining Zimmer Biomet, Mr. van Zuilen served in various roles for Medtronic plc, including as Vice President, North Western Europe from October 2020 to May 2021, as Vice President, Restorative Therapies Group EMEA from February 2017 through September 2020, and as Vice President, Advanced Surgical Technologies Europe, Surgical Solution Group, from October 2011 through January 2017. He served in other roles of increasing responsibility with Medtronic plc through January 1998. Before joining Medtronic, he spent more than five years in medical sales, most recently with Baxter BV (Edwards Lifesciences).

Ms. Winkler joined Zimmer Biomet as Group Vice President of Human Resources in February 2020 and was appointed Senior Vice President, Chief Human Resources Officer in February 2021. Prior to joining Zimmer Biomet, she served Cardinal Health, Inc. as a Worldwide Vice President of Human Resources in the Medical Segment from November 2016 through January 2020. Before joining Cardinal Health, Ms. Winkler served more than 20 years with Johnson and Johnson, including its subsidiary companies DePuy and Cordis, most recently as Global Head, Human Resources Global Finance from April 2011 through November 2016. She has served as an independent voting member of the board of directors of Family Promise, Inc., a 501(c)(3) charity focused on housing and homelessness, since August 2022.

Mr. Yi was appointed President, Asia Pacific in June 2015. He is responsible for the sales, marketing and distribution of products, services and solutions in the Asia Pacific region. Mr. Yi joined the Company in March 2013 as Senior Vice President, Asia Pacific. Previously, he served as Vice President and General Manager of St. Jude Medical for Asia Pacific and Australia from 2005 to 2013. Prior to that, Mr. Yi held several leadership positions over a ten-year period with Boston Scientific Corporation, ultimately serving as Vice President for North Asia.

AVAILABLE INFORMATION

Our Internet address is www.zimmerbiomet.com. We routinely post important information for investors on our website in the "Investor Relations" section, which may be accessed from our homepage at www.zimmerbiomet.com or directly at https://investor.zimmerbiomet.com. We use this website as a means of disclosing material, non-public information and for complying with our disclosure obligations under Regulation FD. Accordingly, investors should monitor the Investor Relations section of our website, in addition to following our press releases, SEC filings, public conference calls, presentations and webcasts. Our goal is to maintain the Investor Relations website as a portal through which investors can easily find or navigate to pertinent information about us, free of charge, including:

- our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as

amended ("Exchange Act"), as soon as reasonably practicable after we electronically file that material with or furnish it to the SEC;
- announcements of investor conferences and events at which our executives talk about our products and competitive strategies, as well as archives of these events;
- press releases on quarterly earnings, product announcements, legal developments and other material news that we may post from time to time;
- corporate governance information including our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Code of Ethics for Chief Executive Officer and Senior Financial Officers, information concerning our Board of Directors and its committees, including the charters of the Audit Committee, Compensation and Management Development Committee, Corporate Governance Committee and Quality, Regulatory and Technology Committee, and other governance-related policies;
- stockholder services information, including ways to contact our transfer agent and information on how to sign up for direct deposit of dividends or enroll in our dividend reinvestment plan; and
- opportunities to sign up for email alerts and RSS feeds to have information provided in real time.

The information available on our website is not incorporated by reference in, or a part of, this or any other report we file with or furnish to the SEC.

Item 1A. Risk Factors

We operate in a rapidly changing economic and technological environment that presents numerous risks, many of which are driven by factors that we cannot control or predict. Our business, financial condition and results of operations may be impacted by a number of factors. In addition to the factors discussed elsewhere in this report, the following risks and uncertainties could materially harm our business, financial condition or results of operations, including causing our actual results to differ materially from those projected in any forward-looking statements. The following list of significant risk factors is not all-inclusive or necessarily in order of importance. Additional risks and uncertainties not presently known to us, or that we currently deem immaterial, also may materially adversely affect us in future periods. You should carefully consider these risks and uncertainties before investing in our securities.

Risks Related to our Business, Operations and Strategy

Business and economic conditions, including disruptions related to the COVID-19 pandemic, have adversely impacted, and may, either alone or in combination with other risks, in the future adversely impact, our business, results of operations and financial condition, the nature and extent of which are uncertain and unpredictable.

Our operations expose us to risks from business interruptions that may arise from a variety of sources, including public health crises and outbreaks of diseases, such as the COVID-19 pandemic and its variants, supply chain disruptions, trade and tariff disputes and global conflicts, that can, singly or in combination with other factors, adversely affect our business and financial results. We experienced a sustained decline in elective surgical procedures globally due to the COVID-19 pandemic and its associated effects, including deferrals of elective surgical procedures and staffing shortages at hospitals. Surgical volumes generally recovered over the course of 2022, but may return to lower levels due to future COVID-19 variants and resurgences.

We continue to experience risks and uncertainty in several aspects of our business including relating to global, regional and national supply chain disruption; dynamic economic conditions; foreign exchange rate volatility; inflation; workforce availability changes; healthcare staffing challenges and changes in government spending. We expect several of these factors to continue, and there can be no assurance that we will successfully manage these risks without adverse impacts to our business or financial results.

The COVID-19 pandemic has illustrated that the occurrence of one risk can have unpredictable effects on other risks, such as we experienced with supply chain disruptions connected to the COVID-19 pandemic. The occurrence of any one or more risks described in these Risk Factors or otherwise may have unpredictable effects on other risks, our business, operations or financial results which may be comparable to, or more adverse than, those we experienced in connection with the COVID-19 pandemic. Therefore, we are also at risk from business and other risks and uncertainties, either alone or in combination with other risk factors.

Our restructuring programs may not be successful or we may not fully realize the expected cost savings and/or operating efficiencies from our restructuring initiatives.

In December 2019, our Board of Directors approved, and we initiated, a global restructuring program (the "2019 Restructuring Plan") with an objective of reducing costs to allow us to further invest in higher priority growth opportunities, which is ongoing. In December 2021, our management also initiated a global restructuring program (the "2021 Restructuring Plan") to further reduce costs and to reorganize our global operations in preparation for the spinoff of ZimVie. Restructuring initiatives involve complex plans and actions that may include, or result in, workforce reductions, global plant closures and/or consolidations, product portfolio rationalizations and asset impairments. Additionally, as a result of restructuring initiatives, we may experience a loss of continuity, loss of accumulated knowledge and/or inefficiencies during transitional periods. Restructuring initiatives present significant risks that may impair our ability to achieve anticipated operating enhancements and/or cost reductions, or otherwise harm our business, including higher than anticipated costs in implementing our restructuring programs, as well as management distraction. For more information on our restructuring programs, see Note 5 to our consolidated financial statements. If we fail to achieve some or all of the expected benefits of restructuring, it could have a material

adverse effect on our competitive position, business, financial condition, results of operations and cash flows.

Our success largely depends on our ability to attract, retain, develop and motivate our human capital, including our senior management, and on our ability to have meaningful succession plans in place to prepare for foreseen and unforeseen changes.

Our future performance depends, in large part, on the continued skills, experiences, competencies and services of our senior management and other key talent, including our ability to attract, retain, develop and motivate our highly skilled employees, senior management, independent agents and distributors. Competition for talent in our business is significant. Our ability to attract and retain key talent, in particular senior management, is dependent on a number of factors, including prevailing market conditions, our ability to offer competitive compensation packages and our ability to be perceived as a preferred place to work. Effective succession planning is also important to our long-term success; failure to ensure effective transfer of knowledge and orderly transitions involving key employees could hinder our business.

We may not be able to effectively integrate acquired businesses into our operations or achieve expected cost savings or profitability from our acquisitions.

Our acquisitions involve numerous risks, including:

- unforeseen difficulties in integrating personnel and sales forces, operations, manufacturing, logistics, research and development, information technology, compliance, vendor management, communications, purchasing, accounting, marketing, administration and other systems and processes;
- difficulties harmonizing and optimizing quality systems and operations;
- diversion of financial and management resources from existing operations;
- unforeseen difficulties related to entering geographic regions or markets where we do not have prior experience;
- potential loss of key employees;
- unforeseen risks and liabilities associated with businesses acquired, including any unknown vulnerabilities in acquired technology or compromises of acquired data; and/or
- inability to generate sufficient revenue or realize sufficient cost savings to offset acquisition or investment costs.

As a result, if we fail to evaluate and execute acquisitions properly, we might not achieve the anticipated benefits of such acquisitions, and we may incur costs in excess of what we anticipate. These risks would likely be greater in the case of larger acquisitions.

Interruption of manufacturing operations could adversely affect our business, financial condition and results of operations.

We and our third-party manufacturers have manufacturing sites all over the world. In some instances, however, the manufacturing of certain of our product lines is concentrated in one or more plants, some of which plants are geographically concentrated. Damage to one or more facilities from weather or natural disaster-related events, vulnerabilities in technology, cyber-attacks against our information systems or the information systems of our business partners (such as ransomware attacks), or issues in manufacturing arising from failure to follow specific internal protocols and procedures, compliance concerns relating to the Quality System Regulation ("QSR") and Good Manufacturing Practice requirements, equipment breakdown or malfunction, reductions in operations and/or worker absences, trade impediments or other factors could adversely affect the ability to manufacture our products. In the event of an interruption in manufacturing, we may be unable to move quickly to alternate means of producing affected products or to meet customer demand. We have experienced such interruptions due to the COVID-19 pandemic, and we may experience such interruptions in the future due to the pandemic or otherwise. In the event of a significant interruption, for example, as a result of a failure to follow regulatory protocols and procedures, we may experience lengthy delays in resuming production of affected products due primarily to the need for regulatory approvals. The global supply chain has been and continues to be negatively impacted by COVID-19 and a variety of other macro factors which has, in part, resulted in challenges to meet end market demand in some instances. We expect similar challenges in 2023. As a result, we may experience loss of market share, which we may be unable to recapture, and harm to our reputation, which could adversely affect our business, financial condition and results of operations.

Disruptions in the supply of the materials and components used in manufacturing our products or the sterilization of our products by third-party suppliers could adversely affect our business, financial condition and results of operations.

We purchase many of the materials and components used in manufacturing our products from third-party suppliers, and we outsource some key manufacturing activities. Certain of these materials and components and outsourced activities can only be obtained from a single source or a limited number of sources due to quality considerations, expertise, costs or constraints resulting from regulatory requirements. In certain cases, we may not be able to establish additional or replacement suppliers for such materials or components or outsourced activities in a timely or cost effective manner, due to market constraints or as a result of FDA and other worldwide regulations that require validation of materials and components prior to their use in our products and the complex nature of our and many of our suppliers' manufacturing processes and the need for clearance or approval of significant changes by worldwide regulatory bodies prior to implementation. A reduction or interruption in the supply of materials or components used in manufacturing our products, such as due to one or more suppliers experiencing reductions in operations and/or worker absences due to a pandemic or otherwise; an inability to timely develop and validate alternative sources if required; or a significant increase in the price of such materials or components could adversely affect our business, financial condition and results of operations.

In addition, many of our products require sterilization prior to sale, and we utilize a mix of internal resources and contract sterilizers to perform this service. To the extent we or our contract sterilizers are unable to sterilize our products, whether due to capacity, availability of materials for

sterilization, regulatory or other constraints, including federal and state regulations on the use of ethylene oxide, or reductions in operations and/or worker absences due to the COVID-19 pandemic or otherwise, we may be unable to transition to other contract sterilizers, sterilizer locations or sterilization methods in a timely or cost effective manner or at all, which could have a material impact on our results of operations and financial condition.

Moreover, we are subject to the SEC's rule regarding disclosure of the use of certain minerals, known as "conflict minerals" (tantalum, tin and tungsten (or their ores) and gold), which are mined from the Democratic Republic of the Congo and adjoining countries. This rule could adversely affect the sourcing, availability and pricing of materials used in the manufacture of our products, which could adversely affect our manufacturing operations and our profitability. In addition, we are incurring additional costs to comply with this rule, including costs related to determining the source of any relevant minerals, metals and other materials used in our products. We have a complex supply chain, and we may not be able to sufficiently verify the origins of the minerals and metals used in our products through our due diligence procedures. As a result, we may face reputational challenges with our customers and other stakeholders.

We are increasingly dependent on sophisticated information technology and if we fail to effectively maintain or protect our information systems or data, including from data breaches, our business could be adversely affected.

We are increasingly dependent on sophisticated information technology for our products and infrastructure. As a result of technology initiatives, expanding and evolving privacy and cybersecurity laws, changes in our system platforms and integration of new business acquisitions, we have been consolidating and integrating the number of systems we operate and have upgraded and expanded our information systems capabilities. In addition, some of our products and services incorporate software or information technology that collects data regarding patients and patient therapy, and some software and other products we provide to customers connect to our systems for maintenance and other purposes. We also have outsourced elements of our operations to third parties, and, as a result, we manage a number of third-party suppliers who may or could have access to our confidential information, including, but not limited to, intellectual property, proprietary business information and personal information of patients, employees and customers (collectively "Confidential Information").

Our information systems, and those of third-party suppliers with whom we contract, 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, evolving systems and regulatory standards, changing threats and vulnerabilities, and the increasing need to protect patient and customer information. In addition, given their size and complexity, these systems could be vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees, third-party vendors and/or business partners, or from cyber-attacks by malicious third parties attempting to gain unauthorized access to our products, systems or Confidential Information.

Like other large multi-national corporations, we have experienced instances of successful phishing attacks on our email systems and expect to be subject to similar attacks in the future. We also are subject to other cyber-attacks, including state-sponsored cyber-attacks, industrial espionage, insider threats, computer denial-of-service attacks, computer viruses, ransomware and other malware, payment fraud or other cyber incidents. In addition, as a result of our adoption of remote work arrangements in many positions, a significant number of our employees who are able to work remotely are doing so, and malicious cyber actors may increase malware campaigns and phishing emails targeting teleworkers, which exposes us to additional cybersecurity risks. Our incident response efforts, business continuity procedures and disaster recovery planning may not be sufficient for all eventualities. If we fail to maintain or protect our information systems and data integrity effectively, we could:

- lose existing customers, vendors and business partners;
- have difficulty attracting new customers;
- have problems in determining product cost estimates and establishing appropriate pricing;
- suffer outages or disruptions in our operations or supply chain;
- have difficulty preventing, detecting, and controlling fraud;
- have disputes with customers, physicians, and other healthcare professionals;
- have regulatory sanctions or penalties imposed;
- incur increased operating expenses;
- be subject to issues with product functionality that may result in a loss of data, risk to patient safety, field actions and/or product recalls;
- incur expenses or lose revenues as a result of a data privacy breach; or
- suffer other adverse consequences.

While we have invested heavily in the protection of our data and information technology, there can be no assurance that our activities related to consolidating the number of systems we operate, upgrading and expanding our information systems capabilities, protecting and enhancing our systems and implementing new systems will be successful. We will continue to dedicate significant resources to protect against unauthorized access to our systems and work with government authorities to detect and reduce the risk of future cyber incidents; however, cyber-attacks are becoming more sophisticated, frequent and adaptive. Therefore, despite our efforts, we cannot assure that cyber-attacks or data breaches will not occur or that systems issues will not arise in the future. Any significant breakdown, intrusion, breach, interruption, corruption or destruction of these systems could have a material adverse effect on our business and reputation and could materially adversely affect our results of operations and financial condition.

Our success depends on our ability to effectively develop and market our products against those of our competitors.

We operate in a highly competitive environment. Our present or future products could be rendered obsolete or uneconomical by technological advances by one or more of our present or future competitors or by other therapies, including biological therapies. To remain competitive, we must continue to develop and acquire new products and technologies and improve existing products and technologies. Competition is primarily on the basis of technology, innovation, quality, reputation, customer service and pricing. In markets outside of the U.S., other factors influence competition as well, including local distribution systems, complex regulatory environments and differing medical philosophies and product preferences. Our competition may have greater financial, marketing and other resources than us; respond more quickly to new or emerging technologies; undertake more extensive marketing campaigns; operate more effective sales and distribution channels; adopt more aggressive pricing policies; or be more successful in attracting potential customers, employees and strategic partners. Any of these factors, alone or in combination, could cause us to have difficulty maintaining or increasing sales of our products.

If we fail to retain the employees, independent agents and distributors upon whom we rely heavily to market our products, customers may not buy our products and our revenue and profitability may decline.

Our marketing success in the U.S. and abroad depends significantly upon our employees', agents' and distributors' sales and service expertise in the marketplace. Many of these agents have developed professional relationships with existing and potential customers because of the agents' detailed knowledge of products and instruments. A loss of a significant number of our agents could have a material adverse effect on our business and results of operations.

If we do not introduce new products in a timely manner, our products may become obsolete over time, customers may not buy our products and our revenue and profitability may decline.

Demand for our products may change, in certain cases, in ways we may not anticipate because of evolving customer needs, changing demographics, slowing industry growth rates, declines in the musculoskeletal implant market, the introduction of new products and technologies and evolving surgical philosophies and industry standards.

Without the timely introduction of new products and enhancements, our products may become obsolete over time. If that happens, our revenue and operating results would suffer. The success of our new product offerings will depend on several factors, including our ability to properly identify and anticipate customer needs; commercialize new products in a timely manner; manufacture and deliver instruments and products in sufficient volumes on time; differentiate our offerings from competitors' offerings; achieve positive clinical outcomes for new products; satisfy the increased demands by healthcare payors, providers and patients for shorter hospital stays, faster post-operative recovery and lower-cost procedures; innovate and develop new materials, product designs and surgical techniques; and provide adequate medical education relating to new products.

In addition, new materials, product designs and surgical techniques that we develop may not be accepted quickly, in some or all markets, because of, among other factors, entrenched patterns of clinical practice, the need for regulatory clearance and uncertainty with respect to third-party reimbursement.

Moreover, innovations generally require a substantial investment in research and development before we can determine their commercial viability, and we may not have the financial resources necessary to fund the research, development and production. 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 revenue 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.

If third-party payors decline to reimburse our customers for our products or reduce reimbursement levels, the demand for our products may decline and our ability to sell our products profitably may be harmed. In addition, we are subject to cost containment measures in the United States and other countries, resulting in pricing pressures, which could have a material adverse effect on our business, results of operations, and cash flows.

We sell our products and services to hospitals, doctors and other healthcare providers, which receive reimbursement for the healthcare services provided to their patients from third-party payors, such as domestic and international government programs, private insurance plans and managed care programs. These third-party payors may deny reimbursement if they determine that a product or service used in a procedure was not in accordance with cost-effective treatment methods, as determined by the third-party payor, or was used for an unapproved indication. Third-party payors may also decline to reimburse for experimental procedures and products. In addition, third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for medical products and services. If third-party payors deny or decline reimbursement, reduce reimbursement levels or change reimbursement models for our products, demand for our products may decline, or we may experience increased pressure to reduce the prices of our products, which could have a material adverse effect on our sales and results of operations.

Many customers for our products have formed group purchasing organizations in an effort to contain costs. Group purchasing organizations negotiate pricing arrangements with medical supply manufacturers and distributors, and these negotiated prices are made available to a group purchasing organization's affiliated hospitals and other members. If we are not one of the providers selected by a group purchasing organization, affiliated hospitals and other members may be less likely to purchase our products, and, if the group purchasing organization has negotiated a strict compliance

contract for another manufacturer's products, we may be precluded from making sales to members of the group purchasing organization for the duration of the contractual arrangement. Our failure to respond to the cost-containment efforts of group purchasing organizations may cause us to lose market share to our competitors and could have a material adverse effect on our sales and results of operations.

Initiatives to limit the growth of general healthcare expenses and hospital costs are ongoing in the markets in which we do business, and we have experienced downward pressure on product pricing and other effects of healthcare reform in our international markets. These initiatives are sponsored by government agencies, legislative bodies and the private sector and include price regulation and competitive pricing. For example, China has implemented a volume-based procurement ("VBP") process designed to reduce medical spending, which has in the past resulted in, and could in the future result in, reduced margins on covered devices and products, required renegotiation of distributor arrangements, and incurrence of inventory-related charges. In cases where our product is not selected in VBP, sales of that product are substantially impacted. Pricing pressure has also increased due to continued consolidation among healthcare providers, trends toward managed care, the shift toward governments becoming the primary payors of healthcare expenses, reductions in reimbursement levels and government laws and regulations relating to reimbursement and pricing generally. If key participants in government healthcare systems reduce the reimbursement levels for our products, including through political changes or transitions, our business, financial condition, results of operations and cash flows may be adversely affected.

Financial, Credit and Liquidity Risks

We incurred substantial additional indebtedness in connection with previous mergers and acquisitions and may not be able to meet all of our debt obligations, and interest rate risk could adversely affect our indebtedness.

We incurred substantial additional indebtedness in connection with previous mergers and acquisitions. At December 31, 2022, our total indebtedness was $5.7 billion. As of December 31, 2022, our debt service principal obligations (excluding interest, leases and equipment notes), during the next 12 months are expected to be $0.5 billion. As a result of the increase in our debt, demands on our cash resources have increased. The increased level of debt could, among other things:

- require us to dedicate a large portion of our cash flow from operations to the servicing and repayment of our debt, thereby reducing funds available for working capital, capital expenditures, research and development expenditures and other general corporate requirements;
- limit our ability to obtain additional financing to fund future working capital, capital expenditures, research and development expenditures and other general corporate requirements;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- restrict our ability to make strategic acquisitions or dispositions or to exploit business opportunities;
- place us at a competitive disadvantage compared to our competitors that have less debt;
- adversely affect our credit rating, with the result that the cost of servicing our indebtedness might increase and our ability to obtain surety bonds could be impaired;
- adversely affect the market price of our common stock; and
- limit our ability to apply proceeds from a future offering or asset sale to purposes other than the servicing and repayment of debt.

In addition, the interest rates applicable to certain of our debt obligations are based on a fluctuating rate of interest determined by reference to the Secure Overnight Financing Rate ("SOFR") or the rate of interest last quoted by *The Wall Street Journal* as the "Prime Rate" in the United States. Any increase in interest rates applicable to our debt obligations would increase our cost of borrowing and could adversely affect our financial position, results of operations or cash flows.

We may have additional tax liabilities.

We are subject to income taxes in the U.S. and many foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. We are regularly under audit by tax authorities. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on our financial statements in the period or periods for which that determination is made.

Proposed changes in tax laws in countries in which we do business, if enacted, could lead to changes in tax laws that could negatively impact our effective tax rate.

Changes in the tax laws and regulations of the jurisdictions where we do business, including an increase in tax rates or an adverse change in the treatment of an item of income or expense, could result in a material increase in our tax expense and/or tax payments, could increase tax uncertainty and could have a material adverse impact on our business, financial condition or results of operations.

For example, changes in the tax laws of foreign jurisdictions are expected to occur as a result of pillar two of the base erosion and profit shifting plan ("Pillar Two") undertaken by the Organisation for Economic Co-operation and Development, which would require profits earned in jurisdictions in which we operate to be subject to a minimum 15 percent income tax rate. In December 2022, the European Union Council established effective dates of January 1, 2024 and January 1, 2025 for different aspects of Pillar Two. We are continuing to evaluate the potential impact on future periods of the Pillar Two, pending legislative adoption by additional individual countries, including those within the European Union.

The spinoff of ZimVie Inc. and the divestiture of our retained interest in ZimVie Inc. could result in substantial tax liability.

We obtained Internal Revenue Service ("IRS") rulings and an opinion as to the tax-free nature of the spinoff under the U.S. Internal Revenue Code of 1986, as amended. We subsequently obtained supplemental IRS rulings as to the tax-free nature of our divestiture of retained shares of ZimVie common stock following the spinoff, which divestiture completed in February 2023. The IRS rulings and opinion are based, among other things, on various factual assumptions and representations we made. If any of these assumptions or representations are, or become, inaccurate or incomplete, reliance on the opinion and rulings may be jeopardized. If the spinoff, or the subsequent divestiture of our retained interest in ZimVie, does not qualify for tax-free treatment for U.S. federal income tax purposes, the resulting tax liability to us, to our stockholders and to ZimVie stockholders could be substantial.

If our independent agents and distributors are characterized as employees, we would be subject to additional tax and other liabilities.

We structure our relationships with independent agents and distributors in a manner that we believe results in an independent contractor relationship, not an employee relationship. Although we believe that our independent agents and distributors are properly characterized as independent contractors, tax or other regulatory authorities may in the future challenge our characterization of these relationships. Further, we have been subject to lawsuits challenging the characterization of these relationships. Changes in classification from independent contractor to employee can result in a change to various requirements associated with the payment of wages, tax withholding, and the provision of unemployment, health, and other traditional employer-employee related benefits. If regulatory authorities or state, federal or foreign courts were to determine our independent agents or distributors are employees, and not independent contractors, we would be required to withhold income taxes, to withhold and pay social security, Medicare and similar taxes and to pay unemployment and other related payroll taxes. We would also be liable for unpaid past taxes and subject to penalties. As a result, any determination that our independent agents and distributors are our employees could have a material adverse effect on our business, financial condition or results of operations.

Future material impairments in the carrying value of our intangible assets, including goodwill, would negatively affect our operating results.

Goodwill and intangible assets represent a significant portion of our assets. At December 31, 2022, we had $8.6 billion in goodwill and $5.1 billion of intangible assets. The goodwill results from our acquisition activity and represents the excess of the consideration transferred over the fair value of the net assets acquired. We assess at least annually whether events or changes in circumstances indicate that the carrying value of our intangible assets may not be recoverable. As discussed further in Note 11 to our consolidated financial statements, in the fourth quarter of 2022, we recorded goodwill impairment charges of $289.8 million as a result of, among other factors, changes in foreign currency exchange rates in our European-based currencies, inflation and a higher interest rate environment; in the first quarter of 2020, we recorded goodwill impairment charges of $470.0 million as a result of the adverse impacts from the COVID-19 pandemic and a change in our reportable segments; and in the second quarter of 2022 and 2021, we recorded $3.0 million and $16.3 million, respectively, of in-process research and development ("IPR&D") intangible asset impairments on certain IPR&D projects. If the operating performance at one or more of our reporting units falls significantly below current levels, including if elective surgical procedures return to lower levels due to a resurgence of the COVID-19 pandemic or otherwise, if competing or alternative technologies emerge, if market conditions or future cash flow estimates for one or more of our businesses decline, or as a result of restructuring initiatives pursuant to which we reorganize our reporting units, we could be required to record additional impairment charges. Any write-off of a material portion of our goodwill or unamortized intangible assets would negatively affect our results of operations.

Global Operational Risks

We conduct a significant amount of our sales activity outside of the U.S., which subjects us to additional business risks and may cause our profitability to decline due to increased costs.

We sell our products in more than 100 countries and derived approximately 42 percent of our net sales in 2022 from outside the U.S. We intend to continue to pursue growth opportunities in sales internationally, including in emerging markets, which could expose us to additional risks associated with international sales and operations. Our international operations are, and will continue to be, subject to a number of risks and potential costs, including:

- changes in foreign medical reimbursement policies and programs;
- differences in and changes to foreign regulatory requirements, such as more stringent requirements for regulatory clearance of products;
- differing local product preferences and product requirements;
- fluctuations in foreign currency exchange rates;
- the effects of inflation, including the effects of different rates of inflation in different countries, on our costs and the costs of our products;
- diminished protection of intellectual property in some countries outside of the U.S.;
- trade protection measures, import or export requirements, new or increased tariffs, trade embargoes and sanctions and other trade barriers, which may prevent us from shipping products to or receiving products from a particular market, restrict our access to certain sources of raw materials and other inputs, increase our operating costs and disrupt our ability to collect payment for our products and services in particular markets;

- foreign exchange controls that might prevent us from repatriating cash earned in countries outside the U.S.;
- complex data privacy and cybersecurity requirements and labor relations laws;
- extraterritorial effects of U.S. laws such as the FCPA;
- effects of foreign anti-corruption laws, such as the UK Bribery Act;
- difficulty in staffing and managing foreign operations;
- labor force instability;
- potentially negative consequences from changes in tax laws; and
- political, social and economic instability and uncertainty, including wars, other conflict and sovereign debt issues.

Violations of foreign laws or regulations could result in fines, criminal sanctions against us, our officers or our employees, prohibitions on the conduct of our business and damage to our reputation.

Wars and other conflicts may increase certain of these risks and may adversely affect our business and financial performance, including by limiting our ability to operate in, or export from, certain markets. Losing access to such markets or exports may have a material adverse effect on our business in the affected market and may limit our ability to operate some of our businesses globally.

We anticipate that the effects of emerging, expanding and new conflicts, such as a possible expansion of the Russian-Ukrainian conflict or a conflict involving China and Taiwan, would not be limited to the specific markets involved. For example, the U.S. and other countries have imposed sanctions on Russia, certain of its governmental bodies, certain businesses and certain individuals due to the invasion of Ukraine, and additional sanctions may continue to be imposed. Similar sanctions could be expected to emerge from other conflicts. Sanctions, and other civil, political and economic effects of such conflicts may have adverse impacts globally, including supply chain continuity disruption; inflationary pressures and increased costs of raw materials and inputs; manufacturing or shipping delays; increased shipping costs; inability to ship products to or from certain countries potentially resulting in an inability to sell certain products globally; and increased disruptions and delays on our ability to collect payment for our products and services in particular markets. While Russia and Ukraine do not constitute material portions of our business, a significant escalation or expansion of economic disruption or of the conflict's current scope, or the emergence of new conflicts involving other countries, could adversely affect our results of operations.

We are subject to risks arising from currency exchange rate fluctuations, which can increase our costs, cause our profitability to decline and expose us to counterparty risks.

A substantial portion of our foreign revenues is generated in Europe and Japan. The U.S. Dollar value of our foreign-generated revenues varies with currency exchange rate fluctuations. Significant increases in the value of the U.S. Dollar relative to the Euro, the Japanese Yen, the Swiss Franc or other currencies could have a material adverse effect on our results of operations. Although we address currency risk management through regular operating and financing activities, and, on a limited basis, through the use of derivative financial instruments, those actions may not prove to be fully effective or may create additional financial obligations for us. Further, if the counterparties to the derivative financial instrument transactions fail to honor their obligations due to financial distress or otherwise, we would be exposed to potential losses or the inability to recover anticipated gains from those transactions.

Legal, Regulatory and Compliance Risks

We are subject to costly and complex laws and governmental regulations relating to the development, design, product standards, packaging, advertising, promotion, postmarket surveillance, manufacturing, labeling and marketing of our products, non-compliance with which could adversely affect our business, financial condition and results of operations.

Our global regulatory environment is increasingly stringent, unpredictable and complex. The products we design, develop, manufacture and market are subject to rigorous regulation by the FDA and numerous other supranational, national, federal, regional, state and local governmental authorities. The process of obtaining regulatory approvals and clearances to market these products can be costly and time consuming and approvals might not be granted for future products on a timely basis, if at all. Delays in receipt of, or failure to obtain, approvals for future products, or loss of approval for current products, could result in delayed realization of product revenues or in substantial additional costs.

Both before and after a product is commercially released, we have ongoing responsibilities under FDA regulations and other supranational, national, federal, regional, state and local requirements globally. These requirements relate to quality systems, recordkeeping, labeling, promotional requirements, adverse event reporting regulations and other matters, which are subject to continual review and are monitored rigorously through periodic inspections by regulators, which may result in observations (such as on FDA Form 483), and in some cases warning letters, that require corrective action, or other forms of enforcement. Furthermore, regulators strictly regulate the promotional claims that we may make about approved or cleared products.

In the EU, for example, the EU MDR became effective in May 2021 and includes significant additional premarket and post-market requirements. Complying with the requirements of this regulation requires us to incur significant expense. Additionally, the availability of recognized European notified body services certified to the new EU MDR requirements is limited, which may delay the marketing approval for some of our products under the EU MDR.

If a regulator were to conclude that we are not in compliance with applicable laws or regulations, that any of our products are ineffective or pose an unreasonable health risk, or that we have marketed or promoted a product for use other than as indicated in labelling approved by the regulator, the regulator could ban such products; detain or seize adulterated or misbranded products; order a recall, repair, replacement, or

refund of payment of such products; refuse to grant pending premarket approval applications; refuse to provide certificates for exports; require us to notify healthcare professionals and others that the products present unreasonable risks of substantial harm to the public health; and subject us to fines, injunctions or other penalties. The regulator may also impose operating restrictions, including a ceasing of operations at one or more facilities, enjoining and restraining certain violations of applicable law pertaining to our products, seizing our products, and/or assessing civil or criminal penalties against our officers, employees or us. Regulators could also issue a corporate warning letter or a recidivist warning letter or negotiate the entry of a consent decree of permanent injunction with us, and/or recommend prosecution. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations.

In August 2018, we received a warning letter from the FDA related to observed non-conformities with current good manufacturing practice requirements of the QSR at our Warsaw North Campus manufacturing facility. As of February 24, 2023, this warning letter remained pending. Until the violations are corrected, we may become subject to additional regulatory action by the FDA as described above, the FDA may refuse to grant premarket approval applications and/or the FDA may refuse to grant export certificates, any of which could have a material adverse effect on our business, financial condition and results of operations. Additional information regarding these and other FDA regulatory matters can be found in Note 21 to our consolidated financial statements.

Our products and operations are also often subject to the rules of industrial standards bodies, such as the International Standards Organization. If we fail to adequately address any of these regulations, our business could be harmed.

If we fail to comply with healthcare fraud and abuse laws and regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

The sales, marketing and pricing of products and relationships that medical products companies have with healthcare providers are under increased scrutiny around the world. Our industry is subject to various laws and regulations pertaining to healthcare fraud and abuse, including the False Claims Act, the Anti-Kickback Statute, the Stark law, the Physician Payments Sunshine Act, the Food, Drug, and Cosmetic Act and similar laws and regulations in the U.S. and around the world. In addition, we are subject to various laws concerning anti-corruption and anti-bribery matters (including the FCPA), sales to countries or persons subject to economic sanctions and other matters affecting our international operations. Violations of these laws are punishable by criminal and/or civil sanctions, including, in some instances, fines, imprisonment and, within the U.S., exclusion from participation in government healthcare programs, including Medicare, Medicaid and Veterans Administration health programs. These laws are administered by, among others, the DOJ, the Office of Inspector General of the Department of Health and Human Services, the SEC, the OFAC, the Bureau of Industry and Security of the U.S. Department of Commerce and state attorneys general.

If we fail to comply with data privacy and security laws and regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

We process personal and personal health data in our business, particularly through our ZBEdge™ ecosystem, our suite of integrated digital and robotic technologies, incorporating data-powered insights across the continuum of care. In addition, some of our products and services incorporate software or information technology that processes health data regarding patients and patient therapy for treatment, health care, maintenance and other purposes. Further, we obtain and process personal data related to our employees, individual business partners (such as physicians and consultants), and website visitors located around the world. These data and information-focused activities carry additional risk.

We are subject to supranational, national, state and international data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, storage, location, disposal and protection of health-related and other personal information. In addition to U.S. federal laws and regulations, a number of U.S. states have also enacted data privacy and security laws and regulations that govern the collection, use, disclosure, transfer, storage, disposal, and protection of personal information, such as social security numbers, medical and financial information, biometric data and other personal information. The FDA has issued guidance to which we may be subject concerning data security for medical devices. These laws and regulations may be more restrictive and not preempted by U.S. federal laws. The legislative and regulatory framework for privacy and data protection issues worldwide is rapidly evolving as countries continue to adopt privacy and data security laws that may apply to us, both because our operations are located in those countries and/or because we provide services to customers in those countries. In addition, certain of our affiliates and associates are subject to privacy, security and breach notification regulations established under these and other international, national, state and foreign laws. We, and certain of our affiliates and associates, are also subject to reporting requirements relating to certain data and other breaches.

The interpretation and enforcement of the laws and regulations described above are uncertain and subject to change, and may require substantial costs to monitor and implement compliance with any additional requirements. In addition, new and more stringent multinational, national and state privacy legislation and regulations may be adopted in 2023 and beyond. We cannot predict all the jurisdictions in which new legislation, regulation or enforcement might arise, the scope of such legislation, regulation and enforcement, or the potential impact to our business and operations of any such changes. Failure to comply with U.S. and international data protection laws and regulations, and the disclosure of any data or related breach, could result in government

enforcement actions (which could include substantial civil and/or criminal penalties and injunctive relief), private litigation and/or adverse publicity and could have a material adverse impact on our business, financial condition or results of operations.

Pending and future product liability claims and litigation could adversely impact our financial condition and results of operations and impair our reputation.

Our business exposes us to potential product liability risks that are inherent in the design, manufacture and marketing of medical devices. In the ordinary course of business, we are 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. As discussed further in Note 21 to our consolidated financial statements, we are defending product liability lawsuits relating to the Durom® Acetabular Component ("Durom Cup"), certain products within the M/L Taper and M/L Taper with Kinectiv® Technology hip stems and Versys® Femoral Head implants, and the M2a-Magnum™ hip system. We are also currently defending a number of other product liability lawsuits and claims related to various other products. Any product liability claim brought against us, with or without merit, can be costly to defend. Product liability lawsuits and claims, safety alerts or product recalls, regardless of their ultimate outcome, could have a material adverse effect on our business and reputation and on our ability to attract and retain customers.

We are substantially dependent on patent and other proprietary rights, and failing to protect such rights or to be successful in litigation related to our rights or the rights of others may result in our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and other proprietary rights against others.

Claims of intellectual property infringement and litigation regarding patent and other intellectual property rights are commonplace in our industry and are frequently time consuming and costly. At any given time, we may be involved as either plaintiff or defendant in a number of patent infringement actions, the outcomes of which may not be known for prolonged periods of time. While it is not possible to predict the outcome of patent and other intellectual property litigation, such litigation has in the past resulted in, and could in the future result in, our payment of significant monetary damages and/or royalty payments, negatively impact our ability to sell current or future products, or prohibit us from enforcing our patent and proprietary rights against others, which could have a material adverse effect on our business and results of operations.

Our success depends in part on our proprietary technology, processes, methodologies and information. We rely on a combination of patent, copyright, trademark, trade secret and other intellectual property laws and nondisclosure, license, assignment and confidentiality arrangements to establish, maintain and protect our proprietary rights, as well as the intellectual property rights of third parties whose assets we license. However, the steps we have taken to protect our intellectual property rights, and the rights of those from whom we license intellectual property, may not be adequate to prevent unauthorized use, misappropriation or theft of our intellectual property. Further, our currently pending or future patent applications may not result in patents being issued to us, patents issued to or licensed by us in the past or in the future may be challenged or circumvented by competitors, and such patents may be found invalid, unenforceable or insufficiently broad to protect our technology or to provide us with any competitive advantage. Third parties could obtain patents that may require us to negotiate licenses to conduct our business, and the required licenses may not be available on reasonable terms or at all. We also cannot be certain that others will not independently develop substantially equivalent proprietary information.

In addition, intellectual property laws differ in various jurisdictions in which we operate and are subject to change at any time, which could further restrict our ability to protect our intellectual property and proprietary rights. In particular, a portion of our revenues is derived from jurisdictions where adequately protecting intellectual property rights may prove more challenging or impossible. We may also not be able to detect unauthorized uses or take timely and effective steps to remedy unauthorized conduct. To prevent or respond to unauthorized uses of our intellectual property, we might be required to engage in costly and time-consuming litigation or other proceedings and we may not ultimately prevail. Any failure to establish, maintain or protect our intellectual property or proprietary rights could have a material adverse effect on our business, financial condition, or results of operations.

We are involved in legal proceedings that may result in adverse outcomes.

In addition to intellectual property and product liability claims and lawsuits, we are involved in various commercial and securities litigation and claims and other legal proceedings that arise from time to time in the ordinary course of our business. Although we believe there are substantial defenses in these matters, litigation and other claims are subject to inherent uncertainties and management's view of these matters may change in the future. Given the uncertain nature of legal proceedings generally, we are not able in all cases to estimate the amount or range of loss that could result from an unfavorable outcome. We could in the future incur judgments or enter into settlements of claims that could have a material adverse effect on our results of operations in any particular period.

Risks Related to Our Organizational Documents and Jurisdiction of Incorporation

Anti-takeover provisions in our organizational documents could delay or prevent a change of control.

Certain provisions of our Restated Certificate of Incorporation, our Restated By-Laws and the Delaware General Corporation Law may have an anti-takeover effect and may delay, defer or prevent a merger, acquisition, tender offer,

takeover attempt or other change of control transaction that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders.

These provisions provide for, among other things:

- the ability of our board of directors to issue one or more series of preferred stock without further stockholder action;
- advance notice for nominations of directors by stockholders and for stockholders to include matters to be considered at our annual meetings;
- certain limitations on convening special stockholder meetings; and
- the prohibition on engaging in a "business combination" with an "interested stockholder" for three years after the time at which a person became an interested stockholder unless certain conditions are met, as set forth in Section 203 of the Delaware General Corporation Law.

These anti-takeover provisions could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many of our stockholders. As a result, our stockholders may be limited in their ability to obtain a premium for their shares.

Our Restated By-Laws designate certain Delaware courts as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our Restated By-Laws provide that, unless we consent in writing to the selection of an alternative forum, a state court located within the State of Delaware (or, if no state court located in the State of Delaware has jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for any stockholder (including any beneficial owner) to bring (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim against us or any of our directors, officers or other employees arising pursuant to any provision of the Delaware General Corporation Law or our Restated Certificate of Incorporation or our Restated By-Laws, as either may be amended from time to time, or (iv) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have received notice of and consented to the foregoing provisions. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and employees. Alternatively, if a court were to find this choice of forum provision inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

Item 1B. Unresolved Staff Comments

Not Applicable.

Item 2. Properties

We own or lease approximately 280 different facilities around the world, of which approximately half are in the U.S. Our corporate headquarters is in Warsaw, Indiana. Warsaw, Indiana is also home to our most significant manufacturing, research and development ("R&D"), and other business activities for our Knees, Hips and S.E.T. product divisions. Internationally, our EMEA regional headquarters is in Switzerland and our Asia Pacific regional headquarters is in Singapore.

We have approximately 25 manufacturing locations in the U.S. and internationally. Our most significant locations outside of the U.S. are in Switzerland, Ireland, the U.K., China, and Puerto Rico. We primarily own our manufacturing facilities in the U.S.; internationally, we occupy both owned and leased manufacturing facilities.

We maintain sales and administrative offices and warehouse and distribution facilities in more than 45 countries around the world. These local market facilities are primarily leased due to common businesses practices and to allow us to be more adaptable to changing needs in the market.

We distribute our products both through large, centralized warehouses and through smaller, market specific facilities, depending on the needs of the market. We maintain large, centralized warehouses in the U.S. and the Netherlands to be able to efficiently distribute our products to customers in the U.S. and EMEA.

We believe that all of the facilities and equipment are in good condition, well maintained and able to operate at present levels. We believe the current facilities, including manufacturing, warehousing, R&D and office space, provide sufficient capacity to meet ongoing demands.

Item 3. Legal Proceedings

Information pertaining to certain legal proceedings in which we are involved can be found in Note 21 to our consolidated financial statements included in Part II, Item 8 of this report and is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not Applicable.

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

Market for the Registrant's Common Equity and Related Stockholder Matters

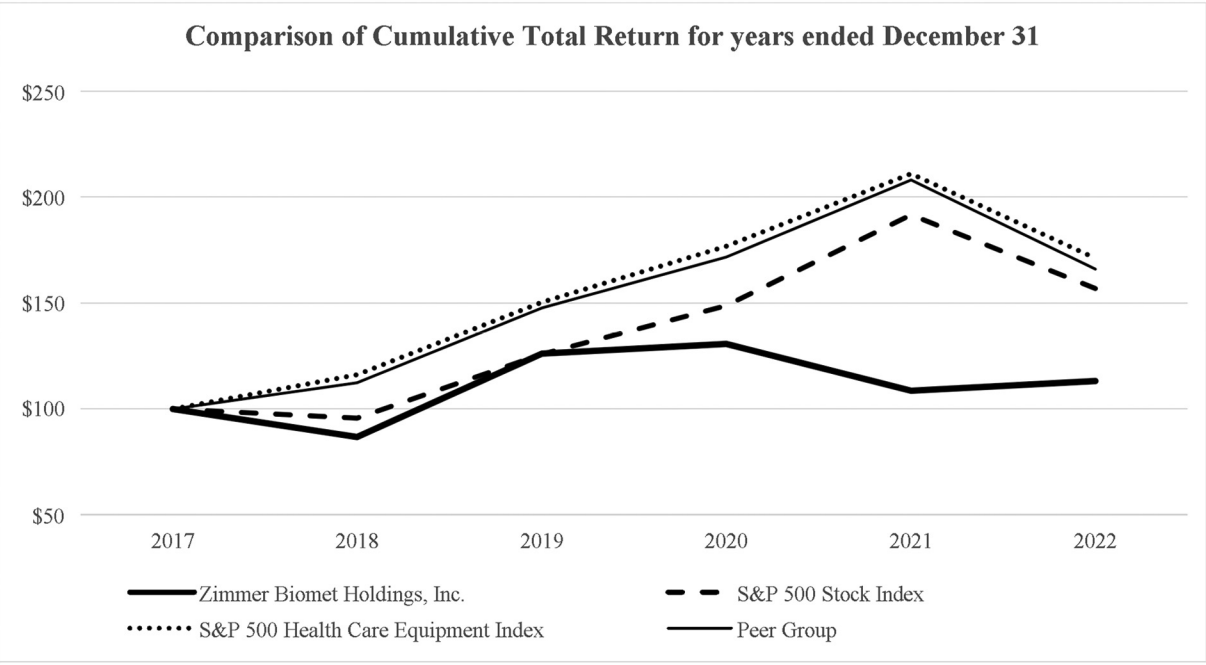
Our common stock is traded on the New York Stock Exchange and the SIX Swiss Exchange under the symbol "ZBH." As of February 7, 2023, there were approximately 14,540 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares of record are held by banks, brokers and other financial institutions.

We expect to continue paying cash dividends on a quarterly basis; however, future dividends are subject to approval of the Board of Directors and may be adjusted as business needs or market conditions change.

The information required by this Item concerning equity compensation plans is incorporated herein by reference to Item 12 of this report.

The graph below shows the cumulative total stockholder return on our common stock compared to the S&P 500 Stock Index, the S&P 500 Health Care Equipment Index and the common stock of a selected group of peer issuers (the "Peer Group"). The chart assumes $100 was invested on December 31, 2017 in Zimmer Biomet common stock and each index and that dividends were reinvested. Returns over the indicated period should not be considered indicative of future returns.

The Peer Group is a group of publicly traded companies, including other large healthcare equipment and services companies, life sciences services companies and companies with whom we compete for business and for executive talent, which companies we use as a market reference point for performance comparisons, executive compensation levels, equity usage and incentive plan design and industry trend analysis. The Peer Group is selected by our Compensation and Management Development Committee from time to time, most recently in May 2022, and currently consists of the following issuers: Agilent Technologies, Inc.; Align Technology, Inc.; Baxter International Inc.; Becton Dickinson and Company; Boston Scientific Corporation; DexCom, Inc.; Edwards Lifesciences Corporation; Hologic, Inc.; Intuitive Surgical, Inc.; Laboratory Corporation of America Holdings; Quest Diagnostics Incorporated; Stryker Corporation; Teleflex Incorporated; and The Cooper Companies, Inc. We have selected the Peer Group to replace the S&P 500 Health Care Equipment Index because we believe it better reflects our relative market performance and to provide consistency in evaluating our relative executive compensation practices.



Company/Index	2017	2018	2019	2020	2021	2022
Zimmer Biomet Holdings, Inc.	$100.00	$ 86.69	$126.03	$130.77	$108.51	$113.18
S&P 500 Stock Index	100.00	95.62	125.72	148.85	191.58	156.88
S&P 500 Health Care Equipment Index	100.00	116.24	150.32	176.83	211.05	171.25
Peer Group	100.00	112.39	147.56	171.63	208.11	165.99

Issuer Purchases of Equity Securities

The following table summarizes repurchases of common stock settled during the three months ended December 31, 2022:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as a Part of Publicly Announced Program[1]	Maximum Approximate Dollar Value of Shares that may yet be Purchased Under the Program[1]
October 2022	–	$ –	–	$1,000,000,000
November 2022	–	–	–	1,000,000,000
December 2022	1,185,064	126.58	1,185,064	850,000,131
Total	1,185,064	$126.58	1,185,064	$ 850,000,131

[1] In February 2016, our Board of Directors authorized a $1.0 billion share repurchase program effective March 1, 2016, with no expiration date.

Item 6. **[Reserved]**

On March 1, 2022, we completed the spinoff of our spine and dental businesses into ZimVie. The historical results of our spine and dental businesses have been reflected as discontinued operations in our consolidated financial statements in our 2022 results through the date of the spinoff and in the prior year periods. In addition, as of December 31, 2021, the assets and liabilities associated with these businesses are classified as assets and liabilities of discontinued operations in our consolidated balance sheet. See Note 3 to our consolidated financial statements for additional information. The following discussion and analysis is presented on a continuing operations basis unless otherwise noted. Certain percentages presented in this discussion and analysis are calculated from the underlying whole-dollar amounts and therefore may not recalculate from the rounded numbers used for disclosure purposes.

The following discussion, analysis and comparisons generally focus on the operating results for the years ended December 31, 2022 and 2021. Discussion, analysis and comparisons of the years ended December 31, 2021 and 2020 that are not included in this Form 10-K can be found in (i) "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2021 (the "2021 Form 10-K") prior to the spinoff of ZimVie; and (ii) "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of Exhibit 99.1 filed with our Form 8-K on June 22, 2022, which Form 8-K was filed to recast certain items of the 2021 Form 10-K, including Part II, Item 7, to reflect the historical results of our spine and dental businesses as discontinued operations following the ZimVie spinoff.

EXECUTIVE LEVEL OVERVIEW

Impact of the COVID-19 Global Pandemic

Our results continue to be impacted by the COVID-19 global pandemic. The vast majority of our net sales are derived from products used in elective surgical procedures that have typically declined during surges of the virus as governments and healthcare systems take actions in an effort to prevent the spread and provide sufficient hospital beds and other resources for COVID-19 patients. Additionally, we believe that staffing shortages at hospitals have contributed to the deferral of elective surgical procedures. In the year ended December 31, 2022, the Omicron variant resulted in fewer elective surgical procedures earlier in the year with recovery in procedures as the surge began to subside later in the first quarter and through the second quarter. In the second half of 2022, procedural volumes continued to improve across most markets relative to the first half of the year. However, in the fourth quarter we did experience more acute deferrals of elective surgical procedures in some markets, such as China, due to surges of the virus.

2022 Financial Highlights

In 2022, our net sales increased by 1.6 percent compared to 2021. Our net sales in 2022 were tempered by a negative 5.0 percent effect from changes in foreign currency exchange rates. We continued to see the return of elective surgical procedures across most markets when compared to the prior year, which was negatively affected by a surge of the COVID-19 virus in early 2021 before vaccines were widely available and later in the year by the Delta variant.

Our net earnings, including discontinued operations, were $231.4 million in 2022 compared to $401.6 million in 2021. In 2022, we recognized a goodwill impairment charge of $289.8 million, which was the primary driver for lower net earnings in 2022 when compared to 2021. Other significant unfavorable items in 2022 when compared to 2021 include an unrealized investment loss of $116.6 million due to a decline in the value of our investment in ZimVie, higher restructuring-related costs as we continued to execute on our 2019 and 2021 Restructuring Plans, and higher spending on travel and other activities which started to return to pre-pandemic levels. These unfavorable factors to net earnings were partially offset by higher net sales, hedge gains recognized from our hedging program, the favorable effects of our restructuring programs, lower litigation-related expenses, and the fact the 2021 period included a $165.1 million charge for the early extinguishment of debt and $65.0 million of charges related to certain agreements we entered into to gain access to or acquire third-party in-process research and development ("IPR&D") projects.

2023 Outlook

We expect revenue growth in 2023 to be driven by a combination of market growth, procedure volume recovery from COVID-19 and new product introductions. We believe there will continue to be some deferrals of elective surgical procedures caused by COVID-19 surges and staffing shortages, but to a lesser extent in 2023 than in 2022. In addition, based on foreign currency exchange rates at the end of 2022 we expect foreign currency to negatively affect net sales growth in 2023, but at a lower level than experienced in 2022. We expect that supply chain and inflation pressures will continue into 2023, but with supply chain pressure easing in the second half of the year and with inflation stable to the level experienced at the end of 2022. We estimate our operating expenses in 2023 will be impacted by the expected non-reoccurrence of goodwill impairment charges, lower quality remediation expenses due to the completion of our remediation milestones, and lower restructuring-related expenses related to our 2019 and 2021 Restructuring Plans. We expect our interest expense, net, will increase primarily due to higher interest rates. We also expect our non-operating other (expense) income, net, will decline in 2023 since the 2022 expense was primarily driven by an investment loss in the shares of ZimVie that we held following the spinoff, which shares we disposed of in February 2023.

RESULTS OF OPERATIONS

We review sales by two geographies, the United States and International, and by the following product categories: Knees; Hips; S.E.T. (Sports Medicine, Extremities, Trauma, Craniomaxillofacial and Thoracic); and Other. This sales analysis differs from our reportable operating segments, which are based upon our senior management organizational structure and how we allocate resources toward achieving operating profit goals. We review sales by these geographies because the underlying market trends in any particular geography tend to be similar across product categories, because we primarily sell the same products in all geographies and many of our competitors publicly report in this manner. Our business is seasonal in nature to some extent, as many of our products are used in elective surgical procedures, which typically decline during the summer months and can increase at the end of the year once annual deductibles have been met on health insurance plans. Additionally, with sales to customers where title to product passes upon shipment, these customers may purchase items in large quantities if incentives are offered or if there are new product offerings in a market, which could cause period-to-period differences in sales. Due to the COVID-19 global pandemic, the typical seasonal patterns did not occur in 2020 or 2021, but started to return in 2022.

Net Sales by Geography

The following table presents net sales by geography and the percentage changes (dollars in millions):

	Year Ended December 31,			2022 vs. 2021	2021 vs. 2020
	2022	2021	2020	% Inc/(Dec)	% Inc
United States	$4,012.4	$3,853.9	$3,507.7	4.1%	9.9%
International	2,927.5	2,973.4	2,619.8	(1.5)	13.5
Total	$6,939.9	$6,827.3	$6,127.5	1.6	11.4

Net Sales by Product Category

The following table presents net sales by product category and the percentage changes (dollars in millions):

	Year Ended December 31,			2022 vs. 2021	2021 vs. 2020
	2022	2021	2020	% Inc/(Dec)	% Inc
Knees	$2,778.3	$2,647.9	$2,378.3	4.9%	11.3%
Hips	1,894.9	1,856.1	1,750.5	2.1	6.0
S.E.T.	1,696.7	1,727.8	1,525.6	(1.8)	13.3
Other	570.0	595.5	473.1	(4.3)	25.9
Total	$6,939.9	$6,827.3	$6,127.5	1.6	11.4

The following table presents net sales by product category by geography for our Knees and Hips product categories, which represent our most significant product categories (dollars in millions):

	Year Ended December 31,			2022 vs. 2021	2021 vs. 2020
	2022	2021	2020	% Inc/(Dec)	% Inc
Knees					
United States	$1,615.0	$1,487.6	$1,382.5	8.6%	7.6%
International	1,163.3	1,160.3	995.8	0.3	16.5
Total	$2,778.3	$2,647.9	$2,378.3	4.9	11.3
Hips					
United States	$ 960.9	$ 921.5	$ 881.1	4.3%	4.6%
International	934.0	934.6	869.4	(0.1)	7.5
Total	$1,894.9	$1,856.1	$1,750.5	2.1	6.0

Demand (Volume/Mix) Trends

Changes in volume and mix of product sales had a positive effect of 7.6 percent and 12.3 percent on year-over-year sales during the years ended December 31, 2022 and 2021, respectively. Volume trends were positive in 2022 as we saw recovery of elective surgical procedures, most notably in international markets, driving volume growth in tandem with new product introductions. In 2022, sales were negatively impacted by limitations due to global supply chain challenges.

Based upon country dynamics, volume changes varied by region in 2022. The volume increases in 2022 were largely a product of how much the COVID-19 pandemic negatively affected the various regions in 2021. In EMEA and Asia Pacific, deferral of elective surgical procedures were more prevalent than in the Americas in 2021. Additionally, in Asia Pacific in 2021, China sales were negatively impacted from a combination of variables related to the implementation of a nationwide volume-based procurement ("VBP") process. The China VBP had a negative effect on volume due to inventory reductions by distributors and short-term deferral of procedures as patients waited to have a surgical procedure performed until after VBP pricing was effective in 2022.

Pricing Trends

Global selling prices had negative effects of 1.0 percent and 2.1 percent on year-over-year sales during 2022 and 2021, respectively. In the majority of countries in which we operate, we continue to experience pricing pressure from governmental healthcare cost containment efforts and from local hospitals and health systems. However, we have had some success in reducing the negative effects of pricing in 2022 due to internal initiatives and being able to pass some inflationary impacts on to customers.

Foreign Currency Exchange Rates

In 2022 and 2021, changes in foreign currency exchange rates had a negative effect of 5.0 percent and a positive effect of 1.2 percent, respectively, on year-over-year sales.

Geography

The 4.1 percent and 9.9 percent net sales growth in the U.S. in 2022 and 2021, respectively, when compared to the prior year in each case was primarily driven by recovery in surgical procedures as COVID-19 cases subsided, especially in the Knees and Hips categories. Internationally, net sales declined by 1.5 percent in 2022 when compared to 2021 and increased 13.5 percent in 2021 when compared to 2020. The decline in 2022 was driven by the negative impacts on International sales of 11.2 percent due to changes in foreign currency exchange rates. Absent the effect of changes in foreign currency exchange rates, most of our markets internationally experienced demand (volume and mix) growth from recovery in surgical procedures. In 2021, our International markets experienced net sales growth from recovery in elective surgical procedures.

Product Categories

In 2022, our Knees and Hips net sales increased by 4.9 percent and 2.1 percent, respectively, when compared to 2021 due to the recovery in elective surgical procedures and new product introductions. The increase was despite the impact of changes in foreign currency exchange rates having a negative effect of 5.0 percent and 5.9 percent on Knees and Hips net sales, respectively. S.E.T. net sales decreased by 1.8 percent in 2022 when compared to 2021 due to the negative effects of changes in foreign currency exchange rates, lower trauma product net sales partially due to VBP implementation and unfavorable changes in reimbursement for certain restorative therapy products. Other product category net sales decreased by 4.3 percent in 2022 when compared to 2021 due to the negative effects of changes in foreign currency exchange rates and lower unit sales of our ROSA robots as some customers shifted to operating lease arrangements for our robots instead of purchasing them. In 2021, all our product categories experienced net sales growth when compared to 2020 due to the recovery of elective surgical procedures.

Expenses as a Percent of Net Sales

	Year Ended December 31,			2022 vs. 2021	2021 vs. 2020
	2022	2021	2020	Inc/(Dec)	Inc/(Dec)
Cost of products sold, excluding intangible asset amortization	29.1%	28.7%	29.8%	0.4%	(1.1)%
Intangible asset amortization	7.6	7.8	8.4	(0.2)	(0.6)
Research and development	5.9	6.4	5.3	(0.5)	1.1
Selling, general and administrative	39.8	41.6	44.3	(1.8)	(2.7)
Goodwill and intangible asset impairment	4.2	0.2	8.2	4.0	(8.0)
Restructuring and other cost reduction initiatives	2.8	1.8	1.7	1.0	0.1
Quality remediation	0.5	0.8	0.8	(0.3)	–
Acquisition, integration, divestiture and related	0.2	–	0.2	0.2	(0.2)
Operating Profit	10.0	12.6	1.4	(2.6)	11.2

Cost of Products Sold and Intangible Asset Amortization

We calculate gross profit as net sales minus cost of products sold and intangible asset amortization. Our gross margin percentage is gross profit divided by net sales. The following table sets forth the factors that contributed to the

gross margin changes in each of 2022 and 2021 compared to the prior year:

	Year Ended December 31,	
	2022	2021
Prior year gross margin	63.5%	61.9%
Lower average selling prices	(0.3)	(0.6)
Manufacturing costs	(0.9)	0.5
Impact of volume, product mix and other	0.6	(0.5)
Inventory charges	(0.1)	2.1
Impact from changes in foreign currency exchange rates	0.3	(0.5)
Intangible asset amortization	0.2	0.6
Current year gross margin	63.3%	63.5%

The decline in gross margin percentage in 2022 compared to 2021 was primarily due to inflationary cost pressures, lower average selling prices and inventory charges related to products we plan to discontinue. These unfavorable items were partially offset by hedge gains recognized in 2022 as part of our hedging program compared to hedge losses in 2021, operating leverage from volume increases, a mix shift to higher margin product sales, as well as the fact that the 2021 period experienced lower than normal production at certain facilities which resulted in fixed overhead costs being expensed immediately.

Intangible asset amortization expense was similar in both amount and as a percentage of net sales in 2022 when compared to 2021.

Operating Expenses

Research & development ("R&D") expenses decreased in both amount and as a percentage of net sales in 2022 compared to 2021, primarily due to the fact that in 2021 we entered into certain agreements to gain access to or acquire third-party IPR&D projects that resulted in charges of $65.0 million. We did not enter into any significant, similar agreements in 2022. That favorability was partially offset by higher personnel-related costs and higher spending on our initial compliance with the EU MDR in 2022.

Selling, general & administrative ("SG&A") expenses decreased in both amount and as a percentage of net sales in 2022 compared to 2021 primarily due to litigation-related expenses declining by $135.1 million and savings from our restructuring plans. These favorable items were partially offset by higher bad debt charges partially related to the Russia/Ukraine conflict and higher expenses for travel and other activities as we started to return to pre-pandemic levels in 2022.

As a result of the invasion of Ukraine by Russia, economic sanctions and export controls were imposed by much of the world on Russian financial institutions and businesses. Our operations in Russia consist primarily of local commercial activities, including sales and customer support. We do not have direct operations in Ukraine. Our net sales in Russia and Ukraine in 2022 were less than 1 percent of our consolidated net sales. Therefore, the ongoing conflict and economic sanctions are not expected to have a significant effect on our results of operations or financial position. The bad debt charges for expected credit losses in Russia resulted in a significant portion of our accounts receivable from customers in this country being impaired. In addition to accounts receivable, we also have inventory and instruments that could require impairment if our business in Russia deteriorates more than our current expectations; however, any such amounts are not expected to be material. See Part I, Item 1A "Risk Factors" for additional risks related to this conflict.

In 2022, we recognized a goodwill impairment charge of $289.8 million related to our EMEA reporting unit. In 2022 and 2021, we recognized intangible asset impairment charges of $3.0 million and $16.3 million, respectively, related to IPR&D projects that we discontinued. For more information regarding these charges, see Note 11 to our consolidated financial statements.

In December of 2021 and 2019, we initiated restructuring programs. The 2021 Restructuring Plan is intended to further reduce costs and to reorganize our global operations in preparation for the spinoff of ZimVie. The 2019 Restructuring Plan has an objective of reducing costs to allow us to invest in higher priority growth opportunities. We also have other cost reduction and optimization initiatives that have the goal of reducing costs across the organization. We recognized expenses of $191.6 million and $125.7 million in 2022 and 2021, respectively, primarily related to employee termination benefits, sales agent contract terminations, and consulting and project management expenses associated with these programs. The expenses were higher in 2022 primarily due to additional expenses related to the 2021 Restructuring Plan that had just been initiated at the end of 2021. For more information regarding these expenses, see Note 5 to our consolidated financial statements.

We incurred quality remediation expenses of $33.8 million and $52.8 million in 2022 and 2021, respectively. We incurred these quality remediation expenses to complete our remediation milestones that address inspectional observations on Form 483 and a warning letter issued by the FDA at our Warsaw North Campus facility, among other matters. The decline in expenses in 2022 when compared to 2021 was due to the natural regression as various remediation milestones were completed. We do not expect to incur any significant quality remediation expenses related to these inspectional observations in 2023.

Acquisition, integration, divestiture and related expenses related to acquisitions made in 2022 and 2020 as well as costs related to our separation with ZimVie.

Other (Expense) Income, net, Interest Expense, net, Loss on Early Extinguishment of Debt and Income Taxes

In 2022, we incurred a loss of $128.0 million in our other (expense) income, net compared to a gain of $12.2 million in 2021. The expense in 2022 was primarily due to a $116.6 million loss on our investment in ZimVie.

Interest expense, net, decreased in 2022 when compared to 2021 primarily from using debt that we issued in the fourth quarter of 2021, along with cash on hand, to repurchase portions of outstanding notes with higher interest rates. Additionally, interest expense, net was lower due to additional debt paydown.

In 2021, we recognized a $165.1 million loss on the early extinguishment of debt. See Note 13 to our consolidated financial statements for additional information on this loss.

Our effective tax rate ("ETR") on earnings from continuing operations before income taxes was 27.9 percent and 10.7 percent for the years ended December 31, 2022 and 2021, respectively. In 2022, the ETR was primarily driven by the $289.8 million goodwill impairment charge and the $116.6 million loss on our investment in ZimVie, which have no corresponding tax benefits, partially offset by favorable tax audit settlements and finalization of Switzerland's Federal Act on Tax Reform and AHV Financing ("TRAF") step-up. In 2021, the ETR was primarily driven by the foreign rate differential as our foreign locations have lower tax rates and favorable return-to-provision changes in estimate offset by unfavorable tax rate changes.

Absent discrete tax events, we expect our future ETR will be lower than the U.S. corporate income tax rate of 21.0 percent due to our mix of earnings between U.S. and foreign locations, which have lower corporate income tax rates. Our ETR in future periods could also potentially be impacted by: changes in our mix of pre-tax earnings; changes in tax rates, tax laws or their interpretation, including the European Union adoption of Pillar 2 proposals; the outcome of various federal, state and foreign audits; and the expiration of certain statutes of limitations. Currently, we cannot reasonably estimate the impact of these items on our financial results.

See Note 17 to our consolidated financial statements for additional information on our income taxes.

Segment Operating Profit

	Net Sales			Operating Profit			Operating Profit as a Percentage of Net Sales		
	Year Ended December 31,			Year Ended December 31,			Year Ended December 31,		
(dollars in millions)	2022	2021	2020	2022	2021	2020	2022	2021	2020
Americas	$4,295.5	$4,102.1	$3,699.5	$1,811.9	$1,709.3	$1,528.2	42.2%	41.7%	41.3%
EMEA	1,456.6	1,477.2	1,237.3	380.8	380.3	303.0	26.1	25.7	24.5
Asia Pacific	1,187.8	1,248.0	1,190.7	407.0	401.3	395.4	34.3	32.2	33.2

Americas

In the Americas, operating profit and operating profit as a percentage of net sales increased in 2022 when compared to 2021 due to higher net sales driven by continued recovery of elective surgical procedures, lower excess and obsolete inventory charges and savings from our restructuring programs. These favorable items were partially offset by higher R&D costs.

EMEA

In EMEA, operating profit and operating profit as a percentage of net sales increased in 2022 when compared to 2021. Our net sales declined in EMEA due to the negative effects of changes in foreign currency exchange rates. However, our operating profit increased slightly due to our hedging program as we recognized hedge gains, which minimized the negative effects from net sales, and we realized savings from our restructuring programs. These favorable items were partially offset by higher bad debt, travel and medical training and education expenses.

Asia Pacific

In Asia Pacific, operating profit and operating profit as a percentage of net sales increased in 2022 when compared to 2021. Our net sales declined in Asia Pacific due to the negative effects of changes in foreign currency exchange rates and by the China government implementing a nationwide volume-based procurement process that became effective in 2022. However, our operating profit increased slightly due to our hedging program as we recognized hedge gains, which minimized these negative effects from net sales, and we realized savings from our restructuring programs.

LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2022, we had $375.7 million in cash and cash equivalents. In addition, we had $1.0 billion available to borrow under a 364-day revolving credit agreement that matures on August 18, 2023, and $1.1 billion available under a five-year revolving facility that matures on August 19, 2027. The terms of the 364-day revolving credit agreement and the five-year revolving facility are described further in Note 13 to our consolidated financial statements.

We believe that cash flows from operations, our cash and cash equivalents on hand, and available borrowings under our revolving credit facilities will be sufficient to meet our ongoing liquidity requirements for at least the next twelve months. However, due to the continued uncertainties related to the COVID-19 pandemic, it is possible our needs may change. Further, there can be no assurance that, if needed, we will be able to secure additional financing on terms favorable to us, if at all.

Sources of Liquidity

Cash flows provided by operating activities from continuing operations were $1,356.2 million in 2022 compared to $1,404.3 million in 2021. The decrease in cash flows from operating activities in 2022 when compared to 2021 was primarily the result of higher tax payments and increased payments under our restructuring programs. These unfavorable items were partially offset by lower interest

payments and lower investments in inventory, as well as the fact that the 2021 period included payments related to certain IPR&D agreements.

Cash flows used in investing activities from continuing operations were $522.0 million in 2022 compared to $443.3 million in 2021. Instrument and property, plant and equipment additions reflected ongoing investments in our product portfolio, optimization of our manufacturing and logistics network and investments in enterprise resource planning software. The 2022 period also reflects investments for an acquisition as well as other investments for acquiring intellectual property related to products that have been commercialized. These cash outflows were partially offset by favorable settlements of our net investment hedges as they matured.

Cash flows used in financing activities from continuing operations were $775.7 million in 2022 compared to $1,306.0 million in 2021. At the ZimVie spinoff date, we received $540.6 million as partial consideration for the contribution of assets in connection with the separation. We used these proceeds, together with borrowings on our five-year revolving facility and cash on hand to redeem the full $750.0 million senior notes that were due April 1, 2022. We also repaid $242.9 million outstanding on our Japanese term loans and $525.8 million outstanding on our 1.414% Euro senior notes at their maturity date of December 13, 2022. In order to help fund the payment on these Euro senior notes, we borrowed $375.0 million under our five-year revolving facility and $83.0 million under a short-term term loan in connection with our plans to dispose of our ZimVie shares. In addition, in 2022 we expended $126.4 million to repurchase shares of our common stock.

In 2021, we issued senior notes and received $1,599.8 million in proceeds, which, along with cash on hand, were used to extinguish $1,993.2 million aggregate outstanding principal amount of our senior notes pursuant to cash tender offers for certain outstanding series of our senior notes, at a total reacquisition price of $2,154.8 million. Additionally, we used cash on hand to redeem $500.0 million of other senior notes that matured in 2021. We also had deferred business combination payments of $145.0 million that were paid in 2021 under the terms of the purchase agreements.

We place our cash and cash equivalents in highly-rated financial institutions and limit the amount of credit exposure to any one entity. We invest only in high-quality financial instruments in accordance with our internal investment policy.

As of December 31, 2022, $328.2 million of our cash and cash equivalents were held in jurisdictions outside of the U.S. Of this amount, $43.2 million is denominated in U.S. Dollars and, therefore, bears no foreign currency translation risk. The balance of these assets is denominated in currencies of the various countries where we operate. We generally intend to limit distributions from foreign subsidiaries to earnings previously taxed in the U.S., primarily as a result of the transition tax or tax on Global Intangible Low-Taxed Income ("GILTI"), as we would not be subject to further U.S. federal tax. In addition to the previously taxed earnings, we have intercompany notes available to repatriate.

Material Cash Requirements from Known Contractual and Other Obligations

At December 31, 2022, we had outstanding debt of $5,696.5 million, of which $544.3 million was classified as current debt. Of our current debt, we settled the full amount of our $83.0 million of our short-term term loan in February 2023 using $33.9 million in cash and the transfer of all the ZimVie shares that we owned, $86.3 million of senior notes mature on March 19, 2023 and the remaining $375.0 million is outstanding under our five-year revolving facility which we expect to repay during 2023. We believe we can satisfy these debt obligations with cash generated from our operations.

For additional information on our debt, including types of debt, maturity dates, interest rates, debt covenants and available revolving credit facilities, see Note 13 to our consolidated financial statements.

In February, May, August and December 2022, our Board of Directors declared cash dividends of $0.24 per share. We expect to continue paying cash dividends on a quarterly basis; however, future dividends are subject to approval of the Board of Directors and may be adjusted as business needs or market conditions change.

In February 2016, our Board of Directors authorized a $1.0 billion share repurchase program effective March 1, 2016, with no expiration date. We had not repurchased any shares under this program until the fourth quarter of 2022, when we entered into transactions to repurchase $150.0 million in shares of our common stock. Our third-party broker executed the full $150.0 million of repurchases as of December 31, 2022 for which paid them $126.4 million by December 31, 2022, with the remaining balance we owed settled at the beginning of January 2023. As of December 31, 2022, $850.0 million remained authorized under this program.

As discussed in Note 5 to our consolidated financial statements, we have a 2021 Restructuring Plan and a 2019 Restructuring Plan. The 2021 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $220 million, of which approximately $130 million was incurred through December 31, 2022. We expect to reduce gross annual pre-tax operating expenses by approximately $190 million relative to the 2021 baseline expenses by the end of 2024 as program benefits under the 2021 Restructuring Plan are realized. The 2019 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $350 million to $400 million, of which approximately $280 million was incurred through December 31, 2022. In our original estimates, we expected to reduce gross annual pre-tax operating expenses by approximately $180 million to $280 million relative to the 2019 baseline expenses by the end of 2023 as program benefits under the 2019 Restructuring Plan are realized. Our latest estimates indicate that we will be near the low end of that range.

As discussed in Note 17 to our consolidated financial statements, the IRS has issued proposed adjustments for years 2010 through 2012, and for years 2013 through 2015, reallocating profits between certain of U.S. and foreign subsidiaries. We have disputed these proposed adjustments

and intend to continue to vigorously defend our positions. Although the ultimate timing for resolution of the disputed tax issues is uncertain, future payments may be significant to our operating cash flows.

Under the Tax Cuts and Jobs Act of 2017, we have a $187.8 million liability remaining from a one-time tax on the mandatory deemed repatriation of post-1986 untaxed foreign earnings and profits ("toll charge") for the deemed repatriation of unremitted foreign earnings. This amount was recorded in non-current income tax liabilities on our consolidated balance sheet as of December 31, 2022.

As discussed in Note 21 to our consolidated financial statements, we are involved in various litigation matters. We estimate the total liabilities for all litigation matters was $349.2 million as of December 31, 2022. We expect to pay these liabilities over the next few years.

In the normal course of business, we enter into purchase commitments, primarily related to raw materials. However, we do not believe these purchase commitments are material to the overall standing of our business or our liquidity.

We have entered into various agreements that may result in future payments dependent upon various events such as the achievement of certain product R&D milestones, sales milestones, or, at our discretion, maintenance of exclusive rights to distribute a product. These estimated payments related to these agreements could range from $0 to $415 million.

CRITICAL ACCOUNTING ESTIMATES

The preparation of our financial statements is affected by the selection and application of accounting policies and methods, and also requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Critical accounting estimates are those that involve a significant level of estimation uncertainty and have had or are reasonably likely to have a material impact on our financial condition and results of operations. We believe that the accounting estimates and assumptions described below involve significant subjectivity and judgment, and changes to such estimates or assumptions could have a material impact on our financial condition or operating results.

Excess Inventory and Instruments—We must determine as of each balance sheet date how much, if any, of our inventory may ultimately prove to be unsaleable or unsaleable at our carrying cost. Similarly, we must also determine if instruments on hand will be put to productive use or remain undeployed as a result of excess supply. Accordingly, inventory and instruments are written down to their net realizable value. To determine the appropriate net realizable value, we evaluate current stock levels in relation to historical and expected patterns of demand for all of our products and instrument systems and components. The basis for the determination is generally the same for all inventory and instrument items and categories except for work-in-process inventory, which is recorded at cost. Obsolete or discontinued items are generally destroyed and completely written off. Management evaluates the need for changes to the net realizable values of inventory and instruments based on market conditions, competitive offerings and other factors on a regular basis.

Income Taxes—Our income tax expense, deferred tax assets and liabilities and reserves for unrecognized tax benefits reflect management's best assessment of estimated future taxes to be paid. We are subject to income taxes in the U.S. and numerous foreign jurisdictions. Significant judgments and estimates are required in determining the consolidated income tax expense.

We estimate income tax expense and income tax liabilities and assets by taxable jurisdiction. Realization of deferred tax assets in each taxable jurisdiction is dependent on our ability to generate future taxable income sufficient to realize the benefits. We evaluate deferred tax assets on an ongoing basis and provide valuation allowances unless we determine it is "more likely than not" that the deferred tax benefit will be realized.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across our global operations. We are subject to regulatory review or audit in virtually all of those jurisdictions and those reviews and audits may require extended periods of time to resolve. We record our income tax provisions based on our knowledge of all relevant facts and circumstances, including existing tax laws, our experience with previous settlement agreements, the status of current examinations and our understanding of how the tax authorities view certain relevant industry and commercial matters.

We recognize tax liabilities in accordance with the Financial Accounting Standards Board ("FASB") guidance on income taxes and we adjust these liabilities when our judgment changes as a result of the evaluation of new information not previously available. Due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from our current estimate of the tax liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which they are determined.

Commitments and Contingencies—We are involved in various ongoing proceedings, legal actions and claims arising in the normal course of doing business, including litigation related to product, labor and intellectual property. We establish liabilities for loss contingencies when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. Accruals for product liability and other claims are established with the assistance of internal and external legal counsel based on current information and historical settlement information for claims, related legal fees and for claims incurred but not reported.

Goodwill and Intangible Assets—We evaluate the carrying value of goodwill and indefinite life intangible assets annually, or whenever events or circumstances indicate that the fair value is below its carrying amount. We evaluate the carrying value of finite life intangible assets whenever events or circumstances indicate the carrying value may not be

recoverable. Significant assumptions are required to estimate the fair value of goodwill and intangible assets, most notably estimated future cash flows generated by these assets and risk-adjusted discount rates. As such, these fair value measurements use significant unobservable inputs. Changes to these assumptions could require us to record impairment charges on these assets.

In our annual impairment test in the fourth quarter of 2022, we determined our EMEA reporting unit's carrying value was in excess of its estimated fair value. Fair value was determined using income and market approaches. Fair value under the income approach was determined by discounting to present value the estimated future cash flows of the reporting unit. Fair value under the market approach utilized the guideline public company methodology, which uses valuation indicators determined from other businesses that are similar to our EMEA reporting unit. As a result of its carrying value being in excess of its estimated fair value, we recorded a goodwill impairment charge of $289.8 million. No goodwill balance remains for the EMEA reporting unit.

See Note 11 to our consolidated financial statements for further discussion and the factors that contributed to this impairment charge.

We have three other reporting units with goodwill assigned to them. For two of these reporting units, their estimated fair values exceeded their carrying values by more than 35 percent. We estimated the fair value of these reporting units using the income and market approaches. We performed a qualitative test on the other reporting unit and concluded it was more likely than not the fair value of this reporting unit exceeded its carrying value.

Future impairment in our reporting units could occur if the estimates used in the income and market approaches change. If our estimates of profitability in the reporting unit decline, the fair value estimate under the income approach will decline. Additionally, changes in the broader economic environment could cause changes to our estimated discount rates and comparable company valuation indicators, which may impact our estimated fair values. Further, changes in foreign currency exchange rates could increase the cost of procuring inventory and services from foreign suppliers, which could reduce reporting unit profitability.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 2 to our consolidated financial statements for information on how recent accounting pronouncements have affected or may affect our financial position, results of operations or cash flows.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

MARKET RISK

We are exposed to certain market risks as part of our ongoing business operations, including risks from changes in foreign currency exchange rates, interest rates and commodity prices that could affect our financial condition, results of operations and cash flows. We manage our exposure to these and other market risks through regular operating and financing activities and through the use of derivative financial instruments. We use derivative financial instruments solely as risk management tools and not for speculative investment purposes.

FOREIGN CURRENCY EXCHANGE RISK

We operate on a global basis and are exposed to the risk that our financial condition, results of operations and cash flows could be adversely affected by changes in foreign currency exchange rates. To reduce the potential effects of foreign currency exchange rate movements on net earnings, we enter into derivative financial instruments in the form of foreign currency exchange forward contracts with major financial institutions. See Note 15 to our consolidated financial statements for further details on our foreign currency exchange risk exposure and management.

We maintain written policies and procedures governing our risk management activities. Our policy requires that critical terms of hedging instruments be the same as hedged forecasted transactions. On this basis, with respect to cash flow hedges, changes in cash flows attributable to hedged transactions are generally expected to be offset by changes in the fair value of hedge instruments. As part of our risk management program, we also perform sensitivity analyses to assess potential changes in revenue, operating results, cash flows and financial position relating to hypothetical movements in currency exchange rates. A sensitivity analysis of changes in the fair value of foreign currency exchange forward contracts outstanding at December 31, 2022 indicated that, if the U.S. Dollar uniformly strengthened or weakened in value by 10 percent relative to all currencies, with no change in the interest differentials, the fair value of those contracts would affect earnings in a range of a decrease of approximately $93 million to an increase of approximately $88 million before income taxes in periods through June 2025.

Any change in the fair value of foreign currency exchange forward contracts as a result of a fluctuation in a currency exchange rate is expected to be largely offset by a change in the value of the hedged transaction. Consequently, foreign currency exchange contracts would not subject us to material risk due to exchange rate movements because gains and losses on these contracts offset gains and losses on the assets, liabilities and transactions being hedged.

We had net assets, excluding goodwill and intangible assets, in legal entities with non-U.S. Dollar functional currencies of $1,771.5 million at December 31, 2022.

We enter into foreign currency forward exchange contracts with terms of one to three months to manage currency exposures for monetary assets and liabilities denominated in a currency other than an entity's functional currency. As a result, foreign currency remeasurement gains/losses recognized in earnings are generally offset with gains/losses on the foreign currency forward exchange contracts in the same reporting period.

For details about these and other financial instruments, including fair value methodologies, see Note 15 to our consolidated financial statements.

COMMODITY PRICE RISK

We purchase raw material commodities such as cobalt chrome, titanium, tantalum, polymer and sterile packaging. We enter into supply contracts generally with terms of 12 to 24 months, where available, on these commodities to alleviate the effect of market fluctuation in prices. As part of our risk management program, we perform sensitivity analyses related to potential commodity price changes.

INTEREST RATE RISK

In the normal course of business, we are exposed to market risk from changes in interest rates that could affect our results of operations and financial condition. We manage our exposure to interest rate risks through our regular operations and financing activities.

We invest our cash and cash equivalents primarily in highly-rated corporate commercial paper and bank deposits. The primary investment objective is to ensure capital preservation. Currently, we do not use derivative financial instruments in our investment portfolio.

The majority of our debt is fixed-rate debt and therefore is not exposed to changes in interest rates. Based upon our overall interest rate exposure as of December 31, 2022, a change of 10 percent in interest rates, assuming the principal amount outstanding remains constant, would not have a material effect on interest expense, net. This analysis does not consider the effect of the change in the level of overall economic activity that could exist in such an environment.

CREDIT RISK

Financial instruments, which potentially subject us to concentrations of credit risk, are primarily cash and cash equivalents, derivative instruments and accounts receivable.

We place our cash and cash equivalents and enter into derivative transactions with highly-rated financial institutions and limit the amount of credit exposure to any one entity. We believe we do not have any significant credit risk on our cash and cash equivalents or derivative instruments.

Our concentrations of credit risks with respect to trade accounts receivable is limited due to the large number of customers and their dispersion across a number of geographic areas and by frequent monitoring of the creditworthiness of the customers to whom credit is granted in the normal course of business. Substantially all of our trade receivables are concentrated in the public and private hospital and healthcare industry in the U.S. and internationally or with distributors or dealers who operate in international markets and, accordingly, are exposed to their respective business, economic and country specific variables. Our ability to collect accounts receivable in some countries depends in part upon the financial stability of these hospital and healthcare sectors and the respective countries' national economic and healthcare systems. Most notably, in Europe healthcare is typically sponsored by the government. Since we sell products to public hospitals in those countries, we are indirectly exposed to government budget constraints and price reduction initiatives. To the extent the respective governments' ability to fund their public hospital programs deteriorates, we may have to record significant bad debt expenses in the future.

While we are exposed to risks from the broader healthcare industry in Europe and around the world, there is no significant net exposure due to any individual customer. Exposure to credit risk is controlled through credit approvals, credit limits and monitoring procedures, and we believe that reserves for losses are adequate.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Zimmer Biomet Holdings, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Zimmer Biomet Holdings, Inc. and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of earnings, of comprehensive income (loss), of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2022 appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited 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 (COSO).

In our opinion, the consolidated financial statements referred to above 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. Also 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 the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or

disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill Impairment Assessment – EMEA and Americas CMFT Reporting Units

As described in Notes 2 and 11 to the consolidated financial statements, the Company's consolidated goodwill balance was $8,580.2 million as of December 31, 2022, and the goodwill associated with the EMEA and Americas CMFT reporting units represents a portion of the consolidated goodwill balance. Management performs an impairment test in the fourth quarter of each year or whenever events or changes in circumstances indicate that the fair value of the reporting unit is more likely than not below its carrying amount. Potential impairment of a reporting unit is identified by comparing the reporting unit's estimated fair value to its carrying amount. The annual goodwill impairment test resulted in an impairment charge of $289.8 million related to the EMEA reporting unit, which represented all of the remaining goodwill. Management estimated the fair value of the EMEA and Americas CMFT reporting units based on income and market approaches. Fair value under the income approach was determined by discounting to present value the estimated future cash flows of the reporting unit. Fair value under the market approach utilized the guideline public company methodology, which uses valuation indicators from publicly-traded companies that are similar to the EMEA and Americas CMFT reporting units. Significant assumptions are incorporated into the discounted cash flow analysis such as forecasted net sales, revenue growth rates, forecasted operating expenses and risk-adjusted discount rates.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment of the EMEA and Americas CMFT reporting units is a critical audit matter are (i) the significant judgment by management when estimating the fair value of the reporting units; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to forecasted net sales, forecasted operating expenses and risk-adjusted discount rate for the EMEA reporting unit and revenue growth rates, forecasted operating expenses and risk-adjusted discount rate for the Americas CMFT reporting unit; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Company's reporting units. These procedures also included, among others (i) testing management's process for developing the estimated fair value of the EMEA and Americas CMFT reporting units; (ii) evaluating the appropriateness of the discounted cash flow analysis; (iii) testing the completeness and accuracy of the underlying data used in the discounted cash flow analysis; and (iv) evaluating the reasonableness of the significant assumptions used by management in the discounted cash flow analysis related to forecasted net sales, forecasted operating expenses and risk-adjusted discount rate for the EMEA reporting unit and revenue growth rates, forecasted operating expenses and risk-adjusted discount rate for the Americas CMFT reporting unit. Evaluating management's assumptions related to forecasted net sales, revenue growth rates and forecasted operating expenses involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the EMEA and Americas CMFT reporting units, where applicable; (ii) the consistency with external data from market and industry sources; and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating the appropriateness of the Company's discounted cash flow analysis and the reasonableness of the risk-adjusted discount rate assumptions.

Tax Liabilities for Certain Unrecognized Tax Benefits

As described in Notes 2 and 17 to the consolidated financial statements, the Company has recorded tax liabilities for unrecognized tax benefits with a consolidated balance of $521.0 million as of December 31, 2022. The calculation of certain of the Company's estimated tax liabilities, representing a majority of the consolidated balance, involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across the Company's global operations. The Company's income tax filings are regularly under audit in multiple federal, state and foreign jurisdictions. Income tax audits may require an extended period of time to reach resolution and may result in significant income tax adjustments when interpretation of tax laws or allocation of company profits is disputed.

The principal considerations for our determination that performing procedures relating to tax liabilities for certain unrecognized tax benefits is a critical audit matter are (i) the significant judgment by management when determining the tax liabilities for certain unrecognized tax benefits due to a high degree of estimation uncertainty related to management's application of complex tax laws and regulations, the result of income tax audits, and potential for significant adjustments as a result of such audits; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures to evaluate the timely identification and accurate measurement of tax liabilities for certain unrecognized tax benefits and evaluating audit evidence available to support the estimates; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the identification and accurate measurement of tax liabilities for unrecognized tax benefits, including controls addressing the

completeness of the tax liabilities. These procedures also included, among others (i) evaluating the accuracy of the measurement of tax liabilities for certain unrecognized tax benefits by testing certain information used in the calculation of tax liabilities for certain unrecognized tax benefits by jurisdiction, on a sample basis; (ii) assessing the completeness of the Company's identification of tax liabilities for unrecognized tax benefits and possible outcomes for certain unrecognized tax benefits; and (iii) evaluating the status and results of income tax audits related to certain unrecognized tax benefits with the relevant tax authorities. Professionals with specialized skill and knowledge were used to assist in evaluating management's application of complex tax laws and regulations in various jurisdictions and assessing the reasonableness of certain of the Company's tax positions.

/s/ PricewaterhouseCoopers LLP
Chicago, Illinois
February 24, 2023

We have served as the Company's auditor since 2000.

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EARNINGS
(in millions, except per share amounts)

	For the Years Ended December 31,		
	2022	2021	2020
Net Sales	$6,939.9	$6,827.3	$6,127.5
Cost of products sold, excluding intangible asset amortization	2,019.5	1,960.4	1,824.3
Intangible asset amortization	526.8	529.5	512.1
Research and development	406.0	435.8	322.8
Selling, general and administrative	2,761.7	2,843.4	2,712.7
Goodwill and intangible asset impairment	292.8	16.3	503.0
Restructuring and other cost reduction initiatives	191.6	125.7	107.2
Quality remediation	33.8	52.8	50.9
Acquisition, integration, divestiture and related	11.4	3.1	11.4
Operating expenses	6,243.6	5,967.0	6,044.4
Operating Profit	696.3	860.3	83.1
Other (expense) income, net	(128.0)	12.2	23.8
Interest expense, net	(164.8)	(208.4)	(212.1)
Loss on early extinguishment of debt	–	(165.1)	–
Earnings (loss) from continuing operations before income taxes	403.5	499.0	(105.2)
Provision (benefit) for income taxes from continuing operations	112.3	53.5	(96.0)
Net Earnings (Loss) from Continuing Operations	291.2	445.5	(9.2)
Less: Net earnings attributable to noncontrolling interest	1.0	0.5	1.5
Net Earnings (Loss) from Continuing Operations of Zimmer Biomet Holdings, Inc.	290.2	445.0	(10.7)
Loss from Discontinued Operations, Net of Tax	(58.8)	(43.4)	(128.2)
Net Earnings (Loss) of Zimmer Biomet Holdings, Inc.	$ 231.4	$ 401.6	$ (138.9)
Basic Earnings (Loss) Per Common Share			
Earnings (Loss) from Continuing Operations	$ 1.38	$ 2.14	$ (0.05)
Loss from Discontinued Operations	(0.28)	(0.21)	(0.62)
Basic Earnings (Loss) Per Common Share	$ 1.10	$ 1.93	$ (0.67)
Diluted Earnings (Loss) Per Common Share			
Earnings (Loss) from Continuing Operations	$ 1.38	$ 2.12	$ (0.05)
Loss from Discontinued Operations	(0.28)	(0.21)	(0.62)
Diluted Earnings (Loss) Per Common Share	$ 1.10	$ 1.91	$ (0.67)
Weighted Average Common Shares Outstanding			
Basic	209.6	208.6	207.0
Diluted	210.3	210.4	207.0

The accompanying notes are an integral part of these consolidated financial statements.

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in millions)

	For the Years Ended December 31,		
	2022	2021	2020
Net Earnings (Loss) of Zimmer Biomet Holdings, Inc.	$ 231.4	$401.6	$(138.9)
Other Comprehensive Income (Loss):			
Foreign currency cumulative translation adjustments, net of tax	(123.3)	(99.9)	25.6
Unrealized cash flow hedge gains/(losses), net of tax	83.5	86.4	(33.5)
Reclassification adjustments on hedges, net of tax	(46.0)	1.3	(38.5)
Adjustments to prior service cost and unrecognized actuarial assumptions, net of tax	77.0	78.4	(9.5)
Total Other Comprehensive (Loss) Income	(8.8)	66.2	(55.9)
Comprehensive Income (Loss) Attributable to Zimmer Biomet Holdings, Inc.	$ 222.6	$467.8	$(194.8)

The accompanying notes are an integral part of these consolidated financial statements.

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in millions, except share amounts)

	As of December 31,	
	2022	2021
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 375.7	$ 378.1
Accounts receivable, less allowance for credit losses	1,381.5	1,259.6
Inventories	2,147.2	2,148.0
Prepaid taxes	198.4	326.7
Prepaid expenses and other current assets	324.5	271.0
Current assets of discontinued operations	–	501.6
Total Current Assets	4,427.3	4,885.0
Property, plant and equipment, net	1,872.5	1,836.6
Goodwill	8,580.2	8,919.4
Intangible assets, net	5,063.8	5,533.6
Other assets	1,122.2	1,005.0
Noncurrent assets of discontinued operations	–	1,276.8
Total Assets	$ 21,066.0	$ 23,456.4
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$ 354.1	$ 306.5
Income taxes payable	38.5	62.0
Other current liabilities	1,421.3	1,317.1
Current portion of long-term debt	544.3	1,605.1
Current liabilities of discontinued operations	–	177.2
Total Current Liabilities	2,358.2	3,467.9
Deferred income taxes, net	474.8	558.5
Long-term income tax payable	421.2	583.0
Other long-term liabilities	632.6	548.5
Long-term debt	5,152.2	5,463.7
Noncurrent liabilities of discontinued operations	–	168.4
Total Liabilities	9,039.0	10,790.0
Commitments and Contingencies (Note 21)		
Stockholders' Equity:		
Common stock, $0.01 par value, one billion shares authorized, 313.8 million (312.8 million in 2021) issued	3.1	3.1
Paid-in capital	9,504.4	9,314.8
Retained earnings	9,559.3	10,292.2
Accumulated other comprehensive loss	(179.3)	(231.6)
Treasury stock, 104.8 million shares (103.8 million shares in 2021)	(6,867.2)	(6,717.8)
Total Zimmer Biomet Holdings, Inc. stockholders' equity	12,020.3	12,660.7
Noncontrolling interest	6.7	5.7
Total Stockholders' Equity	12,027.0	12,666.4
Total Liabilities and Stockholders' Equity	$ 21,066.0	$ 23,456.4

The accompanying notes are an integral part of these consolidated financial statements.

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in millions)

	Zimmer Biomet Holdings, Inc. Stockholders								
	Common Shares		Paid-in	Retained	Accumulated Other Comprehensive	Treasury Shares		Noncontrolling	Total Stockholders'
	Number	Amount	Capital	Earnings	(Loss) Income	Number	Amount	Interest	Equity
Balance January 1, 2020	309.9	$3.1	$8,920.1	$10,427.3	$(241.9)	(103.9)	$(6,720.5)	$ 4.7	$12,392.8
Net loss	–	–	–	(138.9)	–	–	–	1.5	(137.4)
Other comprehensive loss	–	–	–	–	(55.9)	–	–	–	(55.9)
Cash dividends declared ($0.96 per share)	–	–	–	(198.9)	–	–	–	–	(198.9)
Adoption of new accounting standard	–	–	–	(3.1)	–	–	–	–	(3.1)
Acquisition of noncontrolling interest	–	–	–	–	–	–	–	(1.0)	(1.0)
Stock compensation plans	1.5	–	201.5	0.5	–	0.1	0.9	–	202.9
Balance December 31, 2020	311.4	3.1	9,121.6	10,086.9	(297.8)	(103.8)	(6,719.6)	5.2	12,199.4
Net earnings	–	–	–	401.6	–	–	–	0.5	402.1
Other comprehensive income	–	–	–	–	66.2	–	–	–	66.2
Cash dividends declared ($0.96 per share)	–	–	–	(200.4)	–	–	–	–	(200.4)
Stock compensation plans	1.4	–	193.2	4.1	–	–	1.8	–	199.1
Balance December 31, 2021	312.8	3.1	9,314.8	10,292.2	(231.6)	(103.8)	(6,717.8)	5.7	12,666.4
Net earnings	–	–	–	231.4	–	–	–	1.0	232.4
Other comprehensive loss	–	–	–	–	(8.8)	–	–	–	(8.8)
Cash dividends declared ($0.96 per share)	–	–	–	(201.3)	–	–	–	–	(201.3)
Reclassifications of net investment hedges	–	–	–	–	25.9	–	–	–	25.9
Spinoff of ZimVie Inc.	–	–	–	(763.4)	35.2	–	–	–	(728.2)
Stock compensation plans	1.0	–	189.6	0.4	–	–	0.6	–	190.6
Share repurchases	–	–	–	–	–	(1.0)	(150.0)	–	(150.0)
Balance December 31, 2022	313.8	$3.1	$9,504.4	$ 9,559.3	$(179.3)	(104.8)	$(6,867.2)	$ 6.7	$12,027.0

The accompanying notes are an integral part of these consolidated financial statements.

ZIMMER BIOMET HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	For the Years Ended December 31,		
	2022	2021	2020
Cash flows provided by (used in) operating activities from continuing operations:			
Net earnings (loss) from continuing operations	$ 291.2	$ 445.5	$ (9.2)
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities:			
Depreciation and amortization	926.4	937.7	898.4
Share-based compensation	105.0	76.0	73.8
Goodwill and intangible asset impairment	292.8	16.3	503.0
Loss on early extinguishment of debt	–	165.1	–
Loss on investment in ZimVie	116.6	–	–
Deferred income tax (benefit) provision	(64.4)	(102.1)	39.4
Changes in operating assets and liabilities, net of acquired assets and liabilities			
Income taxes	(152.9)	(123.9)	(293.9)
Receivables	(184.7)	(40.8)	(66.2)
Inventories	(75.6)	(8.4)	(34.5)
Accounts payable and accrued liabilities	103.0	86.5	(96.3)
Other assets and liabilities	(1.2)	(47.6)	61.1
Net cash provided by operating activities from continuing operations	1,356.2	1,404.3	1,075.6
Cash flows provided by (used in) investing activities from continuing operations:			
Additions to instruments	(258.3)	(273.6)	(259.0)
Additions to other property, plant and equipment	(187.9)	(143.6)	(111.9)
Net investment hedge settlements	89.4	1.9	53.5
Business combination investments, net of acquired cash	(99.8)	–	(227.1)
Investments in other assets	(65.4)	(28.0)	(19.8)
Net cash used in investing activities from continuing operations	(522.0)	(443.3)	(564.3)
Cash flows provided by (used in) financing activities from continuing operations:			
Proceeds from multicurrency revolving facility	595.0	–	–
Payments on multicurrency revolving facility	(220.0)	–	–
Proceeds from senior notes	–	1,599.8	1,497.1
Redemption of senior notes	(1,275.8)	(2,654.8)	(1,750.0)
Proceeds from term loan	83.0	–	–
Payments on term loans	(242.9)	–	–
Dividends paid to stockholders	(201.2)	(200.1)	(198.5)
Proceeds from employee stock compensation plans	78.1	122.5	129.8
Distribution from ZimVie, Inc.	540.6	–	–
Net cash flows from unremitted collections from factoring programs	–	–	(53.0)
Business combination contingent consideration payments	–	(8.9)	(15.0)
Debt issuance costs	(1.6)	(13.2)	(22.3)
Deferred business combination payments	–	(145.0)	–
Repurchase of common stock	(126.4)	–	–
Other financing activities	(4.5)	(6.3)	(8.3)
Net cash used in financing activities from continuing operations	(775.7)	(1,306.0)	(420.2)
Cash flows provided by (used in) discontinued operations:			
Net cash (used in) provided by operating activities	(71.5)	94.9	128.9
Net cash used in investing activities	(7.2)	(60.3)	(49.5)
Net cash used in financing activities	(68.1)	–	(1.6)
Net cash (used in) provided by discontinued operations	(146.8)	34.6	77.8
Effect of exchange rates on cash and cash equivalents	(14.5)	(13.2)	15.3
(Decrease) increase in cash and cash equivalents	(102.8)	(323.6)	184.2
Cash and cash equivalents, beginning of year (includes $100.4 million, $27.4 million and $36.7 million at January 1, 2022, 2021 and 2020, respectively, of discontinued operations cash)	478.5	802.1	617.9
Cash and cash equivalents, end of year (includes $100.4 million and $27.4 million at December 31, 2021 and 2020, respectively, of discontinued operations cash)	$ 375.7	$ 478.5	$ 802.1

The accompanying notes are an integral part of these consolidated financial statements.

1. Business

We design, manufacture and market orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; craniomaxillofacial and thoracic products; surgical products; and a suite of integrated digital and robotic technologies that leverage data, data analytics and artificial intelligence. We collaborate with healthcare professionals around the globe to advance the pace of innovation. Our products and solutions help treat patients suffering from disorders of, or injuries to, bones, joints or supporting soft tissues. Together with healthcare professionals, we help millions of people live better lives.

The words "Zimmer Biomet," "we," "us," "our," "the Company" and similar words refer to Zimmer Biomet Holdings, Inc. and its subsidiaries. "Zimmer Biomet Holdings" refers to the parent company only.

Risks and Uncertainties - Our results have been and may continue to be impacted by the COVID-19 global pandemic. The vast majority of our net sales are derived from products used in elective surgical procedures which continue to be deferred to some extent due to precautions in certain markets and staffing shortages. The consequences of COVID-19 and its related effects continue to be extremely fluid and there are many market dynamics that are difficult to predict. Although the effects of the COVID-19 pandemic on our operating results continue to subside, the pandemic could still have an unfavorable effect on our financial position, results of operations and cash flows in the near term.

Spinoff - On March 1, 2022, we completed the previously announced separation of our spine and dental businesses into a new public company through the distribution by Zimmer Biomet Holdings of 80.3% of the outstanding shares of common stock of ZimVie Inc. ("ZimVie") to Zimmer Biomet Holding's stockholders. The historical results of our spine and dental businesses that were contributed to ZimVie in the spinoff have been reflected as discontinued operations in our consolidated financial statements as the spinoff represents a strategic shift in our business that has a major effect on operations and financial results. As of December 31, 2021, the assets and liabilities associated with these businesses are classified as assets and liabilities of discontinued operations in the consolidated balance sheet. The disclosures presented in our notes to the consolidated financial statements are presented on a continuing operations basis.

2. Significant Accounting Policies

Basis of Presentation – The consolidated financial statements include the accounts of Zimmer Biomet Holdings and its subsidiaries in which it holds a controlling financial interest. All significant intercompany accounts and transactions are eliminated.

Use of Estimates – The consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"), which requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We have made our best estimates, as appropriate under GAAP, in the recognition of our assets and liabilities. These estimates have considered the impact the COVID-19 pandemic may have on our financial position, results of operations and cash flows. Such estimates included, but were not limited to, variable consideration to our customers, our allowance for doubtful accounts for expected credit losses, the net realizable value of our inventory, the fair value of our goodwill and the recoverability of other long-lived assets. Actual results could differ materially from these estimates.

Foreign Currency Translation – The financial statements of our foreign subsidiaries are translated into U.S. Dollars using period-end exchange rates for assets and liabilities and average exchange rates for operating results. Unrealized translation gains and losses are included in accumulated other comprehensive loss in stockholders' equity. When a transaction is denominated in a currency other than the subsidiary's functional currency, we remeasure the transaction into the functional currency and recognize any transactional gains or losses in earnings.

Shipping and Handling – Amounts billed to customers for shipping and handling of products are reflected in net sales and are not significant. Expenses incurred related to shipping and handling of products are reflected in selling, general and administrative ("SG&A") expenses and were $254.4 million, $255.4 million and $235.5 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Research and Development – We expense all research and development ("R&D") costs as incurred except when there is an alternative future use for the R&D. R&D costs include salaries, prototypes, depreciation of equipment used in R&D, consultant fees, service fees paid to collaborative partners, and arrangements to gain access to or acquire third-party in-process R&D projects with no alternative future use. Where contingent milestone payments are due to third parties under R&D arrangements, we expense the milestone payment obligations when it is probable that the milestone results will be achieved.

Litigation – We record an undiscounted liability for contingent losses, including future legal costs, settlements and judgments, when we consider it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

Quality remediation – We use the financial statement line item "Quality remediation" to recognize expenses related to addressing inspectional observations on Form 483 and a warning letter issued by the FDA following its inspections of our Warsaw North Campus facility, among other matters. See Note 21 for additional information about the Form 483 and

warning letter. The majority of these expenses were related to consultants who helped us to update previous documents and redesign certain processes.

Restructuring and other cost reduction initiatives – A restructuring is defined as a program that is planned and controlled by management, and materially changes either the scope of a business undertaken by an entity, or the manner in which that business is conducted. Restructuring charges include (i) employee termination benefits, (ii) contract termination costs and (iii) other related costs associated with exit or disposal activities.

In December 2021, our management approved a new global restructuring program intended to further reduce costs and to reorganize our global operations in preparation for the spinoff of ZimVie. In December 2019, our Board of Directors approved, and we initiated, a new global restructuring program with an objective of reducing costs to allow us to further invest in higher priority growth opportunities. Restructuring charges for the years ended December 31, 2022, 2021 and 2020 were primarily attributable to these programs.

Acquisition, integration, divestiture and related – We use the financial statement line item, "Acquisition, integration, divestiture and related" to recognize expenses resulting from the consummation of business mergers and acquisitions and the related integration of those businesses, and expenses related to the divestiture of our businesses. Acquisition, integration, divestiture and related gains and expenses are primarily composed of:

- Consulting and professional fees related to third-party integration performed in a variety of areas, such as finance, tax, compliance, logistics and human resources, and legal fees related to the consummation of mergers and acquisitions.
- Employee termination benefits related to terminating employees with overlapping responsibilities in various areas of our business.
- Dedicated project personnel expenses which include the salary, benefits, travel expenses and other costs directly associated with employees who are 100 percent dedicated to our integration of acquired businesses and employees who have been notified of termination, but are continuing to work on transferring their responsibilities.
- Contract termination expenses related to terminated contracts, primarily with sales agents and distribution agreements.
- Changes to our contingent consideration liabilities related to our mergers and acquisitions.
- Other various expenses to relocate facilities, integrate information technology, losses incurred on assets resulting from the applicable acquisition, and other various expenses.
- Income and expenses related to providing ZimVie certain services after the separation date.

Cash and Cash Equivalents – We consider all highly liquid investments with an original maturity of three months or less to be cash equivalents. The carrying amounts reported in the balance sheet for cash and cash equivalents are valued at cost, which approximates their fair value.

Accounts Receivable – Accounts receivable consists of trade and other miscellaneous receivables. We grant credit to customers in the normal course of business and maintain an allowance for expected credit losses. We determine the allowance for credit losses by geographic market and take into consideration historical credit experience, creditworthiness of the customer and other pertinent information. We make concerted efforts to collect all accounts receivable, but sometimes we have to write-off the account against the allowance when we determine the account is uncollectible. The allowance for credit losses was $78.4 million and $60.1 million as of December 31, 2022 and 2021, respectively.

We also have receivables purchase arrangements with unrelated third parties to transfer portions of our trade accounts receivable balance. We terminated our purchase arrangements in the U.S. and Japan during the year ended December 31, 2020. We continue to have arrangements in Europe where we sell to a third party and have no continuing involvement or significant risk with the factored accounts receivable. Funds received from the transfers are recorded as an increase to cash and a reduction to accounts receivable outstanding in our consolidated balance sheets. We report the cash flows attributable to the sale of receivables to third parties in cash flows from operating activities in our consolidated statements of cash flows. Net expenses resulting from the sales of receivables are recognized in SG&A expense and are immaterial. Net expenses include any resulting gains or losses from the sales of receivables, credit insurance and factoring fees. Under the previous arrangement in the U.S. and Japan, any initial collections of cash and remittances to the third parties were recognized in our consolidated statements of cash flows in financing activities which resulted in an outflow of $53.0 million for the year ended December 31, 2020.

Inventories – Inventories are stated at the lower of cost and net realizable value, with cost determined on a first-in first-out basis.

Property, Plant and Equipment – Property, plant and equipment is carried at cost less accumulated depreciation. Depreciation is computed using the straight-line method based on estimated useful lives of ten to forty years for buildings and improvements and three to eight years for machinery and equipment. Maintenance and repairs are expensed as incurred. We review property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. An impairment loss would be recognized when estimated future undiscounted cash flows relating to the asset are less than its carrying amount. An impairment loss is measured as the amount by which the carrying amount of an asset exceeds its fair value.

Software Costs – We capitalize certain computer software and software development costs incurred in connection with developing or obtaining computer software for internal use when both the preliminary project stage is completed and it is probable that the software will be used as intended. Capitalized software costs generally include external direct costs of materials and services utilized in developing or obtaining computer software and compensation and related

benefits for employees who are directly associated with the software project. Capitalized software costs are included in property, plant and equipment on our balance sheet and amortized on a straight-line or weighted average estimated user basis when the software is ready for its intended use over the estimated useful lives of the software, which approximate three to fifteen years.

For cloud computing arrangements that are considered a service contract, our capitalization of implementation costs is aligned with the internal use software requirements. However, on our consolidated balance sheet these implementation costs are recognized in other noncurrent assets. On our consolidated statement of cash flows, these implementations costs are recognized in operating cash flows. The implementation costs are recognized on a straight-line basis over the expected term of the related service contract.

Instruments – Instruments are hand-held devices used by surgeons during total joint replacement and other surgical procedures. Instruments are recognized as long-lived assets and are included in property, plant and equipment. Undeployed instruments are carried at cost or net realizable value. Instruments that have been deployed to be used in surgeries are carried at cost less accumulated depreciation. Depreciation is computed using the straight-line method based on average estimated useful lives, determined principally in reference to associated product life cycles, primarily five years. We review instruments for impairment whenever events or changes in circumstances indicate that the carrying value of an instrument may not be recoverable. Depreciation of instruments is recognized as SG&A expense.

Goodwill – Goodwill is not amortized but is subject to annual impairment tests. Goodwill has been assigned to reporting units. Potential impairment of a reporting unit is identified by either comparing a reporting unit's estimated fair value to its carrying amount or doing a qualitative assessment of a reporting unit's fair value from the last quantitative assessment to determine if there is potential impairment. We may do a qualitative assessment when the results of the previous quantitative test indicated the reporting unit's estimated fair value was significantly in excess of the carrying value of its net assets and we do not believe there have been significant changes in the reporting unit's operations that would significantly decrease its estimated fair value. If a quantitative assessment is performed, the fair value of the reporting unit and the fair value of goodwill are determined based upon a discounted cash flow analysis and/or use of a market approach by looking at market values of comparable companies. Significant assumptions are incorporated into our discounted cash flow analyses such as forecasted net sales, revenue growth rates, forecasted operating expenses and risk-adjusted discount rates. We perform this test in the fourth quarter of the year or whenever events or changes in circumstances indicate that the fair value of the reporting unit is more likely than not below its carrying amount. If the fair value of the reporting unit is less than its carrying value, an impairment loss is recorded in the amount that the carrying value of the reporting unit exceeds the fair value. See Note 11 for more information regarding goodwill.

Intangible Assets – Intangible assets are initially measured at their fair value. We have determined the fair value of our intangible assets either by the fair value of the consideration exchanged for the intangible asset or the estimated after-tax discounted cash flows expected to be generated from the intangible asset. Intangible assets with a finite life, including technology, certain trademarks and trade names, customer-related intangibles, intellectual property rights and patents and licenses are amortized on a straight-line basis over their estimated useful life or contractual life, which may range from less than one year to twenty years. Intangible assets with a finite life are tested for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable.

Intangible assets with an indefinite life, including certain trademarks and trade names and in-process research and development ("IPR&D") projects, are not amortized. Indefinite life intangible assets are assessed annually to determine whether events and circumstances continue to support an indefinite life. Intangible assets with an indefinite life are tested for impairment annually or whenever events or circumstances indicate that the fair value of the reporting unit is more likely than not below its carrying amount. An impairment loss is recognized if the carrying amount exceeds the estimated fair value of the asset. The amount of the impairment loss to be recorded would be determined based upon the excess of the asset's carrying value over its fair value. The fair values of indefinite lived intangible assets are determined based upon a discounted cash flow analysis using the relief from royalty method or a qualitative assessment may be performed for any changes to the asset's fair value from the last quantitative assessment. The relief from royalty method estimates the cost savings associated with owning, rather than licensing, assets. Significant assumptions are incorporated into these discounted cash flow analyses such as estimated growth rates, royalty rates and risk-adjusted discount rates. We may do a qualitative assessment when the results of the previous quantitative test indicated that the asset's fair value was significantly in excess of its carrying value.

In determining the useful lives of intangible assets, we consider the expected use of the assets and the effects of obsolescence, demand, competition, anticipated technological advances, changes in surgical techniques, market influences and other economic factors. For technology-based intangible assets, we consider the expected life cycles of products, absent unforeseen technological advances, which incorporate the corresponding technology. Trademarks and trade names that do not have a wasting characteristic (i.e., there are no legal, regulatory, contractual, competitive, economic or other factors which limit the useful life) are assigned an indefinite life. Trademarks and trade names that are related to products expected to be phased out are assigned lives consistent with the period in which the products bearing each brand are expected to be sold. For customer relationship intangible assets, we assign useful lives based upon historical levels of customer attrition. Intellectual property rights are assigned useful lives that approximate the contractual life of any related patent or the period for which we maintain exclusivity over the intellectual property.

Income Taxes – We account for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period the new tax rate is enacted.

We reduce our deferred tax assets by a valuation allowance if it is more likely than not that we will not realize some portion or all of the deferred tax assets. In making such determination, we consider all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies and recent financial operations. In the event we were to determine that we would be able to realize our deferred income tax assets in the future in excess of their net recorded amount, we would make an adjustment to the valuation allowance which would reduce the provision for income taxes.

We operate on a global basis and are subject to numerous and complex tax laws and regulations. The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations in a multitude of jurisdictions across our global operations. Our income tax filings are regularly under audit in multiple federal, state, and foreign jurisdictions. Income tax audits may require an extended period of time to reach resolution and may result in significant income tax adjustments when interpretation of tax laws or allocation of company profits is disputed. Because income tax adjustments in certain jurisdictions can be significant, we record tax positions based upon our estimates. For those tax positions where it is more likely than not that a tax benefit will be sustained, we have recorded the largest amount of tax benefit with a greater than 50 percent likelihood of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those income tax positions where it is not more likely than not that a tax benefit will be sustained, no tax benefit has been recognized in the financial statements.

Derivative Financial Instruments – We measure all derivative instruments at fair value and report them on our consolidated balance sheet as assets or liabilities. We maintain written policies and procedures that permit, under appropriate circumstances and subject to proper authorization, the use of derivative financial instruments solely for risk management purposes. The use of derivative financial instruments for trading or speculative purposes is prohibited by our policy. See Note 15 for more information regarding our derivative and hedging activities.

Accumulated Other Comprehensive Income (Loss) – Accumulated other comprehensive income (loss) ("AOCI") refers to gains and losses that under GAAP are included in comprehensive income but are excluded from net earnings as these amounts are recorded directly as an adjustment to stockholders' equity. Our AOCI is comprised of foreign currency translation adjustments, including unrealized gains and losses on net investments hedges, unrealized gains and losses on cash flow hedges and amortization of prior service costs and unrecognized gains and losses in actuarial assumptions.

Other Expense (Income), Net – Other expense (income), net includes gains/(losses) on changes in fair value of our investments, gains/(losses) on remeasurement of monetary assets and liabilities denominated in a currency other than an entity's functional currency and the related gains/(losses) on derivative instruments that are not designated as hedging instruments that we use to manage the currency exposures of these assets and liabilities, certain components of pension expense, and other non-operating gains/(losses). In the year ended December 31, 2022, we recognized losses of $116.6 million related to our investment in ZimVie. The initial value of our investment was based upon our 19.7 percent share of the carrying value of net assets transferred to ZimVie on the separation date. At December 31, 2022, we valued our investment at fair value based upon ZimVie's share price on that date, less a discount to reflect that the shares are not registered.

Treasury Stock – We account for repurchases of common stock under the cost method and present treasury stock as a reduction of stockholders' equity. We reissue common stock held in treasury only for limited purposes.

Noncontrolling Interest – We have investments in other companies in which we have a controlling financial interest, but not 100 percent of the equity. Further information related to the noncontrolling interests of those investments has not been provided as it is not significant to our consolidated financial statements.

Accounting Pronouncements Recently Adopted

In July 2021, the Financial Accounting Standards Board issued Accounting Standards Update ("ASU") 2021-05 Lessors – Certain Leases with Variable Lease Payments which is an amendment to Accounting Standards Codification Topic 842 - Leases ("ASC 842"). Under the prior ASC 842 guidance, variable payments were excluded from the measurement of the initial net investment in the lease if the payments do not depend on an index or rate. For sales-type or direct financing leases, this could result in the recognition of a day-one loss for leases with entire or partial variable payments. ASU 2021-05 requires lessors to classify leases with entire or partial variable payments as operating leases if otherwise a day-one loss would be recognized. The ASU is effective for fiscal years beginning after December 15, 2021, and interim periods within those years. Early adoption of this ASU was permitted. The ASU could either be applied retrospectively to leases that were commenced or modified on or after the adoption of ASC 842 or applied prospectively to leases that commence or are modified after the adoption of ASU 2021-05. We adopted this standard as of January 1, 2022. The adoption of this standard did not have a material impact on our financial position, results of operations or cash flows.

Accounting Pronouncements Not Yet Adopted

There are no recently issued accounting pronouncements that we have not yet adopted that are expected to have a material effect on our financial position, results of operations or cash flows.

3. Discontinued Operations and Related ZimVie Matters

On March 1, 2022, we completed the previously announced separation of our spine and dental businesses through the distribution of 80.3% of the outstanding shares of common stock of ZimVie to our stockholders at the close of business on February 15, 2022 (the "Record Date"). The distribution was made in the amount of one share of ZimVie common stock for every ten shares of our common stock owned by our stockholders at the close of business on the Record Date. Fractional shares of ZimVie common stock were not issued but instead were aggregated and sold in the open market with the proceeds being distributed pro rata in lieu of such fractional shares.

In the fourth quarter of 2021, ZimVie entered into a credit agreement with a financial institution providing for revolving loans of up to $175.0 million and term loan borrowings of up to $595.0 million. On February 28, 2022, prior to separation, ZimVie borrowed the entire $595.0 million available under the term loan. Approximately $540.6 million of this amount was paid by ZimVie to Zimmer Biomet in the form of a dividend at separation which is included in our cash flows from financing activities in the consolidated statements of cash flows. We used proceeds from the dividend, along with cash on hand and proceeds from a draw on our revolving credit facility, to repay our 3.150% Senior Notes due 2022 which had an outstanding principal balance of $750.0 million.

Also, in connection with the spinoff, we entered into definitive agreements with ZimVie that, among other things, set forth the terms and conditions of the separation and distribution. The agreements set forth the principles and actions taken or to be taken in connection with the separation and the distribution and provide a framework for our relationship with ZimVie from and after the separation and the distribution. The agreements include a Separation and Distribution Agreement, a Tax Matters Agreement, an Employee Matters Agreement, a Transition Services Agreement (the "TSA"), an Intellectual Property Matters Agreement, a Stockholder and Registration Rights Agreement, a Transition Manufacturing and Supply Agreement (the "TMA"), a Reverse Transition Manufacturing and Supply Agreement (the "Reverse TMA") and a Transitional Trademark License Agreement, each dated as of March 1, 2022.

Pursuant to the TSA, both we and ZimVie agree to provide certain services to each other, on an interim, transitional basis from and after the separation and the distribution. The services include certain regulatory services, commercial services, operational services, tax services, clinical affairs services, information technology services, finance and accounting services and human resource and employee benefits services. The remuneration to be paid for such services is generally intended to allow the company providing the services to recover all of its costs and expenses of providing such services. The TSA will terminate on the expiration of the term of the last service provided thereunder, which will generally be no later than March 31, 2025. However, we expect most TSA services will be completed by the end of 2023.

Pursuant to the TMA and the Reverse TMA, Zimmer Biomet or ZimVie, as the case may be, will manufacture or cause to be manufactured certain products for the other party, on an interim, transitional basis. Pursuant to such agreements, Zimmer Biomet or ZimVie, as the case may be, will be required to purchase certain minimum amounts of products from the other party. Each of the TMA and the Reverse TMA has a two-year term, with a one-year extension possible upon mutual agreement of the parties.

We recognize any gains or losses from the TSA and TMA agreements in Acquisition, integration, divestiture and related expense in our consolidated statements of earnings. Amounts included in the consolidated statements of earnings related to these agreements for the years ended December 31, 2022, 2021 and 2020 were immaterial. Amounts due from ZimVie were also immaterial as of December 31, 2022.

We retained approximately 5.1 million common shares of ZimVie, representing approximately 19.7 percent of ZimVie's outstanding common shares on the separation date. Given our inability to exert significant influence over ZimVie, we recognize this investment at fair value in prepaid expenses and other current assets on our consolidated balance sheet. We disposed of these shares in February 2023. Changes to the fair value of the investment are recognized in non-operating other (expense) income, net. In the year ended December 31, 2022, we recognized losses of $116.6 million related to our investment in ZimVie.

On August 31, 2022, we borrowed an aggregate principal amount of $83.0 million under a short-term credit agreement (the "Short-Term Term Loan") with a third-party financial institution, the proceeds of which were used to repay certain of our existing indebtedness. On September 1, 2022, we entered into a forward exchange agreement and pledge agreement (collectively the "Forward Exchange Agreement") with the same financial institution to deliver to them our 5.1 million shares of ZimVie common stock in the first quarter of 2023. It is likely that the financial institution entered into hedging transactions, which may have included selling the ZimVie shares in the market, in anticipation of receiving the shares in the first quarter of 2023. We pledged our 5.1 million shares of ZimVie common stock to the financial institution as collateral for our obligations under the Short-Term Term Loan and the Forward Exchange Agreement.

In February 2023, we repaid in full the Short-Term Term Loan by transferring our ZimVie common shares to the financial institution counterparty to settle the Forward Exchange Agreement and by paying $33.9 million in cash, representing an amount determined by the difference between the average daily volume-weighted average price of the ZimVie shares over the outstanding term of the Forward Exchange Agreement and the principal amount of $83.0 million.

The Forward Exchange Agreement was accounted for at fair value, with changes in fair value recognized in non-operating other (expense) income, net. The most significant input into the valuation of the Forward Exchange Agreement is the price of ZimVie shares. The fair value of the Forward Exchange Agreement as of December 31, 2022 was

$1.1 million and is included within prepaid expenses and other current assets on our consolidated balance sheet. For the year ended December 31, 2022, an unrealized gain of $1.1 million related to the change in fair value of the Forward Exchange Agreement was recorded in non-operating other (expense) income, net in our consolidated statements of earnings.

As discussed in Note 1, Business, the results of our spine and dental businesses have been reflected as discontinued operations in the consolidated statements of earnings for the years presented. Details of earnings (loss) from discontinued operations included in our consolidated statements of earnings are as follows (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
Net Sales	$147.8	$1,008.8	$ 896.9
Cost of products sold, excluding intangible asset amortization	53.5	380.6	304.0
Intangible asset amortization	14.0	86.2	85.5
Research and development	10.5	61.3	49.0
Selling, general and administrative	89.4	480.5	465.0
Goodwill and intangible asset impairment	–	–	142.0
Restructuring and other cost reduction initiatives	0.4	3.3	9.7
Quality remediation	–	0.2	0.2
Acquisition, integration, divestiture and related	40.9	76.8	12.4
Other expense (income), net	0.3	0.5	(1.6)
Loss from discontinued operations before income taxes	(61.2)	(80.6)	(169.3)
Benefit for income taxes from discontinued operations	(2.4)	(37.2)	(41.1)
Loss from discontinued operations, net of tax	$(58.8)	$ (43.4)	$(128.2)

Details of assets and liabilities of discontinued operations are as follows (in millions):

	December 31, 2021
Cash and cash equivalents	$ 100.4
Accounts receivable, less allowance for credit losses	145.3
Inventories	246.5
Prepaid expenses and other current assets	9.4
Total Current Assets of Discontinued Operations	$ 501.6
Property, plant and equipment, net	$ 179.9
Goodwill	272.8
Intangible assets, net	766.2
Other assets	57.9
Total Noncurrent Assets of Discontinued Operations	$1,276.8

	December 31, 2021
Accounts payable	$ 44.7
Income taxes payable	3.1
Other current liabilities	129.4
Total Current Liabilities of Discontinued Operations	$177.2
Deferred income taxes, net	$107.1
Other long-term liabilities	61.3
Total Noncurrent Liabilities of Discontinued Operations	$168.4

4. Revenue Recognition

We recognize revenue when our performance obligations under the terms of a contract with our customer are satisfied. This happens when we transfer control of our products to the customer, which generally occurs upon implantation or when title passes upon shipment. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring our product. Taxes collected from customers and remitted to governmental authorities are excluded from revenues.

We sell products through two principal channels: 1) direct to healthcare institutions, referred to as direct channel accounts; and 2) through stocking distributors and healthcare dealers. In direct channel accounts and with some healthcare dealers, inventory is generally consigned to sales agents or customers so that products are available when needed for surgical procedures. No revenue is recognized upon the placement of inventory into consignment, as we retain the ability to control the inventory. Upon implantation, we issue an invoice and revenue is recognized. Consignment sales represented approximately 85 percent of our net sales in 2022. Pricing for products is generally predetermined by contracts with customers, agents acting on behalf of customer groups or by government regulatory bodies, depending on the market. Price discounts under group purchasing contracts are generally linked to volume of implant purchases by customer healthcare institutions within a specified group. At negotiated thresholds within a contract buying period, price discounts may increase. Payment terms vary by customer, but are typically less than 90 days.

With sales to stocking distributors and some healthcare dealers and hospitals, revenue is generally recognized when control of our product passes to the customer, which can be upon shipment of the product or receipt by the customer. We estimate sales recognized in this manner represented approximately 15 percent of our net sales in 2022. These customers may purchase items in large quantities if incentives are offered or if there are new product offerings in a market, which could cause period-to-period differences in sales. It is our accounting policy to account for shipping and handling activities as a fulfillment cost rather than as an additional promised service. We have contracts with these customers or orders may be placed from available price lists. Payment terms vary by customer, but are typically less than 90 days.

We offer standard warranties to our customers that our products are not defective. These standard warranties are not considered separate performance obligations. In limited circumstances, we offer extended warranties that are separate performance obligations. We have very few contracts that have multiple performance obligations. Since we do not have significant multiple element arrangements and essentially all of our sales are recognized upon implantation of a product or when title passes, very little judgment is required to allocate the transaction price of a contract or determine when control has passed to a customer. Our costs to obtain contracts consist primarily of sales commissions to employees or third-party agents that are earned when control of our product passes to the customer. Therefore, sales commissions are expensed as part of SG&A expenses at the same time revenue is recognized. Accordingly, we do not have significant contract assets, liabilities or future performance obligations.

We offer volume-based discounts, rebates, prompt pay discounts, right of return and other various incentives which we account for under the variable consideration model. If sales incentives may be earned by a customer for purchasing a specified amount of our product, we estimate whether such incentives will be achieved and recognize these incentives as a reduction in revenue in the same period the underlying revenue transaction is recognized. We primarily use the expected value method to estimate incentives. Under the expected value method, we consider the historical experience of similar programs as well as review sales trends on a customer-by-customer basis to estimate what levels of incentives will be earned. Occasionally, products are returned and, accordingly, we maintain an estimated refund liability based upon the expected value method that is recorded as a reduction in revenue.

We analyze sales by two geographies, the United States and International; and by the following product categories: Knees; Hips; Sports Medicine, Extremities and Trauma ("S.E.T."), which includes Craniomaxillofacial and Thoracic ("CMFT"); and Other. Other includes sales from our Technology, Surgical and Bone Cement products.

This net sales presentation differs from our reportable operating segments, which are based upon our senior management organizational structure and how we allocate resources toward achieving operating profit goals. Each of our reportable operating segments sells all the product categories noted above. Accordingly, the only difference from the presentation below and our reportable operating segments are the geographic groupings.

Net sales by geography are as follows (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
United States	$4,012.4	$3,853.9	$3,507.7
International	2,927.5	2,973.4	2,619.8
Total	$6,939.9	$6,827.3	$6,127.5

Net sales by product category are as follows (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
Knees	$2,778.3	$2,647.9	$2,378.3
Hips	1,894.9	1,856.1	1,750.5
S.E.T	1,696.7	1,727.8	1,525.6
Other	570.0	595.5	473.1
Total	$6,939.9	$6,827.3	$6,127.5

5. Restructuring

In December 2021, our management approved a new global restructuring program (the "2021 Restructuring Plan") intended to further reduce costs and to reorganize our global operations in preparation for the spinoff of ZimVie. The 2021 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $220 million. The pre-tax restructuring charges consist of employee termination benefits; contract terminations for sales agents; and other charges, such as consulting fees and project management. The following table summarizes the liabilities recognized related to the 2021 Restructuring Plan (in millions):

	Employee Termination Benefits	Contract Terminations	Other	Total
Balance, December 31, 2020	$ –	$ –	$ –	$ –
Additions	19.5	2.3	10.3	32.1
Cash payments	–	–	–	–
Foreign currency exchange rate changes	–	–	–	–
Balance, December 31, 2021	19.5	2.3	10.3	32.1
Additions	33.6	49.5	16.6	99.7
Cash payments	(43.4)	(27.8)	(23.9)	(95.1)
Foreign currency exchange rate changes	0.8	1.0	0.1	1.9
Balance, December 31, 2022	$ 10.5	$ 25.0	$ 3.1	$ 38.6
Expense incurred since the start of the 2021 Restructuring Plan	$ 53.1	$ 51.8	$ 26.9	$131.8
Expense estimated to be recognized for the 2021 Restructuring Plan	$ 70.0	$100.0	$ 50.0	$220.0

In December 2019, our Board of Directors approved, and we initiated, a new global restructuring program (the "2019 Restructuring Plan") with an objective of reducing costs to allow us to further invest in higher priority growth opportunities. The 2019 Restructuring Plan is expected to result in total pre-tax restructuring charges of approximately $350 million to $400 million. The pre-tax restructuring charges consist of employee termination benefits; contract terminations for facilities and sales agents; and other charges, such as consulting fees, project management and relocation costs. The restructuring charges incurred in the year ended December 31, 2022, primarily related to employee termination

benefits, consulting fees and project management expenses. The following table summarizes the liabilities recognized related to the 2019 Restructuring Plan (in millions):

	Employee Termination Benefits	Contract Terminations	Other	Total
Balance, December 31, 2019	22.3	—	4.1	26.4
Additions	49.6	15.8	33.1	98.5
Cash payments	(35.5)	(4.9)	(22.1)	(62.5)
Foreign currency exchange rate changes	1.4	—	—	1.4
Balance, December 31, 2020	37.8	10.9	15.1	63.8
Additions	7.3	18.5	49.2	75.0
Cash payments	(28.7)	(12.9)	(64.2)	(105.8)
Foreign currency exchange rate changes	(1.6)	—	(0.1)	(1.7)
Balance, December 31, 2021	$ 14.8	$ 16.5	$ —	$ 31.3
Additions	29.1	0.7	40.1	69.9
Cash payments	(13.4)	(7.3)	(33.3)	(54.0)
Foreign currency exchange rate changes	(1.6)	(0.9)	(0.4)	(2.9)
Balance, December 31, 2022	$ 28.9	$ 9.0	$ 6.4	$ 44.3
Expense incurred since the start of the 2019 Restructuring Plan	$108.3	$ 35.0	$134.6	$ 277.9
Expense estimated to be recognized for the 2019 Restructuring Plan	$160.0	$ 35.0	$180.0	$ 375.0

For the expense estimated to be recognized for the 2019 Restructuring Plan, we have disclosed the midpoint in our estimated range of expenses.

We do not include restructuring charges in the operating profit of our reportable segments.

In our consolidated statement of earnings, we report restructuring charges in our "Restructuring and other cost reduction initiatives" financial statement line item. We report the expenses for other cost reduction and optimization initiatives with restructuring expenses because these activities also have the goal of reducing costs across the organization. However, since the cost reduction and optimization initiative expenses are not considered restructuring, they have been excluded from the amounts presented in this note.

6. Share-Based Compensation

Our share-based payments primarily consist of stock options and restricted stock units ("RSUs"). Share-based compensation expense was as follows (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
Total expense, pre-tax	$105.0	$76.0	$73.8
Tax benefit related to awards	16.9	17.2	15.6
Total expense, net of tax	$ 88.1	$58.8	$58.2

We had two equity compensation plans in effect at December 31, 2022: the 2009 Stock Incentive Plan ("2009 Plan") and the Stock Plan for Non-Employee Directors. We have reserved the maximum number of shares of common stock available for awards under the terms of each of these plans. We have registered 49.9 million shares of common stock under these plans. The 2009 Plan provides for the grant of nonqualified stock options and incentive stock options, long-term performance awards in the form of performance shares or units, restricted stock, RSUs and stock appreciation rights. The Compensation and Management Development Committee of the Board of Directors determines the grant date for annual grants under our equity compensation plans. The date for annual grants under the 2009 Plan to our executive officers is expected to occur in the first quarter of each year following the earnings announcements for the previous quarter and full year. The Stock Plan for Non-Employee Directors provides for awards of stock options, restricted stock and RSUs to non-employee directors. It has been our practice to issue shares of common stock upon exercise of stock options from previously unissued shares, except in limited circumstances where they are issued from treasury stock. The total number of awards which may be granted in a given year and/or over the life of the plan under each of our equity compensation plans is limited. At December 31, 2022, an aggregate of 8.5 million shares were available for future grants and awards under these plans.

Stock Options

Stock options granted to date under our plans generally vest over three or four years and have a maximum contractual life of 10 years. As established under our equity compensation plans, vesting may accelerate upon retirement after the first anniversary date of the award if certain criteria are met. We recognize expense related to stock options on a straight-line basis over the requisite service period, less awards expected to be forfeited using estimated forfeiture rates. Due to the accelerated retirement provisions, the requisite service period of our stock options range from one to four years. Stock options are granted with an exercise price equal to the market price of our common stock on the date of grant, except in limited circumstances where local law may dictate otherwise.

A summary of stock option activity for the year ended December 31, 2022 is as follows (options in thousands):

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Intrinsic Value (in millions)
Outstanding at January 1, 2022 (1)	7,547	$125.32		
Options granted (1)	1,479	117.04		
Options exercised (1)	(527)	82.35		
Options forfeited (1)	(208)	132.38		
Options expired (1)	(186)	138.54		
Awards transferred to ZimVie in the spinoff	(431)	134.66		
Adjustment to Zimmer Biomet awards related to the spinoff of ZimVie (2)	270			
Outstanding at December 31, 2022	7,944	$121.94	5.9	$99.7
Vested or expected to vest as of December 31, 2022	7,779	$121.70	5.8	$98.7
Exercisable at December 31, 2022	5,196	$116.05	4.6	$83.2

(1) Activity prior to the ZimVie spinoff has not been adjusted for the spinoff

(2) In connection with the spinoff of ZimVie, all outstanding Zimmer Biomet stock options (whether vested or unvested) were modified into adjusted Zimmer Biomet awards for continuing Zimmer Biomet employees or converted into ZimVie awards for those becoming ZimVie employees. The modified awards attempted to preserve the same intrinsic value and general terms and conditions (including vesting) as were in place immediately prior to the modification. The modification of these awards did not result in significant incremental expense.

We use a Black-Scholes option-pricing model to determine the fair value of our stock options. Expected volatility was derived from a combination of historical volatility and implied volatility because the options that were actively traded around the grant date of our stock options did not have maturities of over one year. The expected term of the stock options has been derived from historical employee exercise behavior. The risk-free interest rate was determined using the implied yield currently available for zero-coupon U.S. government issues with a remaining term approximating the expected life of the options. The dividend yield was determined by using an estimated annual dividend and dividing it by the market price of our stock on the grant date.

The following table presents information regarding the weighted average fair value of stock options granted, the assumptions used to determine fair value, the intrinsic value of options exercised and the tax benefit of options exercised in the indicated year:

	For the Years Ended December 31,		
	2022	2021	2020
Dividend yield	0.8%	0.6%	0.6%
Volatility	30.2%	30.3%	22.3%
Risk-free interest rate	1.9%	0.7%	1.3%
Expected life (years)	5.0	5.4	5.0
Weighted average fair value of options granted	$32.07	$43.91	$31.65
Intrinsic value of options exercised (in millions)	$ 20.5	$ 54.6	$ 50.1
Tax benefit of options exercised (in millions)	$ 4.0	$ 10.8	$ 9.6

As of December 31, 2022, there was $49.9 million of unrecognized share-based payment expense related to nonvested stock options granted under our plans. That expense is expected to be recognized over a weighted average period of 1.9 years.

RSUs

We have awarded RSUs to certain of our employees. The terms of the awards are generally three or four years. Some of the awards have only service conditions while some have performance and market conditions in addition to service conditions. Future service conditions may be waived if an employee retires after the first anniversary date of the award, but performance and market conditions continue to apply. Accordingly, the requisite service period used for share-based payment expense on our RSUs range from one year to four years.

A summary of nonvested RSU activity for the year ended December 31, 2022 is as follows (RSUs in thousands):

	RSUs	Weighted Average Grant Date Fair Value
Outstanding at January 1, 2022 (1)	1,039	$146.58
Granted (1)	699	114.61
Vested (1)	(168)	117.47
Forfeited (1)	(336)	157.22
Awards transferred to ZimVie in the spinoff	(71)	132.61
Adjustment to Zimmer Biomet awards related to the spinoff of ZimVie (2)	35	
Outstanding at December 31, 2022	1,198	$147.85

(1) Activity prior to the ZimVie spinoff has not been adjusted for the spinoff.

(2) In connection with the spinoff of ZimVie, all unvested Zimmer Biomet RSUs were modified into adjusted Zimmer Biomet awards for continuing Zimmer Biomet employees or converted into ZimVie awards for those becoming ZimVie employees. For awards with service conditions only, the modified awards attempted to preserve the same intrinsic value and general terms and conditions (including vesting) as were in place immediately prior to the modification. For awards that had performance and market conditions, these conditions were removed and converted into service condition only awards to be earned at a fixed amount as determined by our Board of Directors' Compensation and Management Development Committee. The other general terms and conditions (including vesting) were preserved. The modification of these awards did not result in significant incremental expense.

For the RSUs with service conditions only, the fair value of the awards was determined based upon the fair market value of our common stock on the date of grant. For the RSUs with market conditions, a Monte Carlo valuation technique was used to simulate the market conditions of the awards. The outcome of the simulation was used to determine the fair value of the awards.

We are required to estimate the number of RSUs that will vest and recognize share-based payment expense on a straight-line basis over the requisite service period. As of December 31, 2022, we estimate that approximately 893,091 outstanding RSUs will vest. If our estimate were to change in the future, the cumulative effect of the change in estimate will be recorded in that period. Based upon the number of RSUs that we expect to vest, the unrecognized share-based payment expense as of December 31, 2022 was $59.5 million and is expected to be recognized over a weighted-average period of 1.8 years. The fair value of RSUs that vested during the years ended December 31, 2022, 2021 and 2020 based upon our stock price on the date of vesting was $20.3 million, $40.0 million, and $33.2 million, respectively.

7. Inventories

Inventories consisted of the following (in millions):

	As of December 31,	
	2022	2021
Finished goods	$1,655.0	$1,729.2
Work in progress	230.9	175.5
Raw materials	261.3	243.3
Inventories	$2,147.2	$2,148.0

Amounts charged to the consolidated statements of earnings for excess and obsolete inventory, including certain product lines we intend to discontinue, in the years ended December 31, 2022, 2021 and 2020 were $137.3 million, $117.3 million and $230.0 million, respectively.

8. Property, Plant and Equipment

Property, plant and equipment consisted of the following (in millions):

	As of December 31,	
	2022	2021
Land	$ 19.2	$ 20.1
Building and equipment	2,093.4	2,086.0
Capitalized software costs	518.2	454.9
Instruments	3,683.5	3,460.4
Construction in progress	144.1	116.3
	6,458.4	6,137.7
Accumulated depreciation	(4,585.9)	(4,301.1)
Property, plant and equipment, net	$ 1,872.5	$ 1,836.6

Depreciation expense was $399.6 million, $408.1 million and $386.3 million for the years ended December 31, 2022, 2021 and 2020, respectively.

We had $17.0 million and $10.3 million of property, plant and equipment included in accounts payable as of December 31, 2022 and 2021, respectively.

9. Fair Value Measurements of Assets and Liabilities

The following financial assets and liabilities related to continuing operations are recorded at fair value on a recurring basis (in millions):

	As of December 31, 2022			
		Fair Value Measurements at Reporting Date Using:		
Description	Recorded Balance	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$ 72.8	$ –	$72.8	$ –
Cross-currency interest rate swaps	6.8	–	6.8	–
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	1.8	–	1.8	–
Forward Exchange Agreement	1.1	–	1.1	–
Investment in ZimVie	45.5	45.5	–	–
Total Assets	$128.0	$45.5	$82.5	$ –

Description	Recorded Balance	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	As of December 31, 2022	Fair Value Measurements at Reporting Date Using:		
Liabilities				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$ 5.5	$ –	$ 5.5	$ –
Cross-currency interest rate swaps	49.6	–	49.6	–
Interest rate swaps	172.0	–	172.0	–
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	3.3	–	3.3	–
Contingent payments related to acquisitions	17.4	–	–	17.4
Total Liabilities	$247.8	$ –	$230.4	$17.4

Description	Recorded Balance	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	As of December 31, 2021	Fair Value Measurements at Reporting Date Using:		
Assets				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$52.4	$ –	$52.4	$ –
Cross-currency interest rate swaps	23.0	–	23.0	–
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	1.1	–	1.1	–
Total Assets	$76.5	$ –	$76.5	$ –

Description	Recorded Balance	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	As of December 31, 2021	Fair Value Measurements at Reporting Date Using:		
Liabilities				
Derivatives designated as hedges, current and long-term				
Foreign currency forward contracts	$ 0.3	$ –	$ 0.3	$ –
Cross-currency interest rate swaps	3.4	–	3.4	–
Interest rate swaps	10.5	–	10.5	–
Derivatives not designated as hedges, current and long-term				
Foreign currency forward contracts	1.5	–	1.5	–
Contingent payments related to acquisitions	35.6	–	–	35.6
Total Liabilities	$51.3	$ –	$15.7	$35.6

We value our foreign currency forward contracts using a market approach based on foreign currency exchange rates obtained from active markets, and we perform ongoing assessments of counterparty credit risk.

We value our interest rate swaps using a market approach based on publicly available market yield curves and the terms of our swaps, and we perform ongoing assessments of counterparty credit risk. The valuation of our cross-currency interest rate swaps also includes consideration of foreign currency exchange rates.

In connection with the spinoff, we retained approximately 5.1 million unregistered uncommon shares of ZimVie, representing 19.7 percent of ZimVie's common stock on the separation date. At each reporting date, we value these shares based upon the market share price of ZimVie less a discount to reflect that the shares are not registered.

The value of the Forward Exchange Agreement is based upon the historical volume-weighted average price of ZimVie stock since the inception of the agreement with simulations of how the ZimVie stock might perform until the settlement date.

Contingent payments related to acquisitions consist of sales-based payments, and are valued using discounted cash flow techniques. The fair value of sales-based payments is based upon probability-weighted future revenue estimates, and changes as revenue estimates increase or decrease.

The following table provides a reconciliation of the beginning and ending balances of items related to continuing operations measured at fair value on a recurring basis in the tables above that used significant unobservable inputs (Level 3) (in millions):

	Level 3 - Liabilities
Contingent payments related to acquisitions	
Beginning balance December 31, 2021	$ 35.6
Change in estimates	(11.2)
Settlements	(7.0)
Ending balance December 31, 2022	$ 17.4

Changes in estimates for contingent payments related to acquisitions included in continuing operations are recognized in the Acquisition, integration, divestiture and related line item on our consolidated statements of earnings.

10. Acquisitions

On April 18, 2022, we completed the acquisition of all the outstanding shares of a privately held sternal closure company. The acquisition was completed primarily to expand our product offerings in the CMFT market. The total aggregate cash consideration paid at closing was $100.0 million, with an additional $11.0 million of deferred payments to be made over the next two years.

The goodwill related to this acquisition represents the excess of the consideration transferred over the fair value of the net assets acquired. The goodwill is related to the operational synergies we expect to achieve from combining the companies and the cash flows from future, undefined, development projects. The goodwill is included in the Americas operating segment and the Americas CMFT reporting unit. A portion of the goodwill is expected to be deductible for U.S. income tax purposes.

The following table summarizes the aggregate final estimates of fair value of the assets acquired and liabilities assumed related to the acquisition (in millions):

Current assets	$ 3.8
Intangible assets subject to amortization:	
Technology	42.8
Customer relationships	12.3
Goodwill	48.3
Other assets	4.9
Total assets acquired	112.1
Current liabilities	1.1
Total liabilities assumed	1.1
Net assets acquired	$111.0

The amortization periods selected for technology and customer relationships related to this acquisition were 10 years and 4 years, respectively.

In the fourth quarter of 2020, we completed the acquisitions of A&E Medical Corporation, a sternal closure company, and Relign Corp., an arthroscopy equipment company (collectively referred to as the "2020 acquisitions"). The 2020 acquisitions were completed primarily to expand our product offerings in CMFT and sports medicine markets. The total aggregate cash consideration paid in 2020 related to the 2020 acquisitions was $235.7 million. An additional $145.0 million of guaranteed deferred payments were made in 2021. We assigned a fair value of $23.0 million for potential additional payments as of the acquisition dates related to these acquisitions that are contingent on the respective companies' future product sales. The estimated fair value of the aggregate contingent payment liabilities was calculated based on the probability of achieving the specified sales growth and discounting to present value the estimated payments.

The goodwill related to the 2020 acquisitions represents the excess of the consideration transferred over the fair value of the net assets acquired. The goodwill related to the 2020 acquisitions is generated from the operational synergies and cross-selling opportunities we expect to receive from the technologies acquired. None of the goodwill related to these acquisitions is expected to be deductible for tax purposes.

The following table summarizes the aggregate final estimates of fair value of the assets acquired and liabilities assumed related to the 2020 acquisitions (in millions):

Current assets	$ 30.5
Intangible assets subject to amortization:	
Technology	147.9
Trademarks and trade names	1.5
Customer relationships	92.7
Goodwill	172.6
Other assets	5.1
Total assets acquired	450.3
Current liabilities	4.6
Deferred income taxes	42.0
Total liabilities assumed	46.6
Net assets acquired	$403.7

In the year ended December 31, 2021, we adjusted the preliminary fair values of the 2020 acquisitions. The adjustments primarily related to the customer relationships intangible assets and the related deferred income tax liability as we refined our estimates by analyzing historical purchasing patterns of existing customers. The adjustment did not result in a significant change to intangible asset amortization expense recognized in the year ended December 31, 2021 that would have been recognized in the previous period if the adjustment were recognized as of the acquisition date. In addition, we revised our estimates related to net operating loss carryforwards based on updated tax calculations which reduced our deferred income tax liability and goodwill correspondingly. There were no other significant adjustments during the year ended December 31, 2021.

The weighted average amortization period selected for technology, trademarks and trade names, and customer relationships related to the 2020 acquisitions were 13 years, 12 years, and 15 years, respectively.

We have not included pro forma information and certain other information under GAAP for these acquisitions because they did not have a material impact on our financial position or results of operations.

11. Goodwill and Other Intangible Assets

The following table summarizes the changes in the carrying amount of goodwill related to continuing operations (in millions):

	Americas	EMEA	Asia Pacific	Total
Balance at January 1, 2021				
Goodwill	$8,089.1	$ 1,362.9	$575.8	$10,027.8
Accumulated impairment losses	(7.7)	(1,037.0)	–	(1,044.7)
	8,081.4	325.9	575.8	8,983.1
Purchase accounting adjustments	15.4	5.2	2.3	22.9
Other acquisitions	2.4	–	–	2.4
Currency translation	(61.1)	(13.8)	(14.1)	(89.0)
Balance at December 31, 2021				
Goodwill	8,045.8	1,354.3	564.0	9,964.1
Accumulated impairment losses	(7.7)	(1,037.0)	–	(1,044.7)
	8,038.1	317.3	564.0	8,919.4
Purchase accounting adjustments	0.9	–	–	0.9
Other acquisitions	48.3	–	–	48.3
Currency translation	(51.7)	(27.5)	(19.4)	(98.6)
Impairment	–	(289.8)	–	(289.8)
Balance at December 31, 2022				
Goodwill	8,043.3	1,326.8	544.6	9,914.7
Accumulated impairment losses	(7.7)	(1,326.8)	–	(1,334.5)
	$8,035.6	$ –	$544.6	$ 8,580.2

As discussed further in Note 10, we purchased a privately held sternal closure company during the year ended December 31, 2022, resulting in additional goodwill in 2022.

We perform our annual test of goodwill impairment in the fourth quarter of every year. In connection with the annual goodwill impairment test in the fourth quarter of 2022, we estimated the fair value of our Americas Orthopedics, Americas CMFT, and EMEA reporting units using the income and market approaches. In the annual 2022 test, each of the Americas Orthopedics and Americas CMFT reporting units exceeded their carrying values by more than 35 percent. We determined the goodwill related to our EMEA reporting unit was fully impaired and recognized an impairment charge of $289.8 million for the year ended December 31, 2022. We performed a qualitative test on our Asia Pacific reporting unit and concluded it was more likely than not the fair value of this reporting unit exceeded its carrying value.

The impairment charge of $289.8 million in our EMEA reporting unit was primarily due to the impacts from macroeconomic factors. The weakening of major foreign currencies in our EMEA reporting unit against the U.S. Dollar significantly impacted forecasted cash flows used in our analysis. For the EMEA reporting unit, operating expenses do not decline proportionally to revenue as many inventory-related and certain expenses are based on the U.S. Dollar. In addition, inflationary pressures have also caused our forecasted expenses to increase. Furthermore, our discounted cash flows utilized a higher risk-adjusted discount rate for the 2022 impairment test when compared to the 2021 test, primarily due to central banks raising interest rates in 2022 and increased country-specific risk due to macroeconomic factors and risks the region faces. We had previously taken goodwill impairment charges related to this reporting unit in prior years so when these negative macroeconomic factors occurred in 2022, the remaining goodwill was determined to be fully impaired.

We estimated the fair value of the Americas Orthopedics, Americas CMFT, and EMEA reporting units based on income and market approaches. Fair value under the income approach was determined by discounting to present value the estimated future cash flows of the reporting unit. Fair value under the market approach utilized the guideline public company methodology, which uses valuation indicators from publicly-traded companies that are similar to our reporting units and considers differences between our reporting unit and the comparable companies.

In estimating the future cash flows of the reporting units, we utilized a combination of market and company-specific inputs that a market participant would use in assessing the fair value of the reporting units. The primary market input was revenue growth rates.

These rates were based upon historical trends and estimated future growth drivers such as an aging global population, obesity and more active lifestyles. Significant company-specific inputs included assumptions regarding how the reporting units could leverage operating expenses as revenue grows and the impact any of our differentiated products or new products will have on revenues.

Under the guideline public company methodology, we took into consideration specific risk differences between our reporting unit and the comparable companies, such as recent financial performance, size risks and product portfolios, among other considerations.

We will continue to monitor the fair value of our reporting units in our interim and annual reporting periods. If our estimated cash flows decrease, we may have to record further impairment charges in the future. Factors that could result in our cash flows being lower than our current estimates include: 1) additional recurrence of the COVID-19 virus, including variants, causing hospitals to defer elective surgical procedures, 2) decreased revenues caused by unforeseen changes in the healthcare market, or our inability to generate new product revenue from our research and development activities, 3) our inability to achieve the estimated operating margins in our forecasts from our restructuring programs, cost saving initiatives, and other unforeseen factors, and 4) the weakening of foreign currencies against the U.S. Dollar. Additionally, changes in the broader economic environment could cause changes to our estimated discount rates and comparable company valuation indicators, which may impact our estimated fair values.

During the year ended December 31, 2020, we recorded a goodwill charge related to our EMEA reporting unit of $470.0 million. The impairment charge was primarily due to the COVID-19 pandemic and a reportable segment change. The COVID-19 pandemic had a significant adverse effect on both the operational and non-operational assumptions used to estimate the fair value of our EMEA reporting unit. The significant decline in our share price and that of most other publicly-traded companies resulted in us utilizing a higher risk-adjusted discount rate compared to the rate used in the previous annual goodwill impairment test to discount our future estimated cash flows to present value. On an operational basis, due to the deferral of elective surgical procedures, we estimated that our cash flows would be significantly lower than previously estimated in the prior annual goodwill impairment test. The change in reportable segments resulted in additional impairment due to additional assets being allocated to the EMEA reporting unit.

The fair value for the 2020 impairment charge was estimated using income and market approaches similar to the 2022 test.

The components of identifiable intangible assets related to continuing operations were as follows (in millions):

	Technology	Intellectual Property Rights	Trademarks and Trade Names	Customer Relationships	IPR&D	Other	Total
As of December 31, 2022:							
Intangible assets subject to amortization:							
Gross carrying amount	$ 2,954.3	$ 388.5	$ 518.0	$ 5,073.1	$ –	$174.0	$ 9,107.9
Accumulated amortization	(1,700.2)	(250.8)	(258.7)	(2,198.8)	–	(94.7)	(4,503.2)
Intangible assets not subject to amortization:							
Gross carrying amount	–	–	452.1	–	7.0	–	459.1
Total identifiable intangible assets	$ 1,254.1	$ 137.7	$ 711.4	$ 2,874.3	$ 7.0	$ 79.3	$ 5,063.8
As of December 31, 2021:							
Intangible assets subject to amortization:							
Gross carrying amount	$ 2,930.7	$ 381.9	$ 522.1	$ 5,109.1	$ –	$136.6	$ 9,080.4
Accumulated amortization	(1,537.1)	(230.2)	(230.7)	(1,939.5)	–	(79.3)	(4,016.8)
Intangible assets not subject to amortization:							
Gross carrying amount	–	–	457.0	–	13.0	–	470.0
Total identifiable intangible assets	$ 1,393.6	$ 151.7	$ 748.4	$ 3,169.6	$13.0	$ 57.3	$ 5,533.6

We recognized IPR&D intangible asset impairment charges of $3.0 million, $16.3 million and $33.0 million in the years ended December 31, 2022, 2021 and 2020, respectively, in “Goodwill and intangible asset impairment” on our consolidated statements of earnings. These impairments were the result of terminated projects or delays and additional costs related to a project. Since these projects had a low probability of success or were not a priority, their terminations are not expected to have a significant impact on our future cash flows.

Estimated annual amortization expense based upon intangible assets recognized as of December 31, 2022 for the years ending December 31, 2023 through 2027 is (in millions):

For the Years Ending December 31,	
2023	$525.0
2024	516.3
2025	511.3
2026	496.1
2027	482.2

12. Other Current Liabilities

Other current liabilities consisted of the following (in millions):

	As of December 31,	
	2022	2021
Other current liabilities:		
License and service agreements	$ 147.5	$ 133.9
Salaries, wages and benefits	336.2	317.6
Litigation and product liability	205.6	199.9
Customer rebates	149.7	129.5
Accrued liabilities	582.3	536.2
Total other current liabilities	$1,421.3	$1,317.1

We have reclassified certain previously reported components of other current liabilities to conform to the current year presentation.

13. Debt

Our debt consisted of the following (in millions):

	As of December 31,	
	2022	2021
Current portion of long-term debt		
3.150% Senior Notes due 2022	–	750.0
1.414% Euro Notes due 2022	–	568.6
Japan Term Loan A	–	101.6
Japan Term Loan B	–	184.9
Short-Term Term Loan	83.0	–
2022 Five-Year Credit Agreement	375.0	–
3.700% Senior Notes due 2023	86.3	–
Total short-term debt	$ 544.3	$1,605.1
Long-term debt		
3.700% Senior Notes due 2023	–	86.3
1.450% Senior Notes due 2024	850.0	850.0
3.550% Senior Notes due 2025	863.0	863.0
3.050% Senior Notes due 2026	600.0	600.0
3.550% Senior Notes due 2030	257.5	257.5
2.600% Senior Notes due 2031	750.0	750.0
4.250% Senior Notes due 2035	253.4	253.4
5.750% Senior Notes due 2039	317.8	317.8
4.450% Senior Notes due 2045	395.4	395.4
2.425% Euro Notes due 2026	533.6	568.6
1.164% Euro Notes due 2027	533.6	568.6
Debt discount and issuance costs	(30.1)	(36.4)
Adjustment related to interest rate swaps	(172.0)	(10.5)
Total long-term debt	$5,152.2	$5,463.7

At December 31, 2022, our total current and non-current debt of $5.7 billion consisted of $5.4 billion aggregate principal amount of senior notes, which included €1.0 billion of Euro-denominated senior notes ("Euro notes"), an $83.0 million borrowing under the Short-Term Term Loan, and $375.0 million of outstanding borrowings under the 2022 Five-Year Revolving Facility (defined below), partially offset by fair value adjustments relating to interest rate swaps totaling $172.0 million and debt discount and issuance costs of $30.1 million.

On December 13, 2022, we used cash on hand, including the Short-Term Term Loan proceeds of $83.0 million and borrowings under our 2022 Five-Year Revolving Facility, to redeem the full €500.0 million outstanding principal amount of our 1.414% Euro Notes due 2022.

On September 22, 2022, we used cash on hand to repay the full ¥11.7 billion and ¥21.3 billion outstanding principal amounts of our Japanese Term Loan A and Japanese Term Loan B, respectively.

On August 31, 2022, we borrowed an aggregate principal amount of $83.0 million under the Short-Term Term Loan with a third-party financial institution, the proceeds of which were used to redeem a portion of the 1.414% Euro Notes that matured on December 13, 2022. As more fully described in Note 3, the Short-Term Term Loan was settled in February 2023.

On March 18, 2022, we redeemed the full $750.0 million outstanding principal amount of our 3.150% Senior Notes due April 1, 2022. A $100.0 million draw under the 2021 Five-Year Revolving Facility (as defined below), together with cash on hand, were used to redeem these notes. $540.6 million of this cash on hand came from the dividend paid by ZimVie to Zimmer Biomet at separation.

In 2021, we redeemed the $200.0 million outstanding principal amount of our Floating Rate Notes due 2021 and the $300.0 million outstanding principal amount of our 3.375% Senior Notes due 2021, in each case at a redemption price equal to 100% of the aggregate principal amount of the senior notes being redeemed, plus accrued and unpaid interest.

On November 24, 2021, we completed the offering of $850.0 million aggregate principal amount of our 1.450% Senior Notes due November 22, 2024 and $750.0 million aggregate principal amount of our 2.600% Senior Notes due November 24, 2031. Interest is payable on the 1.450% Senior Notes due 2024 on May 22 and November 22 of each year until maturity. Interest is payable on the 2.600% Senior Notes due 2031 on May 24 and November 24 of each year until maturity. We received net proceeds of $1,599.8 million.

On November 15, 2021, we commenced cash tender offers to purchase certain outstanding senior notes. The proceeds from the senior notes offering described above, together with cash on hand, were used to pay for the senior notes purchased in the cash tender offers. The cash tender offers resulted in the following principal amount of the notes tendered: $213.7 million of the 3.700% Senior Notes due 2023, $1,137.0 million of the 3.550% Senior Notes due 2025, and $642.5 million of the 3.550% Senior Notes due 2030. As a result, we recorded a loss on the extinguishment of debt in the amount of $165.1 million in our consolidated statement of earnings for the year ended December 31, 2021. The components of this loss were the reacquisition price of $2,154.8 million minus the carrying value of the debt of $1,982.7 million (including debt discount and issuance costs) plus debt tender fees of $5.0 million minus a gain of $12.0 million on a reverse treasury lock that we entered into to offset any increases or decreases to the premium associated with the tender offer from the date we entered into the lock.

On August 19, 2022, we entered into a new five-year revolving credit agreement (the "2022 Five-Year Credit Agreement") and a new 364-day revolving credit agreement (the "2022 364-Day Revolving Credit Agreement"), as described below. Borrowings under these credit agreements will be used for general corporate purposes.

The 2022 Five-Year Credit Agreement contains a five-year unsecured revolving facility of $1.5 billion (the "2022 Five-Year Revolving Facility"). The 2022 Five-Year Credit Agreement replaces the previous revolving credit agreement (the "2021 Five-Year Credit Agreement"), which contained a five-year unsecured multicurrency revolving facility of $1.5 billion (the "2021 Five-Year Revolving Facility"). There were no borrowings outstanding under the 2021 Five-Year Credit Agreement at the time it was terminated.

The 2022 Five-Year Credit Agreement will mature on August 19, 2027, with two one-year extensions exercisable at our discretion and subject to required lender consent. The 2022 Five-Year Credit Agreement also includes an uncommitted incremental feature allowing us to request an increase of the facility by an aggregate amount of up to $500.0 million.

Borrowings under the 2022 Five-Year Credit Agreement bear interest at floating rates, based upon either an adjusted term secured overnight financing rate ("Term SOFR") for the applicable interest period or an alternate base rate, in each case, plus an applicable margin determined by reference to our senior unsecured long-term debt credit rating. We pay a facility fee on the aggregate amount of the 2022 Five-Year Revolving Facility at a rate determined by reference to our senior unsecured long-term debt credit rating. The 2022 Five-Year Credit Agreement contains customary affirmative and negative covenants and events of default for unsecured financing arrangements, including, among other things, limitations on consolidations, mergers, and sales of assets. The 2022 Five-Year Credit Agreement also requires us to maintain a consolidated indebtedness to consolidated EBITDA ratio of no greater than 4.5 to 1.0 as of the last day of any period of four consecutive fiscal quarters (with such ratio subject to increase to 5.0 to 1.0 for a period of time in connection with a qualified material acquisition and certain other restrictions). We were in compliance with all covenants under the 2022 Five-Year Credit Agreement as of December 31, 2022. As of December 31, 2022, there were outstanding borrowings of $375.0 million under the 2022 Five-Year Revolving Facility. We elected short-term interest periods on these outstanding borrowings.

The 2022 364-Day Revolving Credit Agreement is an unsecured revolving credit facility in the principal amount of $1.0 billion (the "2022 364-Day Revolving Facility"). The 2022 364-Day Revolving Credit Agreement replaced a credit agreement entered into on August 20, 2021, which was also a 364- day unsecured revolving credit facility of $1.0 billion (the "2021 364-Day Revolving Facility"). There were no borrowings outstanding under the 2021 364-Day Revolving Facility when it was terminated.

The 2022 364-Day Revolving Facility will mature on August 18, 2023. Borrowings under the 2022 364-Day Revolving Credit Agreement bear interest at floating rates based upon either an adjusted Term SOFR for the applicable interest period or an alternate base rate, in each case, plus an applicable margin determined by reference to our senior unsecured long-term debt credit rating. We pay a facility fee on the aggregate amount of the 2022 364-Day Revolving Facility at a rate determined by reference to our senior unsecured long-term debt credit rating. The 2022 364-Day Revolving Credit Agreement contains customary affirmative and negative covenants and events of default for an unsecured financing arrangement including, among other things, limitations on consolidations, mergers, and sales of assets. The 2022 364-Day Revolving Credit Agreement also requires us to maintain a consolidated indebtedness to consolidated EBITDA ratio of no greater than 4.5 to 1.0 as of the last day of any period of four consecutive fiscal quarters (with such ratio subject to increase to 5.0 to 1.0 in connection with a qualified material acquisition and certain other restrictions). We were in compliance with all covenants under the 2022 364-Day Revolving Credit Agreement as of December 31, 2022. As of December 31, 2022, there were no outstanding borrowings under the 2022 364-Day Revolving Credit Agreement.

The estimated fair value of our senior notes, which includes our Euro notes, as of December 31, 2022, based on quoted prices for the specific securities from transactions in over-the-counter markets (Level 2), was $4,909.0 million. The carrying value of the outstanding $375.0 million principal balance of the 2022 Five-Year Revolving Facility and $83.0 million Short-Term Term Loan approximates their fair value as they bear interest at short-term market rates.

At December 31, 2022 and 2021, the weighted average interest rate for our borrowings was 3.2 percent and 2.8 percent, respectively. We paid $161.7 million, $219.0 million, and $193.1 million in interest during 2022, 2021, and 2020, respectively.

14. Accumulated Other Comprehensive Income

AOCI refers to certain gains and losses that under GAAP are included in comprehensive income but are excluded from net earnings as these amounts are initially recorded as an adjustment to stockholders' equity. Amounts in AOCI may be reclassified to net earnings upon the occurrence of certain events.

Our AOCI is comprised of foreign currency translation adjustments, unrealized gains and losses on cash flow hedges, and amortization of prior service costs and unrecognized gains and losses in actuarial assumptions on our defined benefit plans. Foreign currency translation adjustments are reclassified to net earnings upon sale or upon a complete or substantially complete liquidation of an investment in a foreign entity. Unrealized gains and losses on cash flow hedges are reclassified to net earnings when the hedged item affects net earnings. Amounts related to defined benefit plans that are in AOCI are reclassified over the service periods of employees in the plan. See Note 16 for more information on our defined benefit plans.

The following table shows the changes in the components of AOCI, net of tax (in millions):

	Foreign Currency Translation	Cash Flow Hedges	Defined Benefit Plan Items	Total AOCI
Balance December 31, 2021	$(107.1)	$ 32.1	$(156.6)	$(231.6)
AOCI before reclassifications	(123.3)	83.5	78.4	38.6
Reclassifications to statements of earnings	–	(46.0)	(1.4)	(47.4)
Spinoff of ZimVie Inc.	35.2	–	–	35.2
Reclassifications of net investment hedges to retained earnings	25.9	–	–	25.9
Balance December 31, 2022	$(169.3)	$ 69.6	$ (79.6)	$(179.3)

The following table shows the reclassification adjustments from AOCI (in millions):

	Amount of Gain / (Loss) Reclassified from AOCI			
	For the Years Ended December 31,			
Component of AOCI	2022	2021	2020	Location on Statements of Earnings
Cash flow hedges				
Foreign exchange forward contracts	$54.8	$ (0.8)	$45.4	Cost of products sold
Forward starting interest rate swaps	(0.8)	(0.6)	(0.6)	Interest expense, net
	54.0	(1.4)	44.8	Total before tax
	8.0	(0.1)	6.3	Provision (benefit) for income taxes
	$46.0	$ (1.3)	$38.5	Net of tax
Defined benefit plans				
Settlements, Prior service cost and unrealized actuarial gain (loss)	$ 0.2	$(14.0)	$(4.6)	Other (expense) income, net
	(1.2)	(3.8)	(1.7)	Provision (benefit) for income taxes
	$ 1.4	$(10.2)	$(2.9)	Net of tax
Total reclassifications	$47.4	$(11.5)	$35.6	Net of tax

The following table shows the tax effects on each component of AOCI recognized in our consolidated statements of comprehensive income (loss) (in millions):

	For the Years Ended December 31,								
	Before Tax			Tax			Net of Tax		
	2022	2021	2020	2022	2021	2020	2022	2021	2020
Foreign currency cumulative translation adjustments	$(87.3)	$(54.8)	$ (43.4)	$36.0	$45.1	$(69.0)	$(123.3)	$(99.9)	$ 25.6
Unrealized cash flow hedge gains (losses)	100.5	102.5	(42.7)	17.0	16.1	(9.2)	83.5	86.4	(33.5)
Reclassification adjustments on cash flow hedges	(54.0)	1.4	(44.8)	(8.0)	0.1	(6.3)	(46.0)	1.3	(38.5)
Adjustments to prior service cost and unrecognized actuarial assumptions	95.9	96.9	(20.9)	18.9	18.5	(11.4)	77.0	78.4	(9.5)
Total Other Comprehensive Income (Loss)	$ 55.1	$146.0	$(151.8)	$63.9	$79.8	$(95.9)	$ (8.8)	$ 66.2	$(55.9)

15. Derivative Instruments and Hedging Activities

We are exposed to certain market risks relating to our ongoing business operations, including foreign currency exchange rate risk, commodity price risk, interest rate risk and credit risk. We manage our exposure to these and other market risks through regular operating and financing activities. Currently, the only risks that we manage through the use of derivative instruments are interest rate risk and foreign currency exchange rate risk.

Interest Rate Risk

Derivatives Designated as Fair Value Hedges

We currently use fixed-to-variable interest rate swaps to partially manage our exposure to interest rate risk from our cash investments and debt portfolio. These derivative instruments are designated as fair value hedges under GAAP. Changes in the fair value of the derivative instrument are recorded in current earnings and are offset by gains or losses on the underlying debt instrument.

In June 2021, we entered into $1 billion of fixed-to-variable interest rate swaps that we have designated as fair value hedges of $1 billion of our fixed rate debt obligations.

As of December 31, 2022 and December 31, 2021, the following amounts were recorded on our consolidated balance sheets related to cumulative basis adjustments for fair value hedges (in millions):

	Carrying Amount of the Hedged Liabilities		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Liabilities	
Balance Sheet Line Item	December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Long-term debt	823.9	985.2	(172.0)	(10.5)

Derivatives Designated as Cash Flow Hedges

In 2014, we entered into forward starting interest rate swaps that were designated as cash flow hedges of our thirty-year tranche of senior notes (the 4.450% Senior Notes due 2045) we expected to issue in 2015. The forward starting interest rate swaps mitigated the risk of changes in interest rates prior to the completion of the notes offering. The interest rate swaps were settled, and the remaining loss to be recognized at December 31, 2022 was $24.6 million, which will be recognized using the effective interest rate method over the remaining maturity period of the hedged notes.

Foreign Currency Exchange Rate Risk

We operate on a global basis and are exposed to the risk that our financial condition, results of operations and cash flows could be adversely affected by changes in foreign currency exchange rates. To reduce the potential effects of foreign currency exchange rate movements on net earnings, we enter into derivative financial instruments in the form of foreign currency exchange forward contracts with major financial institutions. We also designated our Euro notes and other foreign currency exchange forward contracts as net investment hedges of investments in foreign subsidiaries. We are primarily exposed to foreign currency exchange rate risk with respect to transactions and net assets denominated in Euros, Swiss Francs, Japanese Yen, British Pounds, Canadian Dollars, Australian Dollars, Korean Won, Swedish Krona, Czech Koruna, Thai Baht, Taiwan Dollars, South African Rand, Russian Rubles, Indian Rupees, Turkish Lira, Polish Zloty, Danish Krone, and Norwegian Krone. We do not use derivative financial instruments for trading or speculative purposes.

Derivatives Designated as Net Investment Hedges

We are exposed to the impact of foreign exchange rate fluctuations in the investments in our wholly-owned foreign subsidiaries that are denominated in currencies other than the U.S. Dollar. In order to mitigate the volatility in foreign exchange rates, we issued Euro notes in December 2016 and November 2019 and designated 100 percent of the Euro notes to hedge our net investment in certain wholly-owned foreign subsidiaries that have a functional currency of Euro. All changes in the fair value of the hedging instrument designated as a net investment hedge are recorded as a component of AOCI in our consolidated balance sheets.

At December 31, 2022, we had receive-fixed-rate, pay-fixed-rate cross-currency interest rate swaps with notional amounts outstanding of Euro 800 million, Japanese Yen 54.1 billion and Swiss Franc 125 million. These transactions further hedge our net investment in certain wholly-owned foreign subsidiaries that have a functional currency of Euro, Japanese Yen and Swiss Franc. All changes in the fair value of a derivative instrument designated as a net investment hedge are recorded as a component of AOCI in the consolidated balance sheets. The portion of this change related to the excluded component will be amortized into earnings over the life of the derivative while the remainder will be recorded in AOCI until the hedged net investment is sold or substantially eliminated. We recognize the excluded component in interest expense, net on our consolidated statements of earnings. The net cash received related to the receive-fixed-rate, pay-fixed-rate component of the cross-currency interest rate swaps is reflected in investing cash flows in our consolidated statements of cash flows. In the year ended December 31, 2022, Euro 575 million of these cross-currency interest rate swaps matured at a gain of $56.2 million. In the year ended December 31, 2022, ¥7 billion of these cross-currency swaps were terminated at a gain of $12.8 million. The settlement of these gains with the counterparties is reflected in investing cash flows in our consolidated statements of cash flows and will remain in AOCI on our consolidated balance sheet until the hedged net investment is sold or substantially liquidated.

Derivatives Designated as Cash Flow Hedges

Our revenues are generated in various currencies throughout the world. However, a significant amount of our inventory is produced in U.S. Dollars. Therefore, movements in foreign currency exchange rates may have different proportional effects on our revenues compared to our cost of products sold. To minimize the effects of foreign currency exchange rate movements on cash flows, we hedge intercompany sales of inventory expected to occur within the next 30 months with foreign currency exchange forward contracts. We designate these derivative instruments as cash flow hedges.

We perform quarterly assessments of hedge effectiveness by verifying and documenting the critical terms of the hedge instrument and confirming that forecasted transactions have not changed significantly. We also assess on a quarterly basis whether there have been adverse developments regarding the risk of a counterparty default. For derivatives which qualify as hedges of future cash flows, the gains and losses are temporarily recorded in AOCI and then recognized in cost of products sold when the hedged item affects net earnings. On our consolidated statements of cash flows, the settlements of these cash flow hedges are recognized in operating cash flows.

For foreign currency exchange forward contracts outstanding at December 31, 2022, we had obligations to

purchase U.S. Dollars and sell Euros, Japanese Yen, British Pounds, Canadian Dollars, Australian Dollars, Korean Won, Swedish Krona, Czech Koruna, Thai Baht, Taiwan Dollars, South African Rand, Russian Rubles, Indian Rupees, Polish Zloty, Danish Krone, and Norwegian Krone and obligations to purchase Swiss Francs and sell U.S. Dollars. These derivatives mature at dates ranging from January 2023 through June 2025. As of December 31, 2022, the notional amounts of outstanding forward contracts entered into with third parties to purchase U.S. Dollars were $1,317.5 million. As of December 31, 2022, the notional amounts of outstanding forward contracts entered into with third parties to purchase Swiss Francs were $419.2 million.

Derivatives Not Designated as Hedging Instruments

We enter into foreign currency forward exchange contracts with terms of one to three months to manage currency exposures for monetary assets and liabilities denominated in a currency other than an entity's functional currency. Any foreign currency re-measurement gains/losses recognized in earnings are generally offset with gains/losses on the foreign currency forward exchange contracts in the same reporting period. The amount of these gains/losses is recorded in other (expense) income, net. Outstanding contracts are recorded on the balance sheet at fair value as of the end of the reporting period. The notional amounts of these contracts are typically in a range of $1.5 billion to $2.0 billion per quarter.

As discussed in Note 13, in 2021 we entered into a reverse treasury lock related to our bond tender offer to offset any increases or decreases to the premium associated with the tender offer from the date we entered into the lock. We recognized a gain of $12.0 million that was included in the loss on early extinguishment of debt.

As discussed in Note 3, we entered into the Forward Exchange Agreement as part of our pledge to transfer our ZimVie shares to a third-party financial institution, which occurred in February 2023.

Income Statement Presentation

Derivatives Designated as Cash Flow Hedges

Derivative instruments designated as cash flow hedges had the following effects, before taxes, on AOCI and net earnings on our consolidated statements of earnings, consolidated statements of comprehensive income (loss) and consolidated balance sheets (in millions):

	Amount of Gain / (Loss) Recognized in AOCI				Amount of Gain / (Loss) Reclassified from AOCI		
	Years Ended December 31,				Years Ended December 31,		
Derivative Instrument	2022	2021	2020	Location on Statement of Earnings	2022	2021	2020
Foreign exchange forward contracts	$100.5	$102.5	$(42.7)	Cost of products sold	$54.8	$(0.8)	$45.4
Forward starting interest rate swaps	–	–	–	Interest expense, net	(0.7)	(0.6)	(0.6)
	$100.5	$102.5	$(42.7)		$54.1	$(1.4)	$44.8

The fair value of outstanding derivative instruments designated as cash flow hedges and recorded on the consolidated balance sheet at December 31, 2022, together with settled derivatives where the hedged item has not yet affected earnings, was a net unrealized gain of $80.3 million, or $69.6 million after taxes, which is deferred in AOCI. A gain of $82.9 million, or $68.6 million after taxes, is expected to be reclassified to earnings in cost of products sold and a loss of $0.7 million, or $0.5 million after taxes, is expected to be reclassified to earnings in interest expense, net over the next twelve months.

The following table presents the effects of fair value, cash flow and net investment hedge accounting on our consolidated statements of earnings (in millions):

	Location and Amount of Gain/(Loss) Recognized in Income on Fair Value, Cash Flow and Net Investment Hedging Relationships Years Ended December 31,					
	2022		2021		2020	
	Cost of Products Sold	Interest Expense, Net	Cost of Products Sold	Interest Expense, Net	Cost of Products Sold	Interest Expense, Net
Total amounts of income and expense line items presented in the statements of earnings in which the effects of fair value, cash flow and net investment hedges are recorded	$2,019.5	$(164.8)	$1,960.4	$(208.4)	$1,824.3	$(212.1)
The effects of fair value, cash flow and net investment hedging:						
Gain (loss) on fair value hedging relationships						
Discontinued interest rate swaps	–	–	–	3.1	–	3.3
Interest rate swaps	–	(4.0)	–	6.4	–	–
Gain (loss) on cash flow hedging relationships						
Foreign exchange forward contracts	54.8	–	(0.8)	–	45.4	–
Forward starting interest rate swaps	–	(0.7)	–	(0.6)	–	(0.6)
Gain on net investment hedging relationships						
Cross-currency interest rate swaps	–	21.6	–	37.5	–	53.5

Derivatives Not Designated as Hedging Instruments

The following gains/(losses) from these derivative instruments were recognized on our consolidated statements of earnings (in millions):

Derivative Instrument	Location on Statements of Earnings	Years Ended December 31, 2022	2021	2020
Foreign exchange forward contracts	Other (expense) income, net	$(26.1)	$(1.8)	$10.6
Forward Exchange Agreement	Other (expense) income, net	1.1	–	–
Reverse treasury lock	Loss on early extinguishment of debt	–	12.0	–

These gains/(losses) do not reflect gains of $5.3 million and losses of $3.7 million and $22.8 million in 2022, 2021 and 2020, respectively, recognized in other (expense) income, net as a result of foreign currency re-measurement of monetary assets and liabilities denominated in a currency other than an entity's functional currency.

Balance Sheet Presentation

As of December 31, 2022 and 2021, all derivative instruments designated as fair value hedges, cash flow hedges and net investment hedges are recorded at fair value on our consolidated balance sheets. On our consolidated balance sheets, we recognize individual forward contracts with the same counterparty on a net asset/liability basis if we have a master netting agreement with the counterparty. Under these master netting agreements, we are able to settle derivative instrument assets and liabilities with the same counterparty in a single transaction, instead of settling each derivative instrument separately. We have master netting agreements with all of our counterparties. The fair value of derivative instruments on a gross basis is as follows (in millions):

	As of December 31, 2022		As of December 31, 2021	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Asset Derivatives Designated as Hedges				
Foreign exchange forward contracts	Other current assets	$ 73.2	Other current assets	$42.3
Cross-currency interest rate swaps	Other current assets	6.8	Other current assets	16.3
Foreign exchange forward contracts	Other assets	16.6	Other assets	20.9
Cross-currency interest rate swaps	Other assets	–	Other assets	6.7
Total asset derivatives		$ 96.6		$86.2
Asset Derivatives Not Designated as Hedges				
Foreign exchange forward contracts	Other current assets	$ 3.1	Other current assets	$ 1.4
Forward Exchange Agreement	Other current assets	1.1		–
Total asset derivatives not designated as hedges		$ 4.2		$ 1.4
Liability Derivatives Designated as Hedges				
Foreign exchange forward contracts	Other current liabilities	$ 8.0	Other current liabilities	$ 9.6
Cross-currency interest rate swaps	Other current liabilities	3.3	Other current liabilities	0.1
Foreign exchange forward contracts	Other long-term liabilities	14.5	Other long-term liabilities	1.5
Cross-currency interest rate swaps	Other long-term liabilities	46.3	Other long-term liabilities	3.3
Interest rate swaps	Other long-term liabilities	172.0	Other long-term liabilities	10.5
Total liability derivatives		$244.1		$25.0
Liability Derivatives Not Designated as Hedges				
Foreign exchange forward contracts	Other current liabilities	$ 4.6	Other current liabilities	$ 1.8

The table below presents the effects of our master netting agreements on our consolidated balance sheets (in millions):

Description	Location	As of December 31, 2022 Gross Amount	Offset	Net Amount in Balance Sheet	As of December 31, 2021 Gross Amount	Offset	Net Amount in Balance Sheet
Asset Derivatives							
Cash flow hedges	Other current assets	$73.2	$7.1	$66.1	$42.3	$9.5	$32.8
Cash flow hedges	Other assets	16.6	9.9	6.7	20.9	1.3	19.6
Derivatives not designated as hedges	Other current assets	3.1	1.3	1.8	1.4	0.3	1.1
Liability Derivatives							
Cash flow hedges	Other current liabilities	8.0	7.1	0.9	9.6	9.5	0.1
Cash flow hedges	Other long-term liabilities	14.5	9.9	4.6	1.5	1.3	0.2
Derivatives not designated as hedges	Other current liabilities	4.6	1.3	3.3	1.8	0.3	1.5

The following net investment hedge gains (losses) were recognized on our consolidated statements of comprehensive income (loss) (in millions):

Derivative Instrument	Amount of Gain / (Loss) Recognized in AOCI Years Ended December 31, 2022	2021	2020
Euro Notes	$ 113.1	$ 129.6	$(151.5)
Cross-currency interest rate swaps	6.4	103.0	(143.8)
	$ 119.5	$ 232.6	$(295.3)

16. Retirement Benefit Plans

We have defined benefit pension plans covering certain U.S. and Puerto Rico employees. Plan benefits are primarily based on years of credited service and the participant's average eligible compensation. The U.S. and Puerto Rico plans are frozen; meaning there are no new participants that can join the plan and participants in the plan do not accrue additional years of service or compensation. In addition to the U.S. and Puerto Rico defined benefit pension plans, we sponsor various foreign pension arrangements, including retirement and termination benefit plans required by local law or coordinated with government sponsored plans.

We use a December 31 measurement date for our benefit plans.

Defined Benefit Plans

The components of net pension expense for our defined benefit retirement plans were as follows (in millions):

	For the Years Ended December 31, U.S. and Puerto Rico 2022	2021	2020	Foreign 2022	2021	2020
Service cost	$ 0.7	$ 0.9	$ 0.7	$ 22.7	$ 24.7	$ 24.7
Interest cost	11.7	10.5	13.9	5.4	4.9	5.4
Expected return on plan assets	(30.8)	(29.8)	(32.9)	(14.3)	(15.6)	(13.3)
Settlements	–	6.4	0.5	(5.0)	0.5	(0.5)
Amortization of prior service cost	0.3	0.3	0.3	(4.1)	(4.3)	(4.2)
Amortization of unrecognized actuarial loss	7.8	8.6	7.2	0.8	2.5	1.3
Net periodic (income) benefit expense	$(10.3)	$ (3.1)	$(10.3)	$ 5.5	$ 12.7	$ 13.4

In our consolidated statements of earnings, service cost is reported in the same location as other compensation costs arising from services rendered by the pertinent employees while the other components of net pension expense are reported in other (expense) income, net.

The weighted average actuarial assumptions used to determine net pension expense for our defined benefit retirement plans were as follows:

	For the Years Ended December 31,					
	U.S. and Puerto Rico			Foreign		
	2022	2021	2020	2022	2021	2020
Discount rate	2.86%	2.04%	3.40%	0.67%	0.63%	0.73%
Rate of compensation increase	–	–	–	2.27%	2.39%	2.28%
Expected long-term rate of return on plan assets	6.75%	6.75%	7.75%	1.83%	2.09%	2.17%

The expected long-term rate of return on plan assets is based on the historical and estimated future rates of return on the different asset classes held in the plans. The expected long-term rate of return is the weighted average of the target asset allocation of each individual asset class. We believe that historical asset results approximate expected market returns applicable to the funding of a long-term benefit obligation.

Discount rates were determined for each of our defined benefit retirement plans at their measurement date to reflect the yield of a portfolio of high quality bonds matched against the timing and amounts of projected future benefit payments.

Changes in projected benefit obligations and plan assets were (in millions):

	For the Years Ended December 31,			
	U.S. and Puerto Rico		Foreign	
	2022	2021	2022	2021
Projected benefit obligation - beginning of year	$ 503.1	$516.9	$ 807.9	$819.3
Service cost	0.7	0.9	22.7	24.7
Interest cost	11.7	10.5	5.4	4.9
Employee contributions	–	–	24.5	23.4
Benefits paid	(23.5)	(13.3)	(64.1)	(41.7)
Actuarial loss	(125.2)	3.0	(186.2)	6.1
Expenses paid	–	–	(0.2)	(0.2)
Settlement	–	(14.9)	(2.3)	(3.0)
Translation (gain) loss	–	–	(39.8)	(25.6)
Projected benefit obligation - end of year	$ 366.8	$503.1	$ 567.9	$807.9

	For the Years Ended December 31,			
	U.S. and Puerto Rico		Foreign	
	2022	2021	2022	2021
Plan assets at fair market value - beginning of year	$499.5	$474.1	$821.2	$756.7
Actual return on plan assets	(81.5)	50.5	(93.8)	86.6
Employer contributions	1.7	3.1	19.8	22.4
Employee contributions	–	–	24.5	23.4
Settlements	–	(14.9)	(2.3)	(3.0)
Benefits paid	(23.5)	(13.3)	(64.1)	(41.7)
Expenses paid	–	–	(0.2)	(0.2)
Translation (loss) gain	–	–	(37.9)	(23.0)
Plan assets at fair market value - end of year	$396.2	$499.5	$667.2	$821.2
Funded status	$ 29.4	$ (3.6)	$ 99.3	$ 13.3

	For the Years Ended December 31,			
	U.S. and Puerto Rico		Foreign	
	2022	2021	2022	2021
Amounts recognized in consolidated balance sheet:				
Prepaid pension	$30.9	$ 2.7	$119.9	$ 54.9
Short-term accrued benefit liability	(0.1)	(0.1)	(1.4)	(1.3)
Long-term accrued benefit liability	(1.4)	(6.2)	(19.2)	(40.3)
Net amount recognized	$29.4	$(3.6)	$ 99.3	$ 13.3

The weighted average actuarial assumptions used to determine the projected benefit obligation for our defined benefit retirement plans were as follows:

	For the Years Ended December 31,					
	U.S. and Puerto Rico			Foreign		
	2022	2021	2020	2022	2021	2020
Discount rate	5.37%	2.70%	2.70%	2.65%	0.73%	0.61%
Rate of compensation increase	–	–	–	2.25%	2.48%	2.36%

Plans with projected benefit obligations in excess of plan assets were as follows (in millions):

	As of December 31,			
	U.S. and Puerto Rico		Foreign	
	2022	2021	2022	2021
Projected benefit obligation	$1.5	$468.5	$26.8	$38.8
Plan assets at fair market value	–	462.2	7.9	8.1

Total accumulated benefit obligations and plans with accumulated benefit obligations in excess of plan assets were as follows (in millions):

	As of December 31,			
	U.S. and Puerto Rico		Foreign	
	2022	2021	2022	2021
Total accumulated benefit obligations	$366.8	$503.1	$548.6	$783.0
Plans with accumulated benefit obligations in excess of plan assets:				
Accumulated benefit obligation	1.5	468.5	24.5	36.4
Plan assets at fair market value	–	462.2	7.9	8.1

The benefits expected to be paid out in each of the next five years and for the five years combined thereafter are as follows (in millions):

For the Years Ending December 31,	U.S. and Puerto Rico	Foreign
2023	$ 23.7	$ 32.4
2024	24.2	32.0
2025	25.2	31.5
2026	25.6	30.8
2027	25.8	31.3
2028-2032	132.3	145.8

The U.S. and Puerto Rico defined benefit retirement plans' overall investment strategy is to balance total returns by emphasizing long-term growth of capital while mitigating risk. We have established target ranges of assets held by the plans of 30 to 65 percent for equity securities, 30 to 50 percent for debt securities and 0 to 15 percent in non-traditional investments. The plans strive to have sufficiently diversified assets so that adverse or unexpected results from one asset class will not have an unduly detrimental impact on the entire portfolio. We regularly review the investments in the plans and we may rebalance them from time-to-time based upon the target asset allocation of the plans.

For the U.S. and Puerto Rico plans, we maintain an investment policy statement that guides the investment allocation in the plans. The investment policy statement describes the target asset allocation positions described above. Our benefits committee, along with our investment advisor, monitor compliance with and administer the investment policy statement and the plans' assets and oversee the general investment strategy and objectives of the plans. Our benefits committee generally meets quarterly to review performance.

The investment strategies of foreign based plans vary according to the plan provisions and local laws. The majority of the assets in foreign based plans are located in Switzerland-based plans. These assets are held in trusts and are commingled with the assets of other Swiss companies with representatives of all the companies making the investment decisions. The overall strategy is to maximize total returns while avoiding risk. The trustees of the assets have established target ranges of assets held by the plans of 30 to 50 percent in debt securities, 20 to 37 percent in equity securities, 15 to 24 percent in real estate, 3 to 15 percent in cash funds and 0 to 12 percent in other funds.

The fair value of our U.S. and Puerto Rico pension plan assets by asset category was as follows (in millions):

	As of December 31, 2022			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 5.0	$5.0	$ –	$ –
Equity securities	263.2	–	263.2	–
Intermediate fixed income securities	128.0	–	128.0	–
Total	$396.2	$5.0	$391.2	$ –

	As of December 31, 2021			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 3.8	$3.8	$ –	$ –
Equity securities	342.1	–	342.1	–
Intermediate fixed income securities	153.6	–	153.6	–
Total	$499.5	$3.8	$495.7	$ –

The fair value of our foreign pension plan assets was as follows (in millions):

	As of December 31, 2022			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 21.9	$ 21.9	$ –	$ –
Equity securities	136.0	122.6	13.4	–
Fixed income securities	168.8	–	168.8	–
Other types of investments	175.0	–	175.0	–
Real estate	165.5	–	–	165.5
Total	$667.2	$144.5	$357.2	$165.5

	As of December 31, 2021			
		Fair Value Measurements at Reporting Date Using:		
Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$ 56.6	$ 56.6	$ –	$ –
Equity securities	185.5	149.6	35.9	–
Fixed income securities	195.5	–	195.5	–
Other types of investments	223.0	–	223.0	–
Real estate	160.6	–	–	160.6
Total	$821.2	$206.2	$454.4	$160.6

As of December 31, 2022 and 2021, our defined benefit pension plans' assets did not hold any direct investment in Zimmer Biomet Holdings common stock.

Equity securities are valued using a market approach, based on quoted prices for the specific security from transactions in active exchange markets (Level 1), or in some cases where we are invested in mutual or collective funds, based upon the net asset value per unit of the fund which is determined from quoted market prices of the underlying securities in the fund's portfolio (Level 2). Fixed income securities are valued using a market approach, based upon quoted prices for the specific security or from institutional bid evaluations. Real estate is valued by discounting to present value the cash flows expected to be generated by the specific properties.

The following table provides a reconciliation of the beginning and ending balances of our foreign pension plan assets measured at fair value that used significant unobservable inputs (Level 3) (in millions):

	December 31, 2022
Beginning Balance	$160.6
Change in fair value of assets	8.0
Net purchases and sales	(0.9)
Translation gain	(2.2)
Ending Balance	$165.5

We expect that we will have minimal legally required funding requirements in 2023 for the qualified U.S. and Puerto Rico defined benefit retirement plans, and we do not expect to voluntarily contribute to these plans during 2023. Contributions to foreign defined benefit plans are estimated to be $18.8 million in 2023. We do not expect the assets in any of our plans to be returned to us in the next year.

Defined Contribution Plans

We also sponsor defined contribution plans for substantially all of the U.S. and Puerto Rico employees and certain employees in other countries.

The benefits offered under these plans are reflective of local customs and practices in the countries concerned. We expensed $48.5 million, $46.3 million and $43.5 million related to these plans for the years ended December 31, 2022, 2021 and 2020, respectively.

17. Income Taxes

The components of earnings (loss) from continuing operations before income taxes consisted of the following (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
United States operations	$(242.4)	$(118.8)	$(387.6)
Foreign operations	645.9	617.8	282.4
Total	$ 403.5	$ 499.0	$(105.2)

The provision/(benefit) for income taxes and the income taxes paid consisted of the following (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
Current:			
Federal	$175.3	$ 44.3	$ (58.4)
State	16.1	7.2	2.7
Foreign	(14.7)	104.1	(79.7)
	176.7	155.6	(135.4)
Deferred:			
Federal	(74.8)	(83.5)	(12.7)
State	1.6	(19.4)	(10.0)
Foreign	8.8	0.8	62.1
	(64.4)	(102.1)	39.4
Provision (benefit) for income taxes	$112.3	$ 53.5	$ (96.0)
Net income taxes paid	$326.6	$ 258.4	$ 142.0

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

	For the Years Ended December 31,		
	2022	2021	2020
U.S. statutory income tax rate	21.0%	21.0%	21.0%
State taxes, net of federal deduction	3.2	(2.8)	6.6
Tax impact of foreign operations, including U.S. taxes on international income and foreign tax credits	(1.8)	(10.3)	37.4
Change in valuation allowance	1.1	(0.5)	3.8
Non-deductible expenses	5.8	1.3	(4.3)
Goodwill impairment	15.3	–	(92.0)
Tax rate change	0.3	0.1	5.5
Tax impact of certain significant transactions	0.9	1.1	–
Tax benefit relating to foreign derived intangible income and U.S. manufacturer's deduction	(2.9)	0.4	14.2
R&D tax credit	(2.0)	(2.2)	4.8
Share-based compensation	1.8	(0.2)	(1.0)
Net uncertain tax positions, including interest and penalties	(14.6)	2.9	56.9
Switzerland tax reform and certain restructuring transactions	–	–	40.9
Other	(0.2)	(0.1)	(2.5)
Effective income tax rate	27.9%	10.7%	91.3%

Our operations in Puerto Rico benefit from a tax incentive grant which expires in fiscal year 2026.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Valuation allowances are recorded to reduce deferred income tax assets when it is more likely than not that an income tax benefit will not be realized. We reclassified certain prior period amounts to conform to the current period presentation.

The components of deferred taxes consisted of the following (in millions):

	As of December 31,	
	2022	2021
Deferred tax assets:		
Inventory	$ 187.9	$ 204.2
Net operating loss carryover	476.2	454.0
Tax credit carryover	72.9	79.7
Capital loss carryover	7.8	8.6
Product liability and litigation	36.7	44.4
Accrued liabilities	99.1	101.7
Share-based compensation	36.6	30.2
Accounts receivable	25.8	14.8
Research and development	47.9	–
Other	55.5	56.9
Total deferred tax assets	1,046.4	994.5
Less: Valuation allowances	(463.2)	(460.1)
Total deferred tax assets after valuation allowances	$ 583.2	$ 534.4
Deferred tax liabilities:		
Fixed assets	$ 111.6	$ 117.1
Intangible assets	466.8	509.7
Foreign currency items	23.0	9.5
Other	49.2	28.0
Total deferred tax liabilities	650.6	664.3
Total net deferred income taxes	$ (67.4)	$(129.9)

At December 31, 2022, net operating loss, tax credit carryovers, and capital loss carryovers are available to reduce future federal, state and foreign taxable earnings (in millions):

Expiration Period:	Net operating loss carryover	Tax credit carryover	Capital loss carryover
1-5 years	$ 27.9	$17.1	$1.3
6-10 years	40.8	53.1	–
11+ years	282.1	1.6	–
Indefinite	125.4	1.1	6.5
	476.2	72.9	7.8
Valuation allowances	$407.0	$40.0	$7.8

The remaining valuation allowances booked against deferred tax assets of $8.4 million relate primarily to accrued liabilities and intangible assets that management believes, more likely than not, will not be realized.

We generally intend to limit distributions from foreign subsidiaries to earnings previously taxed in the U.S., primarily as a result of the transition tax or tax on Global Intangible Low-Taxed Income ("GILTI"), as we would not be subject to further U.S. federal tax. In addition to the previously taxed earnings, we have intercompany notes available to repatriate. We have not provided deferred taxes on any other outside basis differences in our investments in other foreign subsidiaries as these other outside basis differences are indefinitely reinvested in the operations of our foreign entities. If we decide at a later date to repatriate these earnings to the U.S., we would be required to provide for the net tax effects on these amounts. We estimate that the total tax effect of a potential repatriation would not be significant under current enacted tax laws and regulations and at current currency exchange rates.

The following is a tabular reconciliation of the total amounts of unrecognized tax benefits (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
Balance at January 1	$558.6	$619.4	$ 741.8
Increases related to prior periods	25.0	11.5	75.3
Decreases related to prior periods	(78.2)	(12.7)	(158.3)
Increases related to current period	19.0	7.3	3.4
Decreases related to settlements with taxing authorities	(2.0)	(65.1)	(14.6)
Decreases related to lapse of statute of limitations	(1.4)	(1.8)	(28.2)
Balance at December 31	$521.0	$558.6	$ 619.4
Amounts impacting effective tax rate, if recognized balance at December 31	$360.1	$426.4	$ 473.9

We recognize accrued interest and penalties related to unrecognized tax benefits as income tax expense. During 2022, we accrued interest and penalties of $18.1 million, and as of December 31, 2022, had a recognized liability for interest and penalties of $134.5 million, which does not include any increase related to business combinations.

During 2021, we accrued interest and penalties of $8.9 million, and as of December 31, 2021 had a recognized liability for interest and penalties of $116.2 million, which does not include any increase related to business combinations. During 2020, we released interest and penalties of $1.7 million, and as of December 31, 2020, had a recognized liability for interest and penalties of $107.4 million, which does not include any increase related to business combinations.

We operate on a global basis and are subject to numerous and complex tax laws and regulations. Additionally, tax laws have and continue to undergo rapid changes in both application and interpretation by various countries, including initiatives led by the Organisation for Economic Cooperation and Development. Our income tax filings are subject to examinations by taxing authorities throughout the world. Income tax audits may require an extended period of time to reach resolution and may result in significant income tax adjustments when interpretation of tax laws or allocation of company profits is disputed. Although ultimate timing is uncertain, the net amount of tax liability for unrecognized tax benefits may change within the next twelve months due to changes in audit status, expiration of statutes of limitations, settlements of tax assessments and other events. Management's best estimate of such change is within the range of a $400 million decrease to a $20 million increase.

We are under continuous audit by the Internal Revenue Service ("IRS") and other taxing authorities. During the course of these audits, we receive proposed adjustments from taxing authorities that may be material. Therefore, there is a possibility that an adverse outcome in these audits could have a material effect on our results of operations and financial condition. Our U.S. federal income tax returns have been audited through 2015 and are currently under audit for years 2016-2019.

In October 2020, we reached agreement with the IRS for tax years 2006-2012 primarily related to the reallocation of profits between the U.S. and Puerto Rico.

The IRS has proposed adjustments for tax years 2010-2012, primarily related to the reallocation of profits between certain U.S. and foreign subsidiaries, which remain unsettled. We have disputed these adjustments and intend to continue to vigorously defend our positions as we pursue resolution through the administrative process with the IRS Independent Office of Appeals.

The IRS has proposed adjustments for tax years 2013-2015 related to transfer pricing involving our cost sharing agreement between the U.S. and Switzerland affiliated companies and the reallocation of profits between certain U.S. and foreign subsidiaries. This includes a proposed increase to our U.S. federal taxable income related to our cost sharing agreement, which would result in additional tax expense related to 2013 of approximately $370 million, subject to interest and penalties. We strongly believe that the position of

the IRS, with regard to this matter, is inconsistent with the applicable U.S. Treasury regulations governing our cost sharing agreement. We intend to vigorously contest the adjustment, and we will pursue all available administrative and, if necessary, judicial remedies. If we pursue judicial remedies in the U.S. Tax Court for years 2013-2015, a number of years will likely elapse before such matters are finally resolved. No payment of any amount related to this matter is required to be made, if at all, until all applicable proceedings have been completed.

A public referendum held in Switzerland passed the Federal Act on Tax Reform and AHV Financing ("TRAF"), effective January 1, 2020. The TRAF provides transitional relief measures for companies that are losing the tax benefit of a ruling, including a "step-up" for amortizable goodwill, equal to the amount of future tax benefit they would have received under their existing ruling, subject to certain limitations. This resulted in recording a deferred tax asset for future deductions of tax goodwill. In 2022, we reached final agreement with Swiss authorities for certain tax years, resulting in an increase of the TRAF deferred tax asset and a corresponding net $59 million tax benefit. We also recognized a net $22 million tax benefit associated with closing certain tax years.

State income tax returns are generally subject to examination for a period of 3 to 5 years after filing of the respective return. The state impact of any federal changes generally remains subject to examination by various states for a period of up to one year after formal notification to the states. We have various state income tax return positions in the process of examination, administrative appeals, or litigation.

In other major jurisdictions, open years are generally 2016 or later.

18. Capital Stock and Earnings per Share

We are authorized to issue 250.0 million shares of preferred stock, none of which were issued or outstanding as of December 31, 2022.

The numerator for both basic and diluted earnings per share is net earnings available to common stockholders. The denominator for basic earnings per share is the weighted average number of common shares outstanding during the period. The denominator for diluted earnings per share is weighted average shares outstanding adjusted for the effect of dilutive stock options and other equity awards. The following is a reconciliation of weighted average shares for the basic and diluted share computations (in millions):

	For the Years Ended December 31,		
	2022	2021	2020
Weighted average shares outstanding for basic net earnings per share	209.6	208.6	207.0
Effect of dilutive stock options and other equity awards	0.7	1.8	–
Weighted average shares outstanding for diluted net earnings per share	210.3	210.4	207.0

For the years ended December 31, 2022 and 2021, an average of 4.4 million options and 1.3 million options, respectively, to purchase shares of common stock were not included in the computation of diluted earnings per share as the exercise prices of these options were greater than the average market price of the common stock. Since we incurred a net loss in the year ended December 31, 2020, no dilutive stock options or other equity awards were included as diluted shares.

19. Segment Data

We design, manufacture and market orthopedic reconstructive products; sports medicine, biologics, extremities and trauma products; CMFT products; surgical products; and a suite of integrated digital and robotic technologies that leverage data, data analytics and artificial intelligence. Our chief operating decision maker ("CODM") allocates resources to achieve our operating profit goals through three operating segments. These operating segments, which also constitute our reportable segments, are Americas; EMEA; and Asia Pacific.

Our CODM evaluates performance based upon segment operating profit exclusive of operating expenses and income pertaining to certain inventory and manufacturing-related charges, intangible asset amortization, goodwill and intangible asset impairment, restructuring and other cost reduction initiatives, quality remediation, acquisition, integration, divestiture and related, litigation, certain European Union Medical Device Regulation expenses, certain research and development expenses, other charges and corporate functions (collectively referred to as "Corporate items"). Corporate functions include corporate legal, finance, information technology, human resources and other corporate departments as well as stock-based compensation and certain operations, distribution, quality assurance and regulatory expenses. Intercompany transactions have been eliminated from segment operating profit.

Our Americas operating segment is comprised principally of the U.S. and includes other North, Central and South American markets. This segment also includes research, development engineering, medical education, and brand management for our product category headquarter locations. Our EMEA operating segment is comprised principally of Europe and includes the Middle East and African markets. Our Asia Pacific operating segment is comprised principally of Japan, China and Australia and includes other Asian and Pacific markets. The EMEA and Asia Pacific operating segments include the commercial operations as well as regional headquarter expenses to operate in those markets. Since the Americas segment includes additional costs related to centralized product category headquarter expenses, profitability metrics in this operating segment are not comparable to the EMEA and Asia Pacific operating segments.

Our CODM does not review asset information by operating segment. Instead, our CODM reviews cash flow and other financial ratios by operating segment.

Net sales and other information by segment are as follows (in millions):

	Net Sales			Operating Profit (Loss)			Depreciation and Amortization		
	Year Ended December 31,			Year Ended December 31,			Year Ended December 31,		
	2022	2021	2020	2022	2021	2020	2022	2021	2020
Americas	$4,295.5	$4,102.1	$3,699.5	$ 1,811.9	$ 1,709.3	$ 1,528.2	$142.1	$143.1	$135.6
EMEA	1,456.6	1,477.2	1,237.3	380.8	380.3	303.0	64.4	71.4	73.9
Asia Pacific	1,187.8	1,248.0	1,190.7	407.0	401.3	395.4	63.5	66.7	63.0
Total	$6,939.9	$6,827.3	$6,127.5						
Corporate items				(1,083.8)	(1,084.8)	(1,128.4)	129.6	127.0	113.8
Intangible asset amortization				(526.8)	(529.5)	(512.1)	526.8	529.5	512.1
Goodwill and intangible asset impairment				(292.8)	(16.3)	(503.0)	–	–	–
Total				$ 696.3	$ 860.3	$ 83.1	$926.4	$937.7	$898.4

We conduct business in the following countries that hold 10 percent or more of our total consolidated Property, plant and equipment, net (in millions):

	As of December 31,	
	2022	2021
United States	$1,101.8	$1,084.2
Other countries	770.7	752.4
Property, plant and equipment, net	$1,872.5	$1,836.6

U.S. sales were $4,012.4 million, $3,853.9 million, and $3,507.7 million for the years ended December 31, 2022, 2021 and 2020, respectively. Sales within any other individual country were less than 10 percent of our consolidated sales in each of those years. Sales are attributable to a country based upon the customer's country of domicile.

20. Leases

We own most of our manufacturing facilities, but lease various office space, vehicles and other less significant assets throughout the world. Our contracts contain a lease if they convey a right to control the use of an identified asset, either explicitly or implicitly, in exchange for consideration. We have elected not to recognize a right-of-use asset nor a lease liability for leases with an initial term of twelve months or less. Additionally, we have elected not to separate non-lease components from the leased components in the valuation of our right-of-use asset and lease liability for all asset classes. Our lease contracts are a necessary part of our business, but we do not believe they are significant to our overall operations. We do not have any significant finance leases. Additionally, we do not have significant leases: where we are considered a lessor; where we sublease our assets; with an initial term of twelve months or less; with related parties; with residual value guarantees; that impose restrictions or covenants on us; or that have not yet commenced, but create significant rights and obligations against us.

Our real estate leases generally have terms of between 5 to 10 years and contain lease extension options that can vary from month-to-month extensions to up to 5 year extensions. We include extension options in our lease term if we are reasonably certain to exercise that option. In determining whether an extension is reasonably certain, we consider the uniqueness of the property for our needs, the availability of

similar properties, whether the extension period payments remain the same or may change due to market rates or fixed price increases in the contract, and other economic factors. Our vehicle leases generally have terms of between 3 to 5 years and contain lease extension options on a month-to-month basis. Our vehicle leases are generally not reasonably certain to be extended.

We are required to discount our lease liabilities to present value using the rate implicit in the lease, or our incremental borrowing rate for a similar term as the lease term if the implicit rate is not readily available. We generally do not have adequate information to know the implicit rate in a lease and therefore use our incremental borrowing rate. The incremental borrowing rate must be on a collateralized basis, but our debt arrangements are unsecured. We have determined our incremental borrowing rate by using our credit rating to estimate our unsecured borrowing rate and applying reasonable assumptions to reduce the unsecured rate for a risk adjustment effect from collateral.

Information on our leases is as follows ($ in millions):

	For the Years Ended December 31,		
	2022	2021	2020
Lease cost	$62.4	$71.1	$68.8
Cash paid for leases recognized in operating cash flows	$65.2	$70.5	$66.6
Right-of-use assets obtained in exchange for new lease liabilities	$72.0	$88.8	$74.2

	As of December 31,	
	2022	2021
Right-of-use assets recognized in Other assets	$ 196.4	$ 219.4
Lease liabilities recognized in Other current liabilities	$ 53.0	$ 56.7
Lease liabilities recognized in Other long-term liabilities	$ 167.3	$ 174.9
Weighted-average remaining lease term	5.9 years	6.1 years
Weighted-average discount rate	2.1%	1.8%

Our variable lease costs are not significant.

Our future minimum lease payments as of December 31, 2022 were (in millions):

For the Years Ending December 31,	
2023	$ 56.8
2024	46.1
2025	35.5
2026	28.0
2027	22.5
Thereafter	46.0
Total	234.9
Less imputed interest	14.6
Total	$220.3

21. Commitments and Contingencies

We are involved in various legal proceedings, including product liability, intellectual property, stockholder matters, tax disputes, commercial, employment, governmental proceedings and investigations, and other legal matters that arise in the normal course of our business, including those described below. On a quarterly and annual basis, we review relevant information with respect to loss contingencies and update our accruals, disclosures and estimates of reasonably possible losses or ranges of loss based on such reviews. We establish liabilities for loss contingencies on an undiscounted basis when it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated. If the reasonable estimate of a known or 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. For matters where a loss is believed to be reasonably possible, but not probable, or if no reasonable estimate of known or probable loss is available, no accrual has been made.

When determining the estimated loss or range of loss, significant judgment is required. Estimates of probable losses resulting from litigation and other contingences are inherently difficult to predict, particularly when the matters are in early procedural stages with incomplete facts or legal discovery, involve unsubstantiated or indeterminate claims for damages, and/or potentially involve penalties, fines or punitive damages. In addition to the matters described herein, we remain subject to the risk of future governmental, regulatory and legal actions. Governmental and regulatory actions may lead to product recalls, injunctions and other restrictions on our operations and monetary sanctions, which may include substantial civil or criminal penalties. Actions involving intellectual property could result in a loss of patent protection or the ability to market products, which could lead to significant sales reductions or cost increases, or otherwise materially affect the results of our operations.

We recognize litigation-related charges and gains in Selling, general and administrative expense on our consolidated statement of earnings. During the years ended December 31, 2022, 2021, and 2020, we recognized $65.9 million, $201.0 million and $166.0 million, respectively, of net litigation-related charges. At December 31, 2022 and 2021, accrued litigation liabilities were $349.2 million and $409.3 million, respectively. These litigation-related charges and accrued liabilities reflect all of our litigation-related contingencies and not just the matters discussed below. The ultimate cost of litigation could be materially different than the amount of the current estimates and accruals and could have a material adverse impact on our financial condition and results of operations.

Litigation

Durom Cup-related claims: On July 22, 2008, we temporarily suspended marketing and distribution of the Durom Cup in the U.S. Subsequently, a number of product liability lawsuits were filed against us in various U.S. and foreign jurisdictions. The plaintiffs seek damages for personal injury, and they generally allege that the Durom Cup contains defects that result in complications and revision of the device. We have settled the majority of these claims in the U.S., but other lawsuits are pending in various foreign jurisdictions and additional claims may be asserted in the future. The majority of claims outside the U.S. are pending in Germany, Netherlands and Italy.

We rely on significant estimates in determining the provisions for Durom Cup-related claims, including our estimate of the number of claims that we will receive and the average amount we will pay per claim. The actual number of claims and the actual amount we pay per claim may differ from our estimates. For various reasons, we cannot reasonably estimate the possible loss or range of loss that may result from Durom Cup-related claims in excess of the losses we have accrued. Although we are vigorously defending these lawsuits, their ultimate resolution is uncertain. We accrued a litigation-related charge in this matter based on an estimate of the reasonably possible loss, as discussed above.

Zimmer M/L Taper, M/L Taper with Kinectiv Technology, and Versys Femoral Head-related claims ("Metal Reaction" claims): We are a defendant in a number of product liability lawsuits relating to our M/L Taper and M/L Taper with Kinectiv Technology hip stems, and Versys Femoral Head implants. The plaintiffs seek damages for personal injury, alleging that defects in the products lead to corrosion at the head/stem junction resulting in, among other things, pain, inflammation and revision surgery.

The majority of the cases are consolidated in an MDL that was created on October 3, 2018 in the U.S. District Court for the Southern District of New York (*In Re: Zimmer M/L Taper Hip Prosthesis or M/L Taper Hip Prosthesis with Kinectiv Technology and Versys Femoral Head Products Liability Litigation*). Other related cases are pending in various state and federal courts, and additional lawsuits are likely to be filed. Although we are vigorously defending these lawsuits, their ultimate resolution is uncertain. We accrued a litigation-related charge in this matter based on an estimate of the reasonably possible loss, as discussed above.

Biomet metal-on-metal hip implant claims: Biomet is a defendant in a number of product liability lawsuits relating to metal-on-metal hip implants, most of which involve the M2a-Magnum hip system. Cases were originally consolidated in an MDL in the U.S. District Court for the Northern District of Indiana *(In Re: Biomet M2a Magnum Hip Implant Product Liability Litigation)*, but the majority of the claims in the U.S. have been settled. Trials may still occur in the future, and although each case will be tried on its particular facts, a verdict and subsequent final judgment for the plaintiff in one or more of these cases could have a substantial impact on our potential liability. Lawsuits are pending in various foreign jurisdictions and additional claims are expected to be asserted. We continue to refine our estimates of the potential liability to resolve the remaining claims and lawsuits. Although we are vigorously defending these lawsuits, their ultimate resolution is uncertain. We accrued a litigation-related charge in this matter based on an estimate of the reasonably possible loss, as discussed above.

Regulatory Matters, Government Investigations and Other Matters

FDA warning letter: In August 2018, we received a warning letter from the FDA related to observed non-conformities with current good manufacturing practice requirements of the Quality System Regulation (21 CFR Part 820) ("QSR") at our legacy Biomet manufacturing facility in Warsaw, Indiana (this facility is sometimes referred to in this report as the "Warsaw North Campus"). We have provided detailed responses to the FDA as to our corrective actions and will continue to work expeditiously to address the issues identified by the FDA during inspections in Warsaw. As of December 31, 2022, the Warsaw warning letter remained pending. Until the violations cited in the pending warning letter are corrected, we may be subject to additional regulatory action by the FDA, as described more fully below. Additionally, requests for Certificates to Foreign Governments may not be granted and premarket approval applications for Class III devices to which the QSR deviations are reasonably related will not be approved until the violations have been corrected. In addition to responding to the warning letter described above, we are in the process of addressing various FDA Form 483 inspectional observations at certain of our manufacturing facilities, including observations issued by the FDA following an inspection of the Warsaw North Campus in January 2020, which inspection the FDA has classified as Voluntary Action Indicated ("VAI"). The ultimate outcome of these matters is presently uncertain. Among other available regulatory actions, the FDA may impose operating restrictions, including a ceasing of operations, at one or more facilities, enjoining and restraining certain violations of applicable law pertaining to products, seizure of products and assessing civil or criminal penalties against our officers, employees or us. The FDA could also issue a corporate warning letter or a recidivist warning letter or negotiate the entry of a consent decree of permanent injunction with us. The FDA may also recommend prosecution by the U.S. Department of Justice. Any adverse regulatory action, depending on its magnitude, may restrict us from effectively manufacturing, marketing and selling our products and could have a material adverse effect on our business, financial condition and results of operations.

Other Contingencies

Indemnifications: As part of the ZimVie spinoff, we agreed to indemnify ZimVie for certain legal and tax matters. Our responsibilities for legal indemnification are for specifically identified matters and are subject to a maximum amount, which is not significant for us. We have made an accrual based on an estimate of the probable loss for any legal indemnification. For tax matters, our indemnification is related to tax periods prior to the spinoff and any tax liabilities that may be incurred as part of the spinoff. We have maintained accruals based upon an estimate of any possible tax indemnifications.

Contractual obligations: We have entered into development, distribution and other contractual arrangements that may result in future payments dependent upon various events such as the achievement of certain product R&D milestones, sales milestones, or, at our discretion, maintenance of exclusive rights to distribute a product. Since there is uncertainty on the timing or whether such payments will have to be made, they have not been recognized on our consolidated balance sheets. These estimated payments could range from $0 to approximately $415 million.

22. Subsequent Events

On February 14, 2023, we completed our acquisition of 100 percent of Embody, Inc. ("Embody") by issuing 1.1 million shares of our common stock and $19.6 million of cash for initial consideration valued at $154.6 million. The acquisition also includes up to $120.0 million in fair value of our common shares and cash that is subject to achieving future regulatory and commercial milestones over a three-year period. The acquisition expands our product portfolio for the sports medicine market. This acquisition is not expected to have a significant effect on our results of operations or financial position.

To minimize the dilutive effect of issuing our common stock for this acquisition, we entered into a prepaid forward purchase agreement with a financial institution to repurchase 1.1 million shares of our common stock. In order to fund this prepaid forward purchase agreement and working capital needs, we borrowed approximately $145 million under our 2022 Five-Year Revolving Facility.

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

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to provide reasonable assurance 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 Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures. Because of inherent limitations, disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of disclosure controls and procedures are met.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of December 31, 2022, the end of the period covered by this report, our disclosure controls and procedures were effective at a reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

The management of Zimmer Biomet Holdings, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act, as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers, or persons performing similar functions, and effected by the Company's board of directors, management and other personnel, 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 and 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 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
- 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.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2022. In making this assessment, the Company's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework* (2013).

Based on their assessment, management has concluded that, as of December 31, 2022, the Company's internal control over financial reporting is effective based on those criteria.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, audited the effectiveness of our internal control over financial reporting as of December 31, 2022 and issued an unqualified opinion thereon as stated in their report, which appears under Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

During the fourth quarter of 2022, the Audit Committee of our Board of Directors approved the engagement of PricewaterhouseCoopers LLP, our independent registered public accounting firm, to perform certain non-audit services. This disclosure is made pursuant to Section 10A(i)(2) of the Exchange Act.

Disclosure Pursuant to Section 13(r) of the Exchange Act

Section 13(r) of the Exchange Act requires an issuer to disclose in its annual or quarterly reports if it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to parties subject to sanctions administered by OFAC within the United States Department of the Treasury, whether or not such activities are prohibited or sanctionable under United States law. On March 2, 2021, the United States government designated the Russian Federal Security Service (the "FSB") as a blocked party under Executive Order 13382. On the same day, OFAC updated General License No. 1B (the "OFAC General License"), which generally authorizes certain licensing, permitting, certification, notification and related transactions with the FSB as may be required pursuant to Russian encryption product import controls for the importation, distribution or use of certain information technology products and radio frequency technology products in the Russian Federation.

As required under Russian law and as permitted under the OFAC General License, one of our subsidiaries in Russia periodically files notifications with or applies for import licenses and permits from the FSB on our behalf in connection with the importation of our products into Russia. These notification and licensing activities are free of charge, and none of our gross revenue or net profits are attributable to such activities. We expect to continue to file notifications with and apply for import licenses and permits from the FSB to qualify our products for importation and distribution in the Russian Federation to the extent required under Russian law, but only so long as such notification and licensing activities are authorized by the OFAC General License, any successor general license or other authorization issued by OFAC.

During the fourth quarter of 2022, we filed one notification with the FSB as described above.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information required by this item is incorporated by reference from our definitive Proxy Statement for the annual meeting of stockholders to be held on May 12, 2023 (the "2023 Proxy Statement").

Information regarding our executive officers is included in Part I, Item 1 of this Annual Report on Form 10-K under the caption "Information About our Executive Officers."

We have adopted the Zimmer Biomet Code of Ethics for Chief Executive Officer and Senior Financial Officers (the "finance code of ethics"), a code of ethics that applies to our Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer and Corporate Controller, and other finance organization senior employees. The finance code of ethics is publicly available in the Investor Relations section of our website, which may be accessed from our homepage at www.zimmerbiomet.com or directly at https://investor.zimmerbiomet.com. If we make any substantive amendments to the finance code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to our Chief Executive Officer, Chief Financial Officer, or Chief Accounting Officer and Corporate Controller, we will disclose the nature of that amendment in the Investor Relations section of our website.

Item 11. Executive Compensation

Information required by this item is incorporated by reference from our 2023 Proxy Statement.

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

Information required by this item is incorporated by reference from our 2023 Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence

Information required by this item is incorporated by reference from our 2023 Proxy Statement.

Item 14. Principal Accountant Fees and Services

Information required by this item is incorporated by reference from our 2023 Proxy Statement.

Item 15. Exhibits and Financial Statement Schedules

(a) (1) Financial Statements: See the Consolidated Financial Statements under Item 8 of this Report.

(2) Financial Statement Schedule

Schedule II. Valuation and Qualifying Accounts (in millions):

Description	Balance at Beginning of Period	Additions Charged (Credited) to Expense	Deductions / Other Additions to Reserve	Effects of Foreign Currency	Balance at End of Period
Allowance for Doubtful Accounts:					
Year Ended December 31, 2020	$ 46.3	$19.1	$ (8.3)[1]	$ 1.5	$ 58.6
Year Ended December 31, 2021	58.6	12.4	(9.0)	(1.9)	60.1
Year Ended December 31, 2022	60.1	22.5	(7.6)	3.4	78.4
Deferred Tax Asset Valuation Allowances:					
Year Ended December 31, 2020	$529.6	$(2.0)	$ (3.1)[2]	$ 2.8	$527.3
Year Ended December 31, 2021	527.3	(2.6)	(61.5)[2]	(3.1)	460.1
Year Ended December 31, 2022	460.1	3.0	2.0[2]	(1.9)	463.2

[1] Includes the $2.1 cumulative-effect adjustment related to the adoption of ASU 2016-13, Financial Instruments – Credit Losses (Topic 326).

[2] Primarily relate to amounts generated by tax rate changes or current year activity which have offsetting changes to the associated attribute and therefore there is no resulting impact on tax expense in the consolidated financial statements.

Other financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or the notes thereto.

(3) Exhibits: See Index to Exhibits below

INDEX TO EXHIBITS

Exhibit No	Description
2.1	Separation and Distribution Agreement, dated as of March 1, 2022, by and between Zimmer Biomet Holdings, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
3.1	Restated Certificate of Incorporation of Zimmer Biomet Holdings, Inc., dated May 17, 2021 (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
3.2	Restated Bylaws of Zimmer Biomet Holdings, Inc., effective December 14, 2022
4.1	Description of Securities Registered under Section 12 of the Securities Exchange Act of 1934
4.2	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2019)
4.3	Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. (now known as Zimmer Biomet Holdings, Inc.) and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed December 13, 2016)
4.4	First Supplemental Indenture to the Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed November 17, 2009)
4.5	Form of 5.750% Note due 2039 (incorporated by reference to Exhibit 4.4 above)
4.6	Second Supplemental Indenture dated as of November 10, 2011, to the Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed November 10, 2011)
4.7	Third Supplemental Indenture, dated as of March 19, 2015, to the Indenture dated as of November 17, 2009 between Zimmer Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed March 19, 2015)
4.8	Form of 3.550% Notes due 2025 (incorporated by reference to Exhibit 4.7 above)
4.9	Form of 4.250% Notes due 2035 (incorporated by reference to Exhibit 4.7 above)
4.10	Form of 4.450% Notes due 2045 (incorporated by reference to Exhibit 4.7 above)
4.11	Fourth Supplemental Indenture, dated as of December 13, 2016, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed December 13, 2016)
4.12	Form of 2.425% Notes due 2026 (incorporated by reference to Exhibit 4.11 above)
4.13	Agency Agreement, dated as of December 13, 2016, by and among Zimmer Biomet Holdings, Inc., as issuer, Elavon Financial Services DAC, UK Branch, as paying agent, Elavon Financial Services DAC, as registrar and transfer agent, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed December 13, 2016)
4.14	Amendment No. 1, dated as of January 4, 2017, to the Agency Agreement dated as of December 13, 2016, by and among Zimmer Biomet Holdings, Inc., as issuer, Elavon Financial Services DAC, UK Branch, as paying agent, Elavon Financial Services DAC, as original registrar and original transfer agent, U.S. Bank National Association, as successor registrar and successor transfer agent, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.4 to the Registrant's Registration Statement on Form 8-A filed January 4, 2017)
4.15	Fifth Supplemental Indenture, dated as of March 19, 2018, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed March 19, 2018)
4.16	Form of 3.700% Notes due 2023 (incorporated by reference to Exhibit 4.15 above)
4.17	Sixth Supplemental Indenture, dated as of November 15, 2019, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed November 15, 2019)
4.18	Form of 1.164% Notes due 2027 (incorporated by reference to Exhibit 4.17 above)

Exhibit No	Description
4.19	Agency Agreement, dated as of November 15, 2019, by and between Zimmer Biomet Holdings, Inc., as issuer, Elavon Financial Services DAC, UK Branch, as paying agent, U.S. Bank National Association, as transfer agent and registrar, and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed on November 15, 2019)
4.20	Seventh Supplemental Indenture, dated as of March 20, 2020, between Zimmer Biomet Holdings, Inc. and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed March 20, 2020)
4.21	Form of 3.050% Notes due 2026 (incorporated by reference to Exhibit 4.20 above)
4.22	Form of 3.550% Notes due 2030 (incorporated by reference to Exhibit 4.20 above)
4.23	Eighth Supplemental Indenture, dated as of November 24, 2021, between Zimmer Biomet Holdings, Inc. and Computershare Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed November 24, 2021)
4.24	Form of 1.450% Notes due 2024 (incorporated by reference to Exhibit 4.23 above)
4.25	Form of 2.600% Notes due 2031 (incorporated by reference to Exhibit 4.23 above)
10.1*	Zimmer Biomet Holdings, Inc. Executive Performance Incentive Plan, as amended May 7, 2013 and further amended as of June 24, 2015 (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed November 9, 2015)
10.2*	Amendment to Zimmer Biomet Holdings, Inc. Executive Performance Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed January 7, 2016)
10.3*	Amendment to Zimmer Biomet Holdings, Inc. Executive Performance Incentive Plan, Effective May 7, 2020 (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed May 11, 2020)
10.4*	Amended and Restated Zimmer Biomet Deferred Compensation Plan, effective as of January 1, 2022 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed May 5, 2022)
10.5*	Restated Zimmer Biomet Holdings, Inc. Long Term Disability Income Plan for Highly Compensated Employees (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed January 7, 2016)
10.6*	Restated Benefit Equalization Plan of Zimmer Holdings, Inc. and Its Subsidiary or Affiliated Corporations Participating in the Zimmer Holdings, Inc. Savings and Investment Program (incorporated by reference to Exhibit 10.16 to the Registrant's Annual Report on Form 10-K filed February 27, 2009)
10.7*	First Amendment to the Restated Benefit Equalization Plan of Zimmer Holdings, Inc. and its Subsidiary or Affiliated Corporations Participating in the Zimmer Holdings, Inc. Savings and Investment Program (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed January 7, 2016)
10.8*	Offer Letter, dated as of December 18, 2017, by and between Zimmer Biomet Holdings, Inc. and Bryan C. Hanson (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.9*	Change in Control Severance Agreement with Bryan C. Hanson (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.10*	Chief Executive Officer Confidentiality, Intellectual Property, Non-Competition and Non-Solicitation Agreement with Bryan C. Hanson (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed December 21, 2017)
10.11*	Offer Letter by and between Zimmer Biomet Holdings, Inc. and Ivan Tornos dated as of October 11, 2018 (incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.12*	Form of Change in Control Severance Agreement with Rachel Ellingson, Paul Stellato, Ivan Tornos, Suketu Upadhyay and Lori Winkler (incorporated by reference to Exhibit 10.11 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)

Exhibit No	Description
10.13*	Form of Confidentiality, Non-Competition and Non-Solicitation Agreement with Ivan Tornos, Suketu Upadhyay, Rachel Ellingson and Lori Winkler (incorporated by reference to Exhibit 10.12 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.14*	Swiss Employment Agreement by and between Zimmer GmbH and Wilfred van Zuilen dated as of May 5, 2021 (incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.15*	Offer Letter by and between Zimmer Biomet Holdings, Inc. and Wilfred van Zuilen dated as of May 5, 2021 (incorporated by reference to Exhibit 10.5 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.16*	Change in Control Severance Agreement by and between Zimmer GmbH and Wilfred van Zuilen (incorporated by reference to Exhibit 10.6 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.17*	Confidentiality, Non-Competition and Non-Solicitation Agreement by and between Zimmer GmbH and Wilfred van Zuilen (incorporated by reference to Exhibit 10.7 to the Quarterly Report on Form 10-Q filed August 3, 2021)
10.18*	Offer Letter between Zimmer Biomet Holdings, Inc. and Suketu Upadhyay dated June 13, 2019 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 19, 2019)
10.19*	Letter of Appointment by and between Zimmer Asia (HK) Limited and Sang Yi dated June 15, 2020 (incorporated by reference to Exhibit 10.7 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2020)
10.20*	Change in Control Severance Agreement with Sang Yi dated June 15, 2020 (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2020)
10.21*	Confidentiality, Non-Competition and Non-Solicitation Agreement with Sang Yi dated June 15, 2020 (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2020)
10.22*	Form of Change in Control Severance Agreement with Chad F. Phipps (incorporated by reference to Exhibit 10.13 to the Registrant's Annual Report on Form 10-K filed February 27, 2009)
10.23*	Form of Confidentiality, Non-Competition and Non-Solicitation Agreement with Chad F. Phipps (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed June 26, 2015)
10.24*	Offer Letter by and between Zimmer Biomet Holdings, Inc. and Paul Stellato dated as of April 5, 2022 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed May 16, 2022)
10.25*	Form of Confidentiality, Non-Competition and Non-Solicitation Agreement with Paul Stellato (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed May 16, 2022)
10.26*	Restated Zimmer Biomet Holdings, Inc. Executive Severance Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed August 6, 2018)
10.27*	Amendment to Restated Zimmer Biomet Holdings, Inc. Executive Severance Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed May 5, 2022)
10.28*	Zimmer Biomet Holdings, Inc. Amended Stock Plan for Non-Employee Directors, as amended May 14, 2021 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
10.29*	Form of Restricted Stock Unit Award Letter under the Zimmer Biomet Holdings, Inc. Stock Plan for Non-Employee Directors (incorporated by reference to Exhibit 10.23 to the Registrant's Annual Report on Form 10-K filed February 29, 2016)
10.30*	Zimmer Biomet Holdings, Inc. Deferred Compensation Plan for Non-Employee Directors, as amended May 14, 2021 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
10.31*	Form of Indemnification Agreement with Non-Employee Directors and Officers (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed July 31, 2008)

Exhibit No	Description
10.32*	Zimmer Biomet Holdings, Inc. Executive Physical Sub Plan (incorporated by reference to Exhibit 10.47 to the Registrant's Annual Report on Form 10-K filed February 26, 2019)
10.33*	Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (As Amended on May 14, 2021) (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed May 20, 2021)
10.34*	Form of Nonqualified Stock Option Award Agreement (four-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.35*	Form of Nonqualified Stock Option Award Agreement (two-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to the Registrant's Annual Report on Form 10-K filed February 27, 2018)
10.36*	Form of Nonqualified Stock Option Award Agreement (three-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.34 to the Registrant's Annual Report on Form 10-K filed February 25, 2022)
10.37*	Form of Performance-Based Restricted Stock Unit Award Agreement (2020) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.38*	Form of Performance-Based Restricted Stock Unit Award Agreement (2022) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K filed February 25, 2022)
10.39*	Form of Restricted Stock Unit Award Agreement (four-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K filed February 21, 2020)
10.40*	Form of Restricted Stock Unit Award Agreement (three-year vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.40 to the Registrant's Annual Report on Form 10-K filed February 25, 2022)
10.41*	Form of Restricted Stock Unit Award Agreement (two-year cliff vesting) under the Zimmer Biomet Holdings, Inc. 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed August 6, 2018)
10.42*	Aircraft Time Sharing Agreement by and between Zimmer, Inc. and Bryan C. Hanson (incorporated by reference to Exhibit 10.40 to the Registrant's Annual Report on Form 10-K filed February 27, 2018)
10.43*	First Amendment to Aircraft Time Sharing Agreement by and between Zimmer, Inc. and Bryan C. Hanson (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed August 5, 2019)
10.44	Tax Matters Agreement, dated as of March 1, 2022, by and between Zimmer Biomet Holdings, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
10.45	Employee Matters Agreement, dated as of March 1, 2022, by and between Zimmer Biomet Holdings, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
10.46	Transition Services Agreement, dated as of March 1, 2022, by and between Zimmer Biomet Holdings, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
10.47	Intellectual Property Matters Agreement, dated as of March 1, 2022, by and between Zimmer Biomet Holdings, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
10.48	Stockholder and Registration Rights Agreement, dated as of March 1, 2022, by and between Zimmer Biomet Holdings, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
10.49	Transition Manufacturing and Supply Agreement, dated as of March 1, 2022, by and between Zimmer, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.6 to the Registrant's Current Report on Form 8-K filed March 1, 2022)

Exhibit No	Description
10.50	Reverse Transition Manufacturing and Supply Agreement, dated as of March 1, 2022, by and between Zimmer, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.7 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
10.51	Transitional Trademark License Agreement, dated as of March 1, 2022, by and between Zimmer Biomet Holdings, Inc. and ZimVie Inc. (incorporated by reference to Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed March 1, 2022)
10.52	Five-Year Revolving Credit Agreement, dated as of August 19, 2022, among Zimmer Biomet Holdings, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed August 22, 2022)
10.53	364-Day Revolving Credit Agreement, dated as of August 19, 2022, among Zimmer Biomet Holdings, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed August 22, 2022)
21	List of Subsidiaries of Zimmer Biomet Holdings, Inc.
23	Consent of PricewaterhouseCoopers LLP
31.1	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the Chief Executive Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 of the Chief Financial Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Management contract or compensatory plan or arrangement.

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.

ZIMMER BIOMET HOLDINGS, INC.

By: /s/ Bryan Hanson
Bryan Hanson
Chairman, President and Chief Executive Officer

Dated: February 24, 2023

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

SIGNATURE	TITLE	DATE
/s/ Bryan Hanson Bryan Hanson	Chairman, President and Chief Executive Officer (Principal Executive Officer)	February 24, 2023
/s/ Suketu Upadhyay Suketu Upadhyay	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 24, 2023
/s/ Paul Stellato Paul Stellato	Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)	February 24, 2023
/s/ Christopher Begley Christopher Begley	Director	February 24, 2023
/s/ Betsy Bernard Betsy Bernard	Director	February 24, 2023
/s/ Michael Farrell Michael Farrell	Director	February 24, 2023
/s/ Robert Hagemann Robert Hagemann	Director	February 24, 2023
/s/ Arthur Higgins Arthur Higgins	Director	February 24, 2023
/s/ Maria Teresa Hilado Maria Teresa Hilado	Director	February 24, 2023
/s/ Syed Jafry Syed Jafry	Director	February 24, 2023
/s/ Sreelakshmi Kolli Sreelakshmi Kolli	Director	February 24, 2023
/s/ Michael Michelson Michael Michelson	Director	February 24, 2023

ZIMMER BIOMET HOLDINGS, INC.
RECONCILIATION OF OPERATING PROFIT AND OPERATING PROFIT MARGIN TO ADJUSTED OPERATING PROFIT AND ADJUSTED OPERATING PROFIT MARGIN FOR THE YEARS ENDED DECEMBER 31, 2022, 2021, and 2020
(in millions, unaudited*)

	For the Years Ended December 31,		
	2022	2021	2020
Operating Profit	$ 696.3	$ 860.3	$ 83.1
Inventory and manufacturing-related charges(1)	18.1	5.1	55.0
Intangible asset amortization(1)	526.8	529.5	512.1
Goodwill and intangible asset impairment(1)	292.8	16.3	503.0
Restructuring and other cost reduction initiatives(1)	191.6	125.7	107.2
Quality remediation(1)	33.8	52.8	51.1
Acquisition, integration, divestiture and related(1)	11.4	3.1	11.4
Litigation(1)	61.8	192.9	159.8
European Union Medical Device Regulation(1)	53.1	40.8	22.5
Other charges(1)	8.1	10.8	25.8
Adjusted Operating Profit	$ 1,893.8	$ 1,837.3	$ 1,531.0

	For the Years Ended December 31,		
	2022	2021	2020
Operating Profit Margin	10.0%	12.6%	1.4%
Inventory and manufacturing-related charges(1)	0.3	0.1	0.9
Intangible asset amortization(1)	7.6	7.8	8.4
Goodwill and intangible asset impairment(1)	4.2	0.2	8.2
Restructuring and other cost reduction initiatives(1)	2.8	1.8	1.7
Quality remediation(1)	0.5	0.8	0.8
Acquisition, integration, divestiture and related(1)	0.1	–	0.2
Litigation(1)	0.9	2.8	2.6
European Union Medical Device Regulation(1)	0.8	0.6	0.4
Other charges(1)	0.1	0.2	0.4
Adjusted Operating Profit Margin	27.3%	26.9%	25.0%

* Percentages presented on a continuing operations basis

(1) Please refer to page number 85-86 of this annual report for detailed explanations of each adjustment.

ZIMMER BIOMET HOLDINGS, INC.
RECONCILIATION OF DILUTED EPS TO ADJUSTED DILUTED EPS
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021, and 2020
(unaudited*)

	For the Years Ended December 31,		
	2022	2021	2020
Diluted Earnings (Loss) Per Share	$ 1.38	$ 2.12	$(0.05)
Inventory and manufacturing-related charges, net of tax[1]	0.04	(0.07)	0.09
Intangible asset amortization, net of tax[2]	2.00	2.04	2.02
Goodwill and intangible asset impairment, net of tax[3]	1.39	0.07	2.41
Restructuring and other cost reduction initiatives, net of tax[4]	0.69	0.49	0.39
Quality remediation, net of tax[5]	0.12	0.19	0.19
Acquisition, integration, divestiture and related, net of tax[6]	0.03	0.01	0.03
Litigation, net of tax[7]	0.22	0.80	0.59
European Union Medical Device Regulation, net of tax[8]	0.20	0.15	0.09
Loss on early extinguishment of debt, net of tax[9]	–	0.64	–
Other charges, net of tax[10]	0.65	0.03	0.03
Other certain tax adjustments[11]	0.17	0.09	(0.41)
Effect of dilutive shares assuming net earnings[12]	–	–	(0.03)
Adjusted Diluted Earnings Per Share	$ 6.89	$ 6.56	$ 5.35

* Amounts presented on a continuing operations basis, net of the tax effects on the specified items, including the deferred tax rate changes on intangible assets. The tax effect for the U.S. jurisdiction is calculated based on an effective rate considering federal and state taxes, as well as permanent items. For jurisdictions outside the U.S., the tax effect is calculated based upon the statutory rates where the items were incurred.

(1) Inventory and manufacturing-related charges include excess and obsolete inventory charges on certain product lines we intend to discontinue, incremental cost of products sold from stepping up inventory to its fair value from its manufactured cost in business combination accounting and other inventory and manufacturing-related charges or gains.

(2) We exclude intangible asset amortization as well as deferred tax rate changes on our intangible assets from our non-GAAP financial measures because we internally assess our performance against our peers without this amortization. Due to various levels of acquisitions among our peers, intangible asset amortization can vary significantly from company to company.

(3) In the fourth quarter of 2022 and the first quarter of 2020, we recognized goodwill impairment charges of $289.8 million and $470.0 million, respectively, related to our EMEA reporting unit. In the second quarters of 2022, 2021 and 2020, we recognized $3.0 million, $16.3 million and $33.0 million, respectively, of in-process research and development ("IPR&D") intangible asset impairments on certain IPR&D projects.

(4) In December 2019 and 2021, we initiated global restructuring programs that included a reorganization of key businesses and an overall effort to reduce costs in order to accelerate decision-making, focus the organization on priorities to drive growth and to prepare for the spinoff of ZimVie. Restructuring and other cost reduction initiatives also include other cost reduction and optimization initiatives that have the goal of reducing costs across the organization. The costs include employee termination benefits; contract terminations for facilities and sales agents; and other charges, such as retention period salaries and benefits and relocation costs.

(5) We are addressing inspectional observations on Form 483 and a Warning Letter issued by the U.S. Food and Drug Administration ("FDA") following its previous inspections of our Warsaw North Campus facility, among other matters. This quality remediation has required us to devote significant financial resources. The majority of the expenses are related to consultants who are helping us to update previous documents and redesign certain processes.

(6) The acquisition, integration, divestiture and related gains and expenses we have excluded from our non-GAAP financial measures resulted from various acquisitions, post-separation costs we've incurred related to ZimVie and gains related to a transition services agreement for services we provide to ZimVie and a transition manufacturing and supply agreement for products we supply to ZimVie for a limited period.

(7) We are involved in patent litigation, product liability litigation, commercial litigation and other various litigation matters. We review litigation matters from both a qualitative and quantitative perspective to determine if excluding the losses or gains will provide our investors with useful incremental information. Litigation matters can vary in their characteristics, frequency and significance to our operating results. The litigation charges and gains excluded from our non-GAAP financial measures in the periods presented relate to product liability matters where we have received numerous claims on specific products, patent litigation and commercial litigation related to a common matter in multiple jurisdictions. In regards to the product liability

matters, due to the complexities involved and claims filed in multiple districts, the expenses associated with these matters are significant to our operating results. Once the litigation matter has been excluded from our non-GAAP financial measures in a particular period, any additional expenses or gains from changes in estimates are also excluded, even if they are not significant, to ensure consistency in our non-GAAP financial measures from period-to-period.

(8) The European Union Medical Device Regulation imposes significant additional premarket and postmarket requirements. The new regulations provided a transition period until May 2021 for previously-approved medical devices to meet the additional requirements. For certain devices, this transition period can be extended until May 2024. We are excluding from our non-GAAP financial measures the incremental costs incurred to establish initial compliance with the regulations related to our previously-approved medical devices. The incremental costs primarily relate to temporary personnel and third-party professionals necessary to supplement our internal resources.

(9) We recognized a loss on early extinguishment of debt during the year ended December 31, 2021, as a result of cash tender offers for certain outstanding series of senior notes of the Company.

(10) We have incurred other various expenses from specific events or projects that we consider highly variable or that have a significant impact to our operating results that we have excluded from our non-GAAP measures. These include costs related to legal entity, distribution and manufacturing optimization, including contract terminations, and gains and losses from changes in fair value on our equity investments including our investment in ZimVie.

(11) Other certain tax adjustments are related to certain significant and discrete tax adjustments including intercompany transactions between jurisdictions, ongoing impacts of tax only amortization resulting from certain restructuring transactions, impacts of significant tax reform including Swiss reform and certain favorable tax audit settlements.

(12) Due to the reported net loss for this period, the effect of dilutive shares assuming net earnings is shown as an adjustment. Diluted share count used in Adjusted Diluted EPS is:

	Year Ended December 31, 2020
Diluted shares	207.0
Dilutive shares assuming net earnings	1.4
Adjusted diluted shares	208.4

ZIMMER BIOMET HOLDINGS, INC.
RECONCILIATION OF SALES GROWTH RATE TO CONSTANT CURRENCY SALES GROWTH RATE
FOR THE YEAR ENDED DECEMBER 31, 2022
(unaudited)

	For the Year Ended December 31, 2022		
	Reported % Growth	Foreign Exchange Impact	Constant Currency % Growth
Geographic Segment			
United States	4%	–%	4%
International	(2)	(12)	10
Consolidated	2	(5)	7
Product Category			
Knees	5	(5)	10
Hips	2	(6)	8
S.E.T.	(2)	(4)	2
Other	(4)	(5)	1
Consolidated	2	(5)	7

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Corporate Information (As of March 3, 2023)

Shareholder Information

Headquarters
Zimmer Biomet Holdings, Inc.
345 East Main Street
Warsaw, IN 46580, U.S.A.
+1-574-267-6131
www.zimmerbiomet.com

Stock Listing
Zimmer Biomet is listed on the New York Stock Exchange and the SIX Swiss Exchange under the symbol ZBH.

Independent Auditors
PricewaterhouseCoopers LLP
Chicago, IL, U.S.A.

Transfer Agent
Communications concerning stock transfer requirements, loss of certificates and change of address should be directed to Zimmer Biomet's Transfer Agent:

Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202
+1-888-552-8493 (domestic)
+1-718-575-3336 (international)
Website: www.computershare.com

Investor Relations
Zimmer Biomet invites shareholders, security analysts, portfolio managers and other interested parties to contact:

Keri Mattox
+1-215-275-2431
keri.mattox@zimmerbiomet.com

Zach Weiner
+1-908-591-6955
zach.weiner@zimmerbiomet.com

Dividend Reinvestment and Stock Purchase Plan

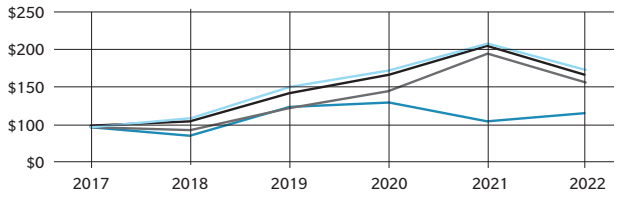
Computershare Trust Company, N.A. administers the Computershare CIP, a direct stock purchase and dividend reinvestment plan, which allows registered shareholders to purchase additional shares of Zimmer Biomet common stock through the automatic reinvestment of dividends. The plan also allows registered shareholders to purchase shares with optional cash investments of at least $25. The minimum initial investment for new investors is $10,000. Existing registered shareholders as well as new investors may enroll in the plan online at www.computershare.com/investor, or by completing and submitting an enrollment form that may be obtained by contacting Computershare at the address or telephone numbers shown above.

ZBH LISTED NYSE SIX SWISS EXCHANGE

Stock Performance Graph

Comparison of Cumulative Total Return for years ended December 31

Assumes $100 was invested on December 31, 2017 in Zimmer Biomet common stock and each index and that dividends were reinvested. Returns over the indicated period should not be considered indicative of future returns.



	2017	2018	2019	2020	2021	2022
Zimmer Biomet Holdings, Inc.	$100.00	$86.69	$126.03	$130.77	$108.51	$113.18
S&P 500 Stock Index	$100.00	$95.62	$125.72	$148.85	$191.58	$156.88
S&P 500 Health Care Equipment Index	$100.00	$116.24	$150.32	$176.83	$211.05	$171.25
Peer Group[1]	$100.00	$112.39	$147.56	$171.63	$208.11	$165.99

To access Zimmer Biomet's annual report on form 10-K, quarterly reports on form 10-Q, news releases, earnings releases, proxy statements, or to obtain Zimmer Biomet's financial calendar, access SEC filings, listen to earnings calls, or to look up Zimmer Biomet stock quotes, please visit http://investor.zimmerbiomet.com.

1 The Peer Group is selected by our Compensation and Management Development Committee from time to time, most recently in May 2022, and currently consists of the following issuers: Agilent Technologies, Inc.; Align Technology, Inc.; Baxter International Inc.; Becton Dickinson and Company; Boston Scientific Corporation; DexCom, Inc.; Edwards Lifesciences Corporation; Hologic, Inc.; Intuitive Surgical, Inc.; Laboratory Corporation of America Holdings; Quest Diagnostics Incorporated; Stryker Corporation; Teleflex Incorporated; and The Cooper Companies, Inc.

This annual report is printed on paper that contains 10% post-consumer waste.

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