UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021 or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

COMMISSION FILE NO. 0-26224

to

INTEGRA LIFESCIENCES HOLDINGS CORPORATION

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

Delaware (STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)

> 1100 Campus Road Princeton , New Jersev

Princeton, New Jersey (ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)

REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE: (609) 275-0500

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

<u>Title of Each Class</u> Common Stock. Par Value \$.01 Per Share

<u>Trading Symbol</u> IART <u>Name of Exchange on Which Registered</u> Nasdaq Global Select Market

isdaq Global Select Market

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 15(d) of the Securities Exchange Act. Yes D

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 🗌

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(I.R.S. EMPLOYER IDENTIFICATION NO.) 08540

51-0317849

(ZIP CODE)

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

Large accelerated filer	Accelerated filer	
Non-accelerated filer	Smaller reporting company	
Emerging growth company		

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

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

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

As of June 30, 2021, the aggregate market value of the registrant's common stock held by non-affiliates was approximately \$4,968.6 million based upon the closing sales price of the registrant's common stock on The Nasdaq Global Select Market on such date. The number of shares of the registrant's Common Stock, \$0.01 par value, outstanding as of February 22, 2022 was 83,243,031.

DOCUMENTS INCORPORATED BY REFERENCE:

Certain portions of the registrant's definitive proxy statement relating to its scheduled May 13, 2022 Annual Meeting of Stockholders are incorporated by reference in Part III of this report.

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PART I

ITEM 1. BUSINESS

OVERVIEW

The terms "we," "our," "us," "Company" and "Integra" refer to Integra LifeSciences Holdings Corporation, a Delaware corporation, and its subsidiaries, unless the context suggests otherwise.

The Company, headquartered in Princeton, New Jersey, is a world leader in medical technology. The Company was founded in 1989 with the acquisition of an engineered collagen technology platform used to repair and regenerate tissue. Since then, Integra has developed numerous product lines from this technology for applications ranging from burn and deep tissue wounds to the repair of dura mater in the brain, as well as nerves and tendons. The Company has expanded its base regenerative technology business to include surgical instruments, neurosurgical products and advanced wound care through global acquisitions and product development to meet the evolving needs of its customers and enhance patient care.

Integra products are sold in more than 130 countries through a direct sales force as well as distributors and wholesalers. We manufacture and sell medical technologies and products in two reportable business segments: Codman Specialty Surgical ("CSS") and Tissue Technologies ("TT"). The CSS segment, which represents two-thirds of our total revenue, consists of market-leading technologies and instrumentation used for a wide range of specialties, such as neurosurgery, neurocritical care and otolaryngology. We are the world leader in neurosurgery and one of the top three providers in instruments used in precision, specialty, and general surgical procedures. Our TT segment generates about one-third of our overall revenue and focuses on three main areas: complex wound surgery, surgical reconstruction, and peripheral nerve repair.

We have key manufacturing and research facilities located in California, Indiana, Maryland, Massachusetts, New Jersey, Ohio, Puerto Rico, Tennessee, Utah, Canada, China, France, Germany, Ireland and Switzerland. We source most of our handheld surgical instruments and dural sealant products through specialized third-party vendors.

Vision

We aspire to continue to be a worldwide leader in neurosurgery and reconstructive surgery with a portfolio of leading businesses that delivers outstanding customer experiences through innovation, execution and teamwork to positively impact the lives of millions of patients and their families.

Strategy

Integra is committed to delivering high quality products that positively impact the lives of millions of patients and their families. We focus on four key pillars of our strategy: 1) enabling an execution-focused culture, 2) optimizing relevant scale, 3) advancing innovation and agility, and 4) leading in customer experience. We believe that by sharpening our focus on these areas through improved planning and communication, optimization of our infrastructure, and strategically aligned acquisitions, we can build scale, increase competitiveness and achieve our long-term goals.

To this end, the executive leadership team has established the following key priorities aligned to the following areas of focus:

Strategic Acquisitions. An important part of the Company's strategy is pursuing strategic transactions and licensing agreements that increase relevant scale in the clinical areas in which Integra competes. During 2021, the Company acquired ACell Inc. ("ACell"), an innovative regenerative medicine company specializing in the manufacturing of porcine urinary bladder extracellular matrices. This acquisition not only expanded the Company's product offering of regenerative technologies, but it also supported the Company's long-term growth and profitability strategy as this product line has a financial profile similar to Integra's other regenerative tissue products. All critical components of ACell have been integrated into the Company's TT segment. See Note 4, *Acquisitions and Divestitures*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for additional details. In 2021, we continued to advance the development of pioneering neurosurgical technologies from our 2019 acquisitions, Arkis Biosciences, Inc. and Rebound Therapeutics Corporation.

Portfolio Optimization and New Product Introductions. We are investing in innovative product development to drive a multi-generational pipeline for our key product franchises. Our product development efforts span across our key global franchises focused on potential for significant returns on investment. In addition to new product development, we are funding studies to gather clinical evidence to support launches, ensure market access and improve reimbursement for existing products. In addition to acquisitions and organic reinvestment, we continually look to optimize our portfolio towards higher growth and higher margin businesses. As such, we may opportunistically divest businesses or discontinue products where we see limited runway for future value creation in line with our aspirations due in part to changes in the market, business fundamentals or the regulatory environment.

In January 2021, we completed the sale of our Extremity Orthopedics business to Smith & Nephew USD Limited ("Smith & Nephew"), a subsidiary of Smith & Nephew plc, for approximately \$240 million in cash. This transaction enables us to increase

our investments in our core neurosurgery and tissue technologies businesses and fund pipeline opportunities to expand our addressable markets to strengthen our existing leadership positions in these segments and drive future growth. See Note 4, *Acquisitions and Divestitures*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

Commercial Channel Investments. Investing in our sales channels is a core part of our strategy to create specialization and greater focus on reaching new and existing customers and addressing their needs. To support our commercial efforts in Tissue Technologies, we expanded our two-tier specialist model to increase our presence in focused segments by creating a virtual selling organization to help serve the evolving needs of our customers. In addition, we continue to build upon our leadership brands across our product franchises in both CSS and TT to engage customers through enterprise-wide contracts with leading hospitals, integrated delivery networks and global purchasing organizations in the United States. Internationally, we have increased our commercial resources significantly in key emerging markets and are making investments to support our sales organization and maximize our commercial opportunities. These investments in our international sales channel position us well for expansion and long-term growth.

Customer Experience. We aspire to be ranked as a best-in-class provider and are committed to strengthen our relationships with all customers. We continue to invest in technologies, systems and processes to enhance the customer experience. Additionally, we launched digital tools and programs, resources and virtual product training to drive continued customer familiarity with our growing portfolio of medical technologies globally.

BUSINESS SEGMENTS

Integra currently manufactures and sells our products and technologies in the following two global reportable business segments: Codman Specialty Surgical and Tissue Technologies. We include financial information regarding our reportable business segments and certain geographic information under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations", Note 16, *Segment and Geographic Information* to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K).

Codman Specialty Surgical

The Codman Specialty Surgical business consists of a broad portfolio of market-leading brands, such as Codman[®], DuraGen[®], DuraSeal[®], CUSA[®], Mayfield[®] and Bactiseal[®], which are used for the management of multiple disease states, including brain tumors, traumatic brain injury, hydrocephalus and other neurological conditions. The growth in this business in the recent years has been fueled by geographic expansion and new product registrations in markets, such as China, Japan, and Europe, which we expect to continue in the near to long term.

We also expanded our product offerings in 2021 with the launch of our new intracranial pressure ("ICP") monitoring system, CereLink[™] in the U.S. and Europe. It provides clinicians with advanced continuous ICP monitoring that until now, has not been available when treating patients with traumatic brain injuries

Moreover, we are expanding into minimally invasive surgery ("MIS") and the surgical management of intracerebral hemorrhages ("ICH"), with the 2021 clinical launch of Aurora[®] Surgiscope[®], a proprietary surgical solution with integrated visualization and capabilities designed specifically for use in deep-seated brain lesions. We started gathering clinical evidence using this same technology for early surgical intervention for the treatment of ICH. We believe this technology offers the promise of transforming the standard of care in neurosurgery.

Rounding out the portfolio is a catalog of surgical headlamps and surgical instrumentation, as well as after-market service. With thousands of surgical instrument products, including specialty surgical instruments, we call on the central sterile processing unit of hospitals and acute care surgical centers. Additionally, through a strong U.S. distribution model, we serve the needs of hundreds of medical offices.

Our global commercial network includes clinical specialists, a large direct global sales force and strategic partnerships and distributors that serve hospitals, integrated health networks, group purchasing organizations, clinicians, surgery centers and health care providers.

Tissue Technologies

Following the sale of the Extremity Orthopedics business in the first quarter of 2021, we rebranded the Orthopedics and Tissue Technologies segment as Tissue Technologies. See Note 4, *Acquisitions and Divestitures*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

The Tissue Technologies segment consists of four unique regenerative technology areas - highly engineered bovine collagen, bovine dermis, porcine urinary bladder, and human amniotic tissue. This broad regenerative platform, which includes multiple leading brands such as Integra[®] Dermal Matrices, AmnioExcel[®], SurgiMend[®], MicroMatrix[®] and NeuraGen[®], primarily addresses the needs of plastic, reconstructive and general surgeons focused on the treatment of acute wounds, such as burns,



chronic wounds, including diabetic foot ulcers, and surgical tissue repair, such as hernia, tendon, peripheral nerve repair and protection.

We have a specialized sales organization composed of directly employed sales representatives, as well as specialty distributors, organized based upon their call point. Our wound reconstruction sales representatives call on surgeons doing procedures in limb salvage, trauma, wound reconstruction and burns, chronic wounds primarily in the inpatient wound care clinic setting. We also have a dedicated surgical reconstruction sales team focused on plastic and reconstructive surgery and hernia procedures with differentiated products. Finally, we have a distributor network focused on biologics. Outside the U.S., we have a combination of direct and indirect sales channels in international markets to sell certain product lines.

This business segment also includes private-label sales of a broad set of our regenerative and wound care technologies. Our customers are other medical technology companies that sell to end markets primarily in spine, surgical and wound care.

We anticipate new product introductions and new clinical indications will continue to contribute to the growth of the segment. In the third quarter of 2021, we filed the premarket approval application for a specific indication for SurgiMend in the use of post-mastectomy breast reconstruction, for which we hope to obtain FDA approval in 2023.

COMPETITION

Our competitors for CSS are Medtronic, Inc., Stryker Corporation, Becton Dickinson and Company and Aesculap, a division of B. Braun Medical, Inc. In addition, we compete with many smaller specialized companies and larger companies that do not otherwise focus on the offerings of Codman Specialty Surgical technologies. We rely on the depth and breadth of our sales and marketing organization, our innovative technologies, and our procurement and manufacturing operations to maintain our competitive position.

Our competition in TT includes Smith & Nephew plc, Organogenesis Holdings Inc., MiMedx Group, Inc., LifeCell Corporation, a subsidiary of Allergan PLC, C.R. Bard, a subsidiary of Becton Dickinson and Company, and Axogen, Inc. We compete with many additional companies who partially participate in soft tissue reconstruction of complex wounds, peripheral nerve repair and surgical reconstruction.

In addition, our products also compete against medical practices that treat a condition without using a medical device or any particular product, such as medical practices that utilize autograft tissue instead of our dermal regeneration products, duraplasty products and nerve repair products. Depending on the product line, we compete based on our products' features, strength of our sales force or distributors, sophistication of our technology and cost effectiveness of our solution.

RESEARCH AND DEVELOPMENT STRATEGY

Our research and development activities focus on identifying unmet surgical needs and addressing those needs with innovative solutions and products. We apply our core competency in regenerative technology to innovate products for neurosurgical, wound applications, plastic surgery, and reconstructive surgery and we have extensive R&D development programs for our core platforms of electromechanical technologies. Additionally, we conduct products and clinical studies to generate efficacy and health economic evidence.

Regenerative Technologies. Integra was the first Company to receive a United States Food and Drug Administration ("FDA") claim for regeneration of dermal tissue and is a world leader in regenerative technology. Because regenerative technology products represent a fast-growing, high-margin opportunity for us, we allocate a large portion of our research and development budget to these projects. Our regenerative technology development program applies our expertise in bioengineering to a range of biomaterials including natural collagen and human tissues as well as synthetics such as polymers. These unique product designs are used for neurosurgical and orthopedic surgical applications, as well as dermal regeneration, including the healing of chronic and acute wounds, tendon and nerve repair. Our regenerative technology platform includes our legacy Integra® Dermal Regeneration Template ("IDRT") products and complementary technologies that we have acquired. Our collagen manufacturing capability, combined with our history of innovation, provides us with strong platform technologies for multiple indications.

In 2020, we announced positive clinical and economic data on Integra[®] Bilayer Wound Matrix ("IBWM") in complex lower extremity reconstruction based on two retrospective studies recently published in Plastic and Reconstructive Surgery, the official journal of the American Society of Plastic Surgeons. As surgeons look for ways to efficiently and effectively repair and close wounds, IBWM helps address the efficiency needed in operating rooms by reducing both the operating time and costs to hospitals and patients. In 2021, we completed one of the largest diabetic foot ulcers ("DFU"), randomized controlled trials of the PriMatrix[®] Dermal Repair Scaffold for the management of DFU. This multi-center study enrolled more than 225 patients with chronic DFU's over the course of 12-week treatments and 4-week follow-up phases. The results of this study, which was published in the Journal of Wound Care, demonstrated that PriMatrix plus standard of care ("SOC") consisting of sharp debridement, infection elimination, use of dressings and offloading was significantly more likely to achieve complete wound closure compared with SOC alone, with a median number of one application of the product.



Electromechanical Technologies and Instrumentation. Because our electromechanical products and instruments address significant needs in surgical procedures and limit uncertainty for surgeons, we continue to invest in approvals for new indications and next generation improvements to our market-leading products. We have several active programs focused on life cycle management and innovation, for capital and disposable products in our portfolio. Our product development efforts are focused on core clinical applications in CSF management, neuro-critical care monitoring, minimally invasive instruments and electrosurgery and ultrasonic medical technologies, as well as our ambition to transform the standard of care in neurosurgery with product advancements in MIS and ICH. Our lighting franchise is among the most dynamic in the industry.

The Company benefitted from our product launches from prior years, including our new electrosurgery generator and irrigator system, an innovative customer-centric toolkit for our CertasTM Plus Programmable Valve along with additional shunt configurations. In Japan, we are experiencing strong growth as a result of the successful launch of DuraGen in mid-2019, which is the first and only collagen xenograft approved for use as a dural substitute in the country. We are focused on the development of core clinical applications in our electromechanical technologies portfolio. Also, we continue to update our CUSA Clarity platform by incorporating new ultrasonic handpiece, surgical tips and integrated electrosurgical capabilities. We continue to work with several instrument partners to bring new surgical instrument platforms to the market.

In the third quarter of 2021, we launched our CereLink ICP Monitor System in the U.S. and Europe. CereLink provides enhanced accuracy, usability and advanced data presentation that provides clinicians with uncompromised, advanced continuous ICP monitoring that until now, has not been available when treating patients with traumatic brain injuries.

In 2021, we continued to advance the early-stage technology platforms we acquired in 2019. Through the acquisition of Arkis Biosciences, we added a platform technology, CerebroFlo[®] external ventricular drainage ("EVD"), catheter with Endexo[®] technology, a permanent additive designed to reduce the potential for catheter obstruction due to thrombus formation. The CerebroFlo EVD Catheter has demonstrated an average of 99% less thrombus accumulation onto its surface, in vitro, compared to a market leading EVD catheter. In 2019, we also acquired Rebound Therapeutics, a Company that specialized in single-use medical device, known as Aurora Surgiscope, which is the only tubular retractor system designed for cranial surgery with an integrated access channel, camera and lighting. In the third quarter of 2021, we conducted a limited clinical launch of the Aurora Surgiscope for use in minimally invasive neurosurgery as well as initiated a registry called MIRROR to collect data on early surgical intervention using this same technology platform for the treatment of ICH.

RESOURCES

In general, raw materials essential to our businesses are readily available from multiple sources. For reasons of quality assurance, availability, or cost effectiveness, certain components and raw materials are available only from a sole supplier. Our practice is to maintain sufficient inventory of components so that our production will not be significantly disrupted even if a particular component or material is not available for a period of time.

Certain of our products, including but not limited to our dermal regeneration products, duraplasty products, wound care products, and nerve and tendon repair products, contain material derived from bovine tissue. We take great care to provide products that are safe and free of agents that can cause disease. In particular, the collagen used in the products that we manufacture is derived from the deep flexor tendon of cattle less than 24 months old from New Zealand, a country that has never had a reported case of bovine spongiform encephalopathy ("BSE") (otherwise known as mad cow disease), from the U.S. or from fetal bovine dermis. The World Health Organization classifies different types of cattle tissue for relative risk of BSE transmission. Deep flexor tendon and fetal bovine skin are in the lowest-risk category for BSE transmission, and therefore considered to have a negligible risk of containing the agent that causes BSE.

INTELLECTUAL PROPERTY

We seek patent and trademark protection for our key technology, products and product improvements, both in the U.S. and in selected foreign countries. When determined appropriate, we have enforced and plan to continue to enforce and defend our patent and trademark rights. In general, however, we do not rely solely on our patent and trademark estate to provide us with any significant competitive advantages as it relates to our existing product lines. We also rely upon trade secrets and continuing technological innovations to develop and maintain our competitive position. In an effort to protect our trade secrets, we have a policy requiring our employees, consultants and advisors to execute proprietary information and invention assignment agreements upon commencement of employment or consulting relationships with us. These agreements also provide that all confidential information developed or made known to the individual during the course of their relationship with us must be kept confidential, except in specified circumstances.

AccuDrain[®], AmnioExcel[®], Aquasonic[®], Auragen[®], Aurora[®] Surgiscope[®], Bactiseal[®], BioDFence[®], BioDOptix[®], Brainet[®], Budde[®], BuzzTM, CereLinkTM, CerebroFlo[®] EVD Catheter with Endexo[®] Technology, Codman[®], Codman Accu-Flo[®], Codman Bicol[®], Codman[®] Certas[®] Plus, Codman[®] Hakim[®]Programmable valve, Codman Holter[®], Codman ICP Express[®], Codman Microsensor[®], Codman VersaTru[®], Codman VPV[®], Contour-Flex[®], Cranioplastic[®], CRW[®], CRW PrecisionTM, CthermTM, CUSA[®], Cytal[®], DirectLink[®], DuraGen[®], DuraSeal[®], Gentrix[®], HeliCote[®], HeliPlug[®], HeliTape[®], HeliMend[®], Helistat[®], Helitene[®], HermeticTM, Hy-Tape[®], Integra[®], Integra[®], Isocool[®], Jarit[®], Lead-LokTM, Licox[®], LimiTorrTM, Luxtec[®],

Mayfield[®], MatriStem UBM[™], MediHone^{y®}, MicroFrance[®], MicroMatrix[®], Miltex[®], Mischler[™], MoniTorr ICP[™], Natus[®], NeuraGen[®], NeuraWrap[™], Nicolet[®], Omnigraft[®], Omni-Tract[®], OSV II[®], Padgett[®], PriMatrix[®], Pureflow[™], Q-Snor[™], Redmond[™], Revize[™], Ruggles[®], Signacreme[®], SurgiMend[®], TCC-EZ[®], TenoGlide[®], TissueMend[®], Ultra VS[™], VersaTru[®], Xtrasorb[®], zRIP[™], and the Integra logo are some of the material trademarks of Integra LifeSciences Corporation and its subsidiaries. MAYFIELD[®] is a registered trademark of SM USA, Inc., and is used by Integra under license.

SEASONALITY

Revenues during our fourth quarter tend to be stronger than other quarters because many hospitals increase their purchases of our products during the fourth quarter to coincide with the end of their budget cycles in the U.S. In general, our first quarter usually has lower revenues than the preceding fourth quarter, the second and third quarters have higher revenues than the first quarter, and the fourth quarter revenues are the highest in the year. The main exceptions to this pattern occur because of material acquisitions as well as impacts of the COVID-19 pandemic.

Impact of COVID-19 Pandemic on our business

During the COVID-19 pandemic, the Company's focus remained on supporting patients, providing customers with life-saving products, and protecting the well-being of our employees. The rapid and evolving spread of the virus and subsequent variants have resulted in unprecedented challenges to the global healthcare industry. In response to the pandemic, we acted swiftly by implementing protocols to ensure continuity of our manufacturing and distribution sites around the world and to provide for the safety of our employees.

The COVID-19 pandemic continues to have widespread and unpredictable impacts and the Company has continued to manage risks in this uncertain environment. We remain confident that the underlying markets in which the Company competes remain attractive. We also remain focused on managing the business for the long-term. The Company's adaptability and resiliency in the face of this unprecedented crisis is made possible in part by prior investments in technology infrastructure and operations, as well as our talented and committed global workforce.

Capital markets and worldwide economies have also been significantly impacted by the COVID-19 pandemic, and it is possible that the pandemic could cause a local and/or global economic recession. Any such economic recession could have a material adverse effect on the Company's long-term business as hospitals curtail and reduce capital as well as overall spending. The COVID-19 pandemic and local actions, such as "shelter-in-place" orders and restrictions on travel and access to our customers or temporary closures of our facilities or the facilities of our suppliers and their contract manufacturers, disruption and/or higher costs to the Company's supply chain, staffing shortages in hospitals and labor constraints in our facilities, could further impact our sales, margins and our ability to ship our products and supply our customers. Any of these events could negatively impact the number of surgical and medical intervention procedures performed and have a material adverse effect on our business, financial condition, results of operations, or cash flows.

Information pertaining to risk factors as it relates to the COVID-19 pandemic can be found in Item 1A. Risk Factors of this Annual Report on Form 10-K.

GOVERNMENT REGULATION AND COMPLIANCE

We are a manufacturer and marketer of medical devices and Human Tissue and Cell Based Products ("HCT/Ps") and therefore are subject to extensive regulation by the FDA, the Center for Medicare Services of the U.S. Department of Health and Human Services, other federal governmental agencies and, in some jurisdictions, by state and foreign governmental authorities. These regulations govern the introduction of new medical devices and HCT/Ps, the observance of certain standards with respect to the design, manufacture, testing, labeling, promotion and sales of the products, the maintenance of certain records, the ability to track devices, the reporting of potential product defects, the import and export of products, and other matters.

United States Food and Drug Administration

The regulatory process for obtaining product approvals and clearances can be onerous and costly. The FDA requires, as a condition to marketing a medical device in the U.S., that we secure a Premarket Notification clearance pursuant to Section 510(k) of the Federal Food, Drug and Cosmetic Act (the "FD&C Act"), or an approved premarket approval ("PMA"), application (or supplemental PMA application). Obtaining these approvals and clearances can take up to several years and may involve preclinical studies and clinical trials. The FDA also may require a post-approval clinical study as a condition of approval. To perform clinical trials for significant risk devices in the U.S. on an unapproved product, we are required to obtain an Investigational Device Exemption from the FDA. The FDA also may require a filing for approval prior to marketing products that are modifications of existing products or new indications for existing products. Moreover, after clearance/approval is given, if the product is shown to be hazardous or defective, the FDA and foreign regulatory agencies have the power to withdraw the clearance or approval, as the case may be, or require us to change the device, its manufacturing process or its labeling, to supply additional proof of its safety and effectiveness or to recall, repair, replace or refund the cost of the medical device. Because we currently export medical devices manufactured in the U.S. that have not been approved by the FDA for distribution in the U.S., we are required to obtain approval/registration in the country to which we are exporting and maintain certain records relating to exports and make these available to the FDA for inspection, if required.

Human Cells, Tissues and Cellular and Tissue-Based Products

Integra, through the acquisition of Derma Sciences and BioD LLC ("BioD"), is involved with the recovery, processing, storage, transportation and distribution of donated amniotic tissue. The FDA has specific regulations governing HCT/Ps. An HCT/P is a product containing, or consisting of, human cells or tissue intended for transplantation into a human patient. Examples of HCT/Ps include bone, ligament, skin and cornea.

Some HCT/Ps fall within the definition of a biological product, medical device or drug regulated under the FD&C Act. These biologic, device or drug HCT/Ps must comply both with the requirements exclusively applicable to HCT/Ps and, in addition, with requirements applicable to biologics, devices or drugs, including premarket clearance or approval from the FDA.

Section 361 of the Public Health Service Act ("Section 361") authorizes the FDA to issue regulations to prevent the introduction, transmission or spread of communicable disease. HCT/Ps regulated as "361" HCT/Ps are subject to requirements relating to registering facilities and listing products with the FDA, screening and testing for tissue donor eligibility, and Good Tissue Practices when processing, storing, labeling, and distributing HCT/Ps, including required labeling information, stringent record keeping, and adverse event reporting.

The American Association of Tissue Banks ("AATB") has issued operating standards for tissue banking. Compliance with these standards is a requirement in order to become an AATB-accredited tissue establishment. In addition, some states have their own tissue banking regulations. We are licensed or have permits for tissue banking in California, Delaware, Illinois, Maryland, New York, Oregon, and Tennessee. In Tennessee, we are registered with the FDA Center for Biological Evaluations and Research.

Procurement of certain human organs and tissue for transplantation is subject to the restrictions of the National Organ Transplant Act, which prohibits the transfer of certain human organs, including skin and related tissue for valuable consideration, but permits the reasonable payment associated with the removal, transportation, implantation, processing, preservation, quality control and storage of human tissue and skin. BioD, our wholly-owned subsidiary, is a registered Tissue Bank and is involved with the recovery, storage and transportation of donated human amniotic tissue.

On June 22, 2015, the FDA issued an Untitled Letter (the "Untitled Letter") alleging that BioD's morselized anniotic membrane tissue-based products do not meet the criteria for regulation as HCT/Ps solely under Section 361 and that, as a result, BioD would need a biologics license to lawfully market those morselized products. Since the issuance of the Untitled Letter, BioD and the Company have made known to the FDA their disagreement with the FDA's assertion that certain products are more than minimally manipulated. The FDA has not changed its position that certain of the BioD acquired products are not eligible for marketing solely under Section 361. In July 2020, the FDA issued the final guidance document related to human tissue titled, "Regulatory Considerations for Human Cells, Tissues, and Cellular and Tissue-Based Products: Minimal Manipulation and Homologous Use" (the "2020 HCT/P Final Guidance"). The 2020 HCT/P Final Guidance document supersedes the November 2017 guidance by the same title.

The HCT/P Final Guidance maintains the FDA's position that products such as the Company's morselized amniotic membrane tissue-based products do not meet the criteria for regulation solely as HCT/Ps. In addition, in the November 2017 guidance, the FDA articulated a risk-based approach to enforcement and, while some uses for amniotic membrane tissue-based products would have as much as thirty-six months of enforcement discretion, other high risk uses could be subject to immediate enforcement action. The 2020 HCT/P Final Guidance maintained this approach and extended the discretionary enforcement period to May 31, 2021.

Considering the risk of enforcement action, the Company discontinued the manufacturing of all morselized amniotic membrane tissue-based products prior to May 31, 2021. We no longer distribute these products. As of December 31, 2021, the Company has not received any further notice of enforcement action from the FDA regarding its morselized amniotic membrane tissue-based products.

Revenues from the now discontinued BioD morselized amniotic membrane-based products for the year ended December 31, 2021 were less than 1.0% of consolidated revenues.

Medical Device Regulations

We also are required to register with the FDA as a medical device manufacturer. As such, our manufacturing sites are subject to periodic inspection by the FDA for compliance with the FDA's Quality System Regulations. These regulations require that we manufacture our products and maintain our documents in a prescribed manner with respect to design, manufacturing, testing and control activities. Further, we are required to comply with various FDA requirements and other legal requirements for labeling and promotion. If the FDA believes that a company is not in compliance with applicable regulations, it may issue a warning letter, institute proceedings to detain or seize products, issue a recall order, impose operating restrictions, enjoin future violations and assess civil penalties against that company, its officers or its employees and may recommend criminal prosecution to the U.S. Department of Justice. All Integra manufacturing facilities participate in the Medical Device Single Audit Program and are audited annually for compliance with the Quality System for US FDA, Canada, Australia, Brazil, and Japan.

Medical device regulations also are in effect in many of the countries in which we do business outside the U.S. These laws range from comprehensive medical device approval and Quality System requirements for some or all of our medical device products to simpler requests for product data or certifications. Under the European Union Medical Device Directive, medical devices must meet the Medical Device Directive standards and receive CE Mark Certification prior to marketing in the European Union ("EU"). In addition, the EU enacted the EU Medical Device Regulation, which imposes stricter requirements on the marketing and sales of medical devices including but not limited to quality systems, labeling and clinical data. CE Mark Certification requires a comprehensive quality system program, technical documentation, clinical evaluation and data on the product, which are then reviewed by a Notified Body. A Notified Body is an organization designated by the national governments of the EU member states to make independent judgments about whether a product complies with the requirements established by each CE marking directive. The Medical Device Directive, Medical Device Regulation, ISO 9000 series and ISO 13485 are recognized international quality standards that are designed to ensure that we develop and manufacture quality medical devices. Other countries are also instituting regulations regarding medical devices or interpreting and enforcing existing regulations more strictly. Compliance with these regulations requirements. A recognized Notified Body audits our facilities annually to verify our compliance with the ISO 13485 Quality System standard.

Certain countries, as well as the EU, have issued regulations that govern products that contain materials derived from animal sources. Regulatory authorities are particularly concerned with materials infected with the agent that causes BSE. These regulations affect our dermal regeneration products, duraplasty products, hernia repair products, biomaterial products for the spine, nerve and tendon repair products and certain other products, all of which contain material derived from animals, including our products, may become subject to additional regulation, or even be banned in certain countries, because of concern over the potential for prion transmission. Significant new regulations, a ban of our products, or a movement away from bovine-derived products because of an outbreak of BSE could have a material, adverse effect on our current business or our ability to expand our business. See "Item 1A. Risk Factors - *Certain of our products contain materials derived from animal sources and may become subject to additional regulation*" of this Annual Report on Form 10-K.

Postmarket Requirements. After a device is cleared or approved for commercial distribution, numerous regulatory requirements apply. These include the FDA Quality System Regulations which cover the procedures and documentation of the design, testing, production, control, quality assurance, labeling, packaging, sterilization, storage and shipping of medical devices; the FDA's general prohibition against promoting products for unapproved or 'off-label' uses; the Medical Device Reporting regulation, which requires that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if it were to recur; and the Reports of Corrections and Removals regulation, which require manufacturers to report recalls and field corrective actions to the FDA if initiated to reduce a risk to health posed by the device or to remedy a violation of the FD&C Act. Postmarket requirements are also followed globally where our products are registered and approved. These foreign jurisdictions have similar requirements to the FDA which include reporting requirements such as adverse events and recalls.

Other regulations

Anti-Bribery Laws. In the U.S., we are subject to laws and regulations pertaining to healthcare fraud and abuse, including anti-kickback laws and physician self-referral laws that regulate the means by which companies in the health care industry may market their products to hospitals and health care professionals and may compete by discounting the prices of their products. Similar anti-bribery laws exist in many of the countries in which we sell our products outside the U.S., as well as the United States Foreign Corrupt Practices Act (which addresses the activities of U.S. companies in foreign markets). Our products also are subject to regulation regarding reimbursement, and U.S. healthcare laws apply when a customer submits a claim for a product that is reimbursed under a federally funded healthcare program. These global laws require that we exercise care in designing our sales and marketing practices, including interactions with healthcare professionals, and customer discount arrangements. See "Item 1A. Risk Factors - We are exposed to a variety of risks relating to our international sales and operations" of this Annual Report on Form 10-K for further details.

Import-export. Our international operations subject us to laws regarding sanctioned countries, entities and persons, customs, and import-export. Among other things, these laws restrict, and in some cases can prevent, U.S. companies from directly or indirectly selling goods, technology or services to people or entities in certain countries. In addition, these laws require that we exercise care in our business dealings with entities in and from foreign countries.

Hazardous materials. Our research, development and manufacturing processes involve the controlled use of certain hazardous materials. We are subject to country-specific, federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these materials and certain waste products. We believe that our environmental, health and safety procedures for handling and disposing of these materials comply with the standards prescribed by the controlling laws and regulations. However, risk of accidental releases or injury from these materials is possible. These risks are managed to minimize or eliminate associated business impacts. In the event of this type of accident, we could be held liable for damages and face a liability that could exceed our resources. We could be subject to a regulatory shutdown of a facility that could prevent the distribution and sale of products manufactured there for a significant period of time, and we could suffer a casualty loss that could require a shutdown of the facility in order to repair it, any of which could have a material, adverse effect on our business. Although we continuously strive to maintain full compliance with respect to all applicable global environmental, health and safety laws and regulations, we could incur substantial costs to fully comply with future laws and regulations, and our operations, business or assets may be negatively affected. Furthermore, global environmental, health and safety compliance is an ongoing process. Integra has compliance procedures in place for compliance with Employee Health & Safety laws, driven by a centrally led organizational structure that ensures proper implementation, which is essential to our overall business objectives.

In addition to the above regulations, we are, and may be, subject to regulation under country-specific federal and state laws, including, but not limited to, requirements regarding record keeping, and the maintenance of personal information, including personal health information. As a public Company, we are subject to the securities laws and regulations, including the Sarbanes-Oxley Act of 2002. We also are subject to other present and could be subject to possible future, local, state, federal and foreign regulations.

Third-Party Reimbursement. Healthcare providers that purchase medical devices generally rely on third-party payors, including, in the U.S., the Medicare and Medicaid programs and private payors, such as indemnity insurers, employer group health insurance programs and managed care plans, to reimburse all or part of the cost of the products. As a result, demand for our products is and will continue to be dependent in part on the coverage and reimbursement policies of these payors. The manner in which reimbursement is sought and obtained varies based upon the type of payor involved and the setting in which the product is furnished and utilized. Reimbursement from Medicare, Medicaid and other third-party payors may be subject to periodic adjustments as a result of legislative, regulatory and policy changes, as well as budgetary pressures. Possible reductions in, or eliminations of, coverage or reimbursement by third-party payors, or denial of, or provision of uneconomical reimbursement for new products may affect our customers' revenue and ability to purchase our products. Any changes in the healthcare regulatory, payment or enforcement landscape relative to our customers' healthcare services have the potential to significantly affect our operations and revenue.

Data Privacy and Cybersecurity Laws and Regulations. As a business with a significant global footprint, compliance with evolving regulations and standards in data privacy and cybersecurity (relating to the confidentiality and security of our information technology systems, products such as medical devices, and other services provided by us) may result in increased costs, lower revenue, new complexities in compliance, new challenges for competition, and the threat of increased regulatory enforcement activity. Our business relies on the secure electronic transmission, storage and hosting of sensitive information, including personal information, financial information, intellectual property, and other sensitive information related to our customers and workforce.

For example, in the U.S., the collection, maintenance, protection, use, transmission, disclosure and disposal of certain personal information and the security of medical devices are regulated at the U.S. federal and state, and industry levels. U.S. federal and

state laws protect the confidentiality of certain patient health information, including patient medical records, and restrict the use and disclosure of patient health information by health care providers. In addition, the FDA has issued guidance advising manufacturers to take cybersecurity risks into account in product design for connected medical devices and systems, to assure that appropriate safeguards are in place to reduce the risk of unauthorized access or modification to medical devices that contain software and reduce the risk of introducing threats into hospital systems that are connected to such devices. The FDA also issued guidance on post market management of cyber security in medical devices.

Outside the U.S., we are impacted by the privacy and data security requirements at the international, national and regional level, and on an industry specific basis. Legal requirements in these countries relating to the collection, storage, handling and transfer of personal data and, potentially, intellectual property continue to evolve with increasingly strict enforcement regimes. In Europe, for example, we are subject to EU General Data Protection Regulation ("GDPR") which requires member states to impose minimum restrictions on the collection, use and transfer of personal data and includes, among other things, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances and significant fines for non-compliance. The GDPR also requires companies processing personal data of individuals residing in the EU to comply with EU privacy and data protection rules.

Please refer to "Item 1A. Risk Factors - *We are subject to requirements relating to information technology which could adversely affect our business*" of this Annual Report on Form 10-K for additional discussion of the risks accompanying compliance with data privacy and cybersecurity laws and regulations.

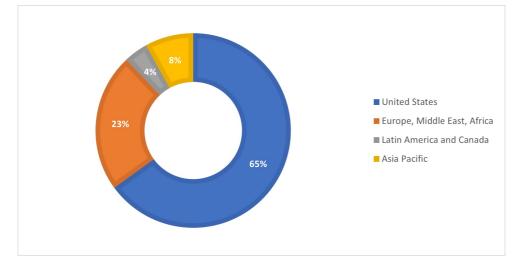
These laws and regulations impact the ways in which we use and manage personal data, protected health information, and our information technology systems. They also impact our ability to move, store, and access data across geographic boundaries. Compliance with these requirements may require changes in business practices, complicate our operations, and add complexity and additional management and oversight needs. They also may complicate our clinical research activities, as well as product offerings that involve transmission or use of clinical data.

HUMAN CAPITAL

Workforce Demographics

As of December 31, 2021, we had approximately 3,800 regular full and part time employees and 900 contingent, subcontracted, and outsourced partners.

65% of our employees are located in the United States, 23% in Europe, Middle East and Africa, 4% in Latin America and Canada and 8% in Asia Pacific which includes Australia and New Zealand.





Diversity and Inclusion

A diverse workforce and an inclusive culture and work environment is a business priority and a key to our long-term success. Our commitment to diversity and inclusion ("D&I") starts at the top with our Board of Directors and CEO. At all levels of the company, we focus on attracting, retaining, and developing our diverse talent.

Leadership Commitment and Accountability

Executive leadership team members set the D&I goals for the company and advancing diversity and inclusion initiatives to build stronger teams remains a company-wide goal.

Leadership Councils, Employee Resource Groups and External Partnerships:

We are accountable to our D&I commitment through our leadership councils, employee resource groups, and external partnerships.

- Our Women's Leadership Council, since its establishment in 2017, is an action and results-oriented advisory group comprised of fifteen of our senior women leaders across Integra. The specific charter of the Council is to work together to identify ways to continue to attract and retain female talent, advance the development of our women into leadership roles, increase the cultural awareness of the value of inclusion and diversity in our company, and create specific development forums for our high performing women at Integra.
- Employee resources groups encourage a culture of awareness and inclusion, assist in the attraction and retention of diverse talent, and help colleagues develop leadership skills. Members of the executive leadership team serve as sponsors for each of Integra's employee resource groups. Integra has five Employee Resources Groups:
 - Women of Integra Networks ("WIN") with 20+ chapters globally
 - African American Affinity Group
 - Veteran Employee Resource Group
 - Indian American Professional Network
 - Asian American and Pacific Islander Employee Resource Group
- We reinforce our commitment to diversity by partnering with other organizations focused on driving inclusion in the workplace including the CEO Action for Diversity & Inclusion, the largest CEO-driven business commitment to advance D&I in the workplace and Healthcare Businesswomen's Association, an association dedicated to further the advancement and impact of women in the business of healthcare.

Promoting an inclusive culture through learning opportunities:

To help drive our culture of inclusion, our colleagues participate in programs focused on how to manage bias and value differences.

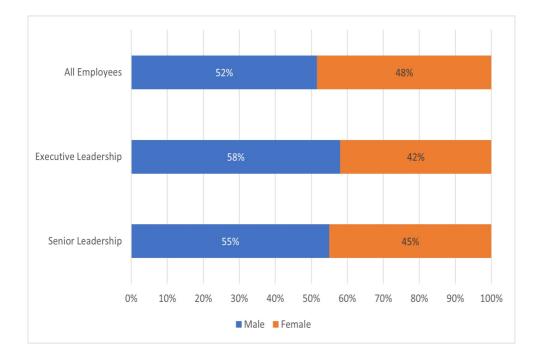
- Members of our executive leadership, senior management team, and larger scope leaders participate in a half-day microinequities training. The content includes understanding unconscious bias and microinequities, how to identify microinequities in day-to-day decisions and actions as leaders, and ways to mitigate microinequities on an individual and organizational level.
- Upon joining Integra, colleagues globally participate in two programs to promote inclusion: a course that creates awareness of unconscious biases in the workplaces and tools to build-bias breaking skills and a course that examines what practicing inclusion in the workplace looks like.

Gender Diversity:

We believe that our company is stronger and will deliver strong operating results when we build diverse teams and leverage broad perspectives to meet the needs of our shareholders, customers, colleagues, and communities we serve.

The breakout of our colleagues by gender as of December 31, 2021:

48% of Integra's overall population is female, 52% male. We continue to strive to ensure our diversity in our leadership roles is representative of our overall population. Through mentorship, sponsorship, recruitment efforts, and development programs we look to continue to grow our population of females in leadership roles at Integra. Currently, 42% of our executive leaders and 45% of senior leaders (non-executive vice presidents) are female.



In partnership with Leadership Edge, a company founded by women leaders and dedicated to growing and mentoring women, Integra sponsors the Excel Women's Leadership Program. The program is designed to accelerate the development and advancement of high potential, mid-career female leaders into senior leadership roles. The program has assisted in further building our pipeline of women leaders with 50% of the program's graduates being promoted into roles with increased responsibility.

Employee Health and Safety:

Integra LifeSciences is committed to providing a safe environment for all employees and visitors. We rely on our environmental, health and safety management systems as well as entrusting our managers to oversee and ensure health and safety at their respective sites and foster a workplace culture to achieve that end. We implement our approach globally by our systems and support at regional and country levels from colleagues that implement proper safety protocols, identify and correct hazards, and remain safety conscious at all times. Managers are expected to enforce health and safety regulations, including compliance with applicable federal, state and local laws. Our Environmental Health and Safety ("EH&S") organizational structure incorporates both workplace EH&S coordinators and compliance teams. We have developed an Incident Procedure Policy and General Safety Rules that guide our colleagues to improve our workplace environment, improve safety, and reduce risk and costs.

As we navigate the COVID-19 pandemic and its variants, we have placed a high priority on employee health, providing resources to support our workforce through this challenging time. To help limit exposure to the coronavirus, we acted to ensure employees in business-critical functions who cannot work from home are protected, including those in research and development, quality, manufacturing, distribution, and sales. Personal protective equipment, increased sanitation and social distancing guidance are provided to protect our employees. We continue to actively monitor the COVID-19 pandemic and its variants and respond based on guidance from U.S. and global health organizations, relevant governmental guidance, and evolving practices.

FINANCIAL INFORMATION ABOUT GEOGRAPHIC AREAS

Financial information about our geographical areas is set forth in our financial statements Note 16, *Segment and Geographic Information*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K).

AVAILABLE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, (the "Exchange Act"). In accordance with the Exchange Act, we file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission, ("the SEC"). Our financial information may be viewed, including the information contained in this report, and other reports we file with the SEC, on the Internet, without charge as soon as reasonably practicable after we file them with the SEC, in the "SEC Filings" page of the Investor Relations section of our website at <u>www.integralife.com</u>. A copy may also be obtained for any of these reports, without charge, from our Investor Relations department, 1100 Campus Road, Princeton, NJ 08540. Alternatively, reports filed may be viewed or obtained through the SEC's website at <u>www.sec.gov</u>.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

We have made statements in this report, including statements under "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" that constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, ("the Securities Act"), and Section 21E of the Exchange Act. These forward-looking statements are subject to a number of risks, uncertainties and assumptions about us including, among other things:

- the COVID-19 pandemic;
- general economic and business conditions, both nationally and in our international markets;
- our expectations and estimates concerning future financial performance, financing plans and the impact of competition;
- anticipated trends in our business;
- anticipated demand for our products, particularly capital equipment;
- our ability to produce and deliver products in sufficient quantities to meet sales demands;
- our expectations concerning our ongoing restructuring, integration and manufacturing transfer and expansion activities;
- existing and future regulations affecting our business, and enforcement of those regulations;
- our ability to obtain additional debt and equity financing to fund capital expenditures, working capital requirements and acquisitions;
- physicians' willingness to adopt our recently launched and planned products, third-party payors' willingness to provide or continue reimbursement for any of our products and our ability to secure regulatory approval for products in development;
- initiatives launched by our competitors;
- our ability to protect our intellectual property, including trade secrets;
- our ability to complete acquisitions, integrate operations post-acquisition and maintain relationships with customers of acquired entities;
- our ability to remediate all matters identified in FDA observations and warning letters that we received or may receive; and
- other risk factors described in the section entitled "Risk Factors" in this report.

Forward-looking statements can be identified by forward-looking words such as "believe," "may," "could," "might," "will," "estimate," "continue," "anticipate," "intend," "seek," "plan," "expect," "should," "would" and similar expressions in this report. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks and uncertainties, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements.

ITEM 1B. UNRESOLVED STAFF COMMENTS

As of the filing of this Annual Report on Form 10-K, we had no unresolved comments from the staff of the Securities and Exchange Commission that were received not less than 180 days before the end of our 2021 fiscal year.



ITEM 1A. RISK FACTORS

RISKS RELATED TO COVID-19

The effects of the COVID-19 pandemic continue to significantly impact global economic conditions and have affected, and may continue to affect, our operations, supply chain, distribution, sales force, as well as the financial stability of hospitals and other customers, and have caused and could again cause a reduction in procedures, which could materially adversely affect our business, results of operations, financial condition, and stock price.

On March 11, 2020, the World Health Organization characterized the Novel Coronavirus Disease 2019 ("COVID-19") as a pandemic. The COVID-19 pandemic continues to have widespread and unpredictable impacts on global society, economies, financial markets, and business practices and negatively impact business and healthcare activity globally. To date, and in continuing efforts to control the spread of COVID-19 (including subsequent surges and variants), governments around the world, including in the U.S., have and continue to implement various preventative measures including quarantines, "shelter in place" orders, "stay at home" orders, travel restrictions, business operation restrictions, school closures, and other similar types of measures. Even as efforts to contain the pandemic have made progress, new variants of the virus are causing additional surges or outbreaks. The COVID-19 pandemic has impacted and may continue to impact our business operations, including our employees, customers, suppliers, distributors, other service providers and communities in which we operate, and there is substantial uncertainty in the nature and degree of its continue effects over time.

In response to the COVID-19 pandemic and related mitigation efforts, similar to many other employers in the U.S., the Company has and continues to encourage many employees to work remotely. The Company has continued to operate certain manufacturing facilities to date in compliance with federal, state and local orders regarding COVID-19. The health of the Company's workforce is our top concern and the Company has procured equipment and implemented safety protocols in an effort to maintain the health and safety of our employees. A number of our network of business partners have been adversely affected by the COVID-19 pandemic. These impacts could impair our ability to move our products through distribution channels to end customers, and any such delay or shortage in the supply of materials or products may result in our inability to satisfy consumer demand for certain of our products in a timely manner or at all, which could harm our reputation, future sales and profitability.

It is not possible to predict with precision how future demand for our products will be impacted by the COVID-19 pandemic as the scope and duration of the pandemic and its impact on our business and the markets in which we operate remain unpredictable. The Company has implemented extensive business contingency plans across its global organization and network of third parties through which the Company conducts its business which helps limit some of the impact of the COVID-19 pandemic but does not completely prevent or avoid a negative impact on the business. In addition, COVID-19 has impacted and may further impact the global economy and capital markets, including by negatively impacting access to capital markets, foreign currency exchange rates, and interest rates, each of which may adversely impact our business and liquidity.

The extent to which the COVID-19 pandemic will negatively affect the Company's operations and financial position will depend on future developments that remain uncertain and cannot be predicted with precision. For example, including, without limitation, the pandemic could cause:

- Continued fluctuations in our operational results, revenues, and cash flows which may negatively impact our stock price;
 - Impact on our operations and sales including but not limited to delays in orders, ability to market, sell, deliver and service our products;
- Reductions in demand for our products and services due to the impact of COVID-19 on hospitals and customers such as continued or future
 postponement or cancellations of procedures, hospital postponement or cancellation of capital purchases, or elimination of services;
- Disruption to manufacturing operations and distribution supply chains;
- Increased challenges or restraints in obtaining necessary products or components from our suppliers and vendors;
- Reduction or interruption to our manufacturing processes which could have a material adverse effect on our business;
- Local and/or global economic instability and inflation and recessions, which may result in hospitals and customers reducing capital spending and could materially affect our business, including but not limited to our future access to capital, and negatively impact the value of our stock;
- Continued limitations on our operations due to restrictions associated with "shelter in place" orders and travel restrictions;
- Distraction of management time and focus;
- Increased risk that insurance coverage will not provide protection for all of the COVID-19-related disruption;
- Continued and/or increased risks related to the health and safety of our employees (and retention issues), volatility of foreign currency exchange
 rates, and risk of cybersecurity attacks and breaches;
- Possible liquidity constraints and credit impact;

- · Delays in obtaining regulatory clearances, approval to market products, quality inspections, or delays to clinical trial activity;
- Delays in coverage decisions by private and public health insurers and foreign governmental health systems;
- Delays in the completion of supportive clinical studies for payer coverage decisions or clinical and economic decision makers due to slowed study enrollments;
- Delays to acquisition plans, increased risks to the operations and financial condition of newly acquired businesses, and increased costs or delays to
 integration of newly acquired businesses;
- The impact of any reprioritization of capital allocations on our ability to achieve our strategic objectives over the medium and long-term; and
- Write downs or impairments of investments in third parties, goodwill or intangible assets from recently acquired businesses, accounts receivable, or other assets.

As the situation surrounding the COVID-19 pandemic remains fluid, it is difficult to predict, with any certainty, the duration and extent of its impact which depends on future developments that cannot be accurately predicted at this time, such as the severity and transmission rate of the virus (including any variant strains), the extent and effectiveness of containment actions including the effectiveness of the vaccine against future variants and the availability of new antiviral medicines for the treatment of COVID-19, and the impact of these and other factors on our employees, customers, suppliers, distributors and other service providers. If COVID-19, or a variant strain, continues to spread and escalate domestically or internationally, or if governments impose additional measures intended to mitigate the spread and related effects of the pandemic, the risks described above could be elevated significantly. Should that occur, and the COVID-19 pandemic persist for a prolonged time, the above factors and others that are currently unknown could have a material adverse impact on our business, results of operations, financial conditions and prospects and could elevate known risks described in this Item 1A. Risk Factors. Information pertaining to the potential impact of the COVID-19 pandemic and associated economic disruptions, and the actual operational and financial impacts that we have experienced to date can be found in Management's Discussion and Analysis of Financial Position and Results of Operations.

RISKS RELATING TO OUR BUSINESS

Our operating results may fluctuate.

Our operating results, including components of operating results such as gross margin and cost of product sales, may fluctuate from time to time, and such fluctuations could affect our stock price. Our operating results have fluctuated in the past and can be expected to do so from time to time in the future. Some of the factors that may cause these fluctuations include:

- risks related to COVID-19;
- economic conditions worldwide, which could affect the ability of hospitals and other customers to purchase our products and could result in a
 reduction in elective and non-reimbursed operative procedures;
- the impact of acquisitions, our ability to integrate acquisitions, and our restructuring activities including portfolio rationalization, divestitures and product lifecycle management;
- expenditures for major initiatives, including acquired businesses and integrations thereof and restructuring;
- the timing of significant customer orders, which tend to increase in the fourth quarter coinciding with the end of budget cycles;
- increased competition for a wide range of customers across all our product lines in the markets our products are sold;
- market acceptance of our existing products, as well as products in development;
- retention of current employees and recruiting of new employees in light of market competition for talent and relevant skills;
- the timing of regulatory approvals as well as changes in country-specific regulatory requirements;
- changes in the exchange rates between the U.S. dollar and foreign currencies of countries in which we do business;
- changes in the variable interest rates of our debt instruments which could impact debt service requirements;
- potential backorders, lost sales and expenses incurred in connection with product recalls or field corrective actions;
- disruption of our operations and sales resulting from extreme weather conditions or natural disasters that damage our manufacturing, distribution, or infrastructure of those facilities, or the suppliers and service providers for those facilities;
- our ability to manufacture and ship our products efficiently or in sufficient quantities to meet sales demands;
- changes in the cost or decreases in the supply of raw materials and services, including sterilization, energy, steel and honey;
- the timing of our research and development expenditures;
- reimbursement for our products by third-party payors such as Medicare, Medicaid, private and public health insurers and foreign governmental health systems;
- the ability to maintain existing distribution rights to and from certain third parties;
- the ability to maintain business if or when we opt to convert such business from distributors to a direct sales model;



- the ability of our commercial sales representatives to obtain sales targets in a reasonable time frame;
- the impact of changes to our sales organization, continued channel expansion, including increased specialization;
- peer-reviewed publications discussing the clinical effectiveness of the products we sell;
- inspections of our manufacturing facilities for compliance with Quality System Regulations (Good Manufacturing Practices) which could result in Form 483 observations, warning letters, injunctions or other adverse findings from the FDA or from equivalent regulatory bodies, and corrective actions, procedural changes and other actions that we determine are necessary or appropriate to address the results of those inspections, any of which may affect production and our ability to supply our customers with our products;
- changes in regulations or guidelines that impact the sales and marketing practices for products that we sell;
- the increased regulatory scrutiny of certain of our products, including products which we manufacture for others, could result in removal from the market or involve field corrective actions that could affect the marketability of our products;
- enforcement or defense of intellectual property rights;
- changes in tax laws, or their interpretations; and
- the impact of goodwill and intangible asset impairment charges if future operating results of the acquired businesses are significantly less than the results anticipated at the time of the acquisitions.

The industry and market segments in which we operate are highly competitive, and we may be unable to compete effectively with other companies.

There is intense competition among medical device companies. We compete with established medical technology companies in many of our product areas. Competition also comes from early-stage companies, universities, research institutions and other non-profit entities. In certain cases, our products compete primarily against medical practices that treat a condition without using a device or any particular product, such as the medical practices that use autograft tissue instead of our dermal regeneration products, duraplasty products and nerve repair products, or that use other technologies that cost less than our products. Many of our competitors have access to greater financial, technical, research and development, marketing, manufacturing, sales, distribution, administrative, consulting and other resources than we do. Our competitors may be more effective at developing commercial products. They may be able to gain market share by offering lower-cost products or products that enjoy better reimbursement from third-party payors and foreign governmental health systems.

Our competitive position depends on our ability to achieve market acceptance for our products, develop new products, implement production and marketing plans, secure regulatory approval for products under development, demonstrate clinical and economic effectiveness, obtain and maintain reimbursement coverage and funding under third-party payors and foreign governmental health systems, obtain patent protection and produce products consistently in sufficient quantities to meet demand. We may need to develop new applications for our products to remain competitive. Technological advances by one or more of our current or future competitors or their achievement of superior reimbursement from third-party payors and foreign governmental health systems could render our present or future products obsolete or uneconomical. Our future success will depend upon our ability to compete effectively against current technology as well as to respond effectively to technological advances, changes in customers' requirements or in payor or regulatory evidence requirements. Additionally, purchasing decisions of our customers may be based on clinical evidence or comparative effectiveness studies and, because of our vast array of products, we might not be able to fund the studies necessary to gain entry or maintain our position or provide the required information to compete effectively. Other companies may have more resources available to fund such studies. For example, competitors have launched and are developing products to compete with our dural repair products, regenerative skin, neuro critical care monitors and ultrasonic tissue ablation devices, among others. In the current environment of managed care, consolidation among health care providers, increased competition, and declining reimbursement rates, we have been increasingly required to compete on the basis of price. Competitive pressures could adversely affect our profitability. Given these factors, we cannot guarantee that we will be able to compete.

Changes in the healthcare industry may require us to decrease the selling price for our products, may reduce the size of the market for our products, or may eliminate a market, any of which could have a negative impact on our financial performance.

Trends toward managed care, healthcare cost containment and other changes in government and private sector initiatives in the U.S. and other countries in which we do business are placing increased emphasis on the delivery of more cost-effective medical therapies that could adversely affect the sale and/or the prices of our products. For example:

third-party payors of hospital services and hospital outpatient services, including Medicare, Medicaid, private and public health insurers and foreign
governmental health systems, annually revise their payment methodologies, which can result in stricter standards for reimbursement of hospital
charges for certain medical procedures or the elimination of reimbursement;



- several foreign countries have implemented reforms of their respective healthcare sectors in an effort to reduce healthcare spending, including
 restricting funding to only those medical technologies and procedures with proven effectiveness, and increasing patient co-payments. Governmental
 health systems have revised and continue to consider revisions of healthcare budgets, which could result in stricter standards for implementing
 certain medical procedures, increased scrutiny of medical devices, and downward pricing pressure;
- Medicare, Medicaid, private and public health insurer and foreign governmental cutbacks could create downward pricing pressure on our products;
- in the U.S., Medicare and Medicaid coverage as well as commercial payor coverage determinations could reduce or eliminate reimbursement or coverage for certain of our wound matrix, amniotic, surgical reconstruction and advanced wound dressing products as well as other products in most regions, negatively affecting our market for these products, and future determinations could reduce or eliminate reimbursement or coverage for these products in other regions and could reduce or eliminate reimbursement or coverage for other products;
- there has been a consolidation among healthcare facilities and purchasers of medical devices in the U.S., some of whom prefer to limit the number of suppliers from whom they purchase medical products, and these entities may decide to stop purchasing our products or demand discounts on our prices;
- in the U.S., we are party to contracts with group purchasing organizations, which negotiate pricing for many member hospitals, require us to discount our prices for certain of our products and limit our ability to raise prices for certain of our products, particularly surgical instruments;
- there is economic pressure to contain healthcare costs in domestic and international markets, and, regardless of the consolidation discussed above, providers generally are exploring ways to cut costs by eliminating purchases or driving reductions in the prices that they pay for medical devices, or increasing clinical or economic evidence thresholds for product formularies;
- there are proposed and existing laws, regulations and industry policies in domestic and international markets regulating the sales and marketing
 practices and the pricing and profitability of companies in the healthcare industry;
- proposed laws or regulations may permit hospitals to provide financial incentives to doctors for reducing hospital costs, will award physician efficiency, and will encourage partnerships with healthcare service and goods providers to reduce prices; and
- there have been initiatives by third-party payors and foreign governmental health systems to challenge the prices charged for medical products that could affect our ability to sell products on a competitive basis.

Any and all of the above factors could materially and adversely affect our levels of revenue and our profitability.

Our current strategy involves growth through acquisitions, which requires us to incur substantial costs and potential liabilities for which we may never realize the anticipated benefits, and also requires us to successfully integrate acquired businesses into our business operations in order to avoid our business being materially and adversely affected.

In addition to internally generated growth, our current strategy involves growth through acquisitions. Between January 1, 2019 and December 31, 2021, we have acquired 3 businesses at a total cost of approximately \$404.3 million which amount includes our acquisition of ACell, Inc. in January 2021 for \$306.9 million. This acquisition added products to our complex wound management product portfolio and provides additional growth opportunities for our TT segment.

We may be unable to continue to implement our growth strategy and it may ultimately be unsuccessful. A significant portion of our growth in revenues has resulted from, and is expected to continue to result from, the acquisition of businesses or products complementary to our own. We engage in evaluations of potential acquisitions and are in various stages of discussion regarding possible acquisitions, certain of which, if consummated, could be significant to us. Any new acquisition could result in material transaction expenses, increased operating, amortization and interest expenses, and possible in-process research and development charges for acquisitions that do not meet the definition of a "business," any of which could have a material, adverse effect on our operating results. Certain businesses that we acquire may not have adequate financial, disclosure, regulatory, quality or other compliance controls at the time we acquire them and could require significant expenditures to address those controls or subject us to increased risk. As we grow by acquisition, we must manage and integrate the new businesses to bring them into our systems for financial, disclosure, compliance, regulatory and quality control, realize economies of scale, and control costs. Failure to integrate acquired businesses and operations (including acquired employees and systems), retain key customers and suppliers of any acquired business or manage the cost of providing our products or price our products appropriately could preclude realization of the full benefits that we expect from there transactions. Our failure to meet the challenges involved in integrating the business in order to realize the anticipated benefits of the acquisitions could cause an interruption of, or loss of momentum in, our activities and could materially and adversely affect our results of operations. In addition, acquisitions involve other risks, including diversion of management resources otherwise available for the running of our business and the development of our business as well as risks associated with entering markets in which our marketing teams and sales force has limited experience or where experienced distribution alliances are not available. Some acquisitions may include the need for ongoing product development to occur consistent with time sensitive milestones in order for the Company to achieve its commercial projections for the acquisition. Our future profitability will depend in part upon our



ability to develop our resources to adapt to these new products or business areas and to identify and enter into or maintain satisfactory distribution networks. As a result of our acquisitions of other healthcare businesses, we may be subject to the risk of unanticipated business uncertainties, regulatory and other compliance matters or legal liabilities relating to those acquired businesses for which the sellers of the acquired businesses may not indemnify us, for which we may not be able to obtain insurance (or adequate insurance), or for which the indemnification may not be sufficient to cover the ultimate liabilities. We may not be able to identify suitable acquisition candidates in the future, obtain acceptable financing or consummate any future acquisitions. Certain potential acquisitions are subject to antitrust and competition laws, which laws could impact our ability to pursue strategic acquisitions and could result in mandated divestitures. If we are unsuccessful in our acquisition strategy, we may be unable to meet our financial targets and our financial performance could be materially and adversely affected.

These risks may be heightened in cases where the majority of the former businesses' operations, employees and customers are located outside the U.S. Any one or all of these factors could increase operating costs or lower anticipated financial performance. Many of these factors are also outside of our control. In addition, dispositions of certain key products, technologies and other rights, including pursuant to conditions imposed on us to obtain regulatory approvals, may affect our business operations.

Even if the operations of the businesses are integrated successfully, we may not realize the full benefits of the acquisition, including the synergies, cost savings or sales or growth opportunities that we expect. These benefits may not be achieved within the anticipated time frame, or at all. Additional unanticipated costs could be incurred in the integration of the businesses. All of these factors could cause a reduction to our earnings per share, decrease or delay the expected accretive effect of the transaction, and negatively impact the price of our common stock.

Our future financial results could be adversely affected by impairments or other charges.

We are required to test both goodwill and indefinite-lived intangible assets for impairment on an annual basis based upon a fair value approach, rather than amortizing them over time. We are also required to test goodwill and indefinite-lived intangible assets for impairment between annual tests if an event occurs such as a significant decline in revenues or cash flows for certain products, or the discount rates used in the calculations of discounted cash flows change significantly, or circumstances change that would more likely than not reduce our enterprise fair value below its book value. If such a decline, rate change or circumstance were to materialize, we may record an impairment of these intangible assets that could be material to the financial statements. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Estimates" of this report.

The guidance on long-lived assets requires that we assess the impairment of our long-lived assets, including finite-lived intangible assets, whenever events or changes in circumstances indicate that the carrying value may not be recoverable as measured by the sum of the expected future undiscounted cash flows.

Also, Company decisions and other economic factors relating to our trade names may occur over time. For instance, we may discontinue certain products in the future as we continue to assess the profitability of our product lines. As a result, we may need to record impairment charges or accelerate amortization on certain trade names or technology-related intangible assets in the future.

The value of a medical device business is often volatile, and the assumptions underlying our estimates made in connection with our assessments under the guidance may change as a result of that volatility or other factors outside our control and may result in impairment charges. The amount of any such impairment charges could be significant and have a material, adverse effect on our reported financial results for the period in which the charge is taken and could have an adverse effect on the market price of our securities, including the notes and the common stock into which they may be converted.

Lack of market acceptance for our products or market preference for technologies that compete with our products could reduce our revenues and profitability.

Market acceptance of our products depends on many factors, including our ability to convince prospective customers that our technology is an attractive alternative to other technologies, to manufacture products in sufficient quantities and at acceptable costs, and to supply and service sufficient quantities of our products directly or through our distribution alliances. For example, the use of autograft tissue is a well-established means for repairing the dermis, and it competes for acceptance in the market with our collagen-based wound care products. In addition, unfavorable payment amounts or adverse coverage determinations of third-party payors, including Medicare, Medicaid, private and public health insurers, and foreign governmental health systems, regarding our products or third-party determinations that favor a competitor's product over ours, could harm acceptance or continued use of our products. For example, greater market acceptance of our wound graft products may ultimately depend on our ability to demonstrate that coverage and reimbursement are available and favorable, or because they are an attractive, cost-effective alternative to other treatment options.



If there are negative events in the healthcare industry, whether real or perceived, there could be a negative impact on the industry as a whole. The industry is subject to rapid and continuous change arising from, among other things, consolidation, technological improvements, the pressure on governments, third-party payors and providers to reduce healthcare costs, and healthcare reform legislation and initiatives domestically and internationally. In addition, our future success depends, in part, on our ability to license and develop additional products. Even if we determine that a product candidate has medical benefits, the cost of commercializing, either through internal development or payments associated with licensing arrangements, could be too high to justify development and we could ultimately face competitors with more effective products and better reimbursement status that cost less and are ready for commercial introduction before our products. If we are unable to develop additional commercially viable products, our future prospects could be materially and adversely affected.

One or more of these factors could vary unpredictably, and such variations could have a material, adverse effect on our competitive position. We may not be able to adjust our contemplated plan of development to meet changing market demands.

It could be difficult to replace some of our suppliers.

Outside vendors, some of whom are sole-source suppliers, provide key components and raw materials used in the manufacture of our products. Although we believe that alternative sources for many of these components and raw materials are available, any interruption in supply of a limited or sole-source component or raw material could harm our ability to manufacture our products until a new or alternative source of supply is identified and qualified. In addition, an uncorrected defect or supplier's variation in a component or raw material, either unknown to us or incompatible with our manufacturing process, could harm our ability to manufacture products. We may not be able to find a sufficient alternative supplier in a reasonable time period, or on commercially reasonable terms, if at all, and our ability to produce and supply our products could be impaired. We believe that these factors are most likely to affect the following products that we sell:

- our collagen-based products, such as the Integra Dermal Regeneration Template and wound matrix products, the DuraGen[®] family of products, our Absorbable Collagen Sponges, PriMatrix[®] and SurgiMend[®] products;
- our products made from silicone, such as our neurosurgical shunts and drainage systems and hemodynamic shunts;
- products which use many different specialty parts, electrical components, or chemicals from numerous suppliers, such as our intracranial monitors, shunts, catheters, tissue ablation, and headlights;
- products which are amniotic tissue-based
- products which are porcine tissue-based;
- products that use medical grade leptospermum honey, such as our Medihoney products; and
- our TCC-EZ[®] total contact cast system products.

The availability of amniotic tissue-based products depends upon, among other factors, the availability of tissue from human donors. Access to donated amniotic tissue could also be adversely impacted by regulatory changes or evolving public perceptions of the donor process.

Additionally, many of our products require sterilization by third-party suppliers. To the extent these suppliers are unable to provide sterilization services, whether due to lack of capacity, regulatory requirements, environmental concerns such as those relating to ethylene oxide or otherwise, we may be unable to transition sterilization to other suppliers in a timely or cost effective manner, or at all, which could have an adverse impact on our operating results.

Our supply chain and our cost of goods also may be negatively impacted by unanticipated price increases due to factors such as inflation, including wage inflation, or to supply restrictions beyond our control or the control of our suppliers.

While it is our policy to maintain sufficient inventory of components so that our production will not be significantly disrupted even if a particular component or material is not available for a period of time, we remain at risk that we will not be able to qualify new components or materials quickly enough to prevent a disruption if one or more of our suppliers ceases production of important components or materials.

We may experience difficulties, delays, performance impact or unexpected costs from consolidation of facilities and transfer of manufacturing facilities.

In recent years, we consolidated several facilities or transferred manufacturing operations from third parties to our existing internal manufacturing facilities and may further undertake similar consolidations or transferrs in the future in order to improve our cost structure, achieve increased operating efficiencies, and improve our competitive standing or results of operations and/or to address unfavorable economic conditions. As part of these initiatives, we may also lose favorable tax incentives or not be able to renew leases on acceptable terms. We may further reduce staff, make changes to certain capital projects, close certain production operations and abandon leases for certain facilities that will not be used in our operations. In conjunction with any actions, we will continue to make significant investments and build the framework for our future growth. We may not realize, in full or in part, the anticipated benefits and savings from these efforts because of unforeseen difficulties, delays, implementation issues or unexpected costs. If we are unable to achieve or maintain all of the resulting savings or benefits to our business or other unforeseen events occur, our business and results of operations may be adversely affected.

We may have significant product liability exposure and our insurance may not cover all potential claims.

We are exposed to product liability and other claims if our technologies or products are alleged to have caused harm. We may not be able to obtain insurance for the potential liability on acceptable terms with adequate coverage or at reasonable costs. Any potential product liability claims could exceed the amount of our insurance coverage or may be excluded from coverage under the terms of the policy. Our insurance may not be renewed at a cost and level of coverage comparable to that then in effect.

Economic and political instability around the world could adversely affect the ability of hospitals, other customers, suppliers and distributors to access funds or otherwise have available liquidity, which could reduce orders for our products or interrupt our production or distribution or result in a reduction in elective and non-reimbursed operative procedures.

Economic and political instability around the world could adversely affect the ability of hospitals and other customers to access funds to enable them to fund their operating and capital budgets. As a result, hospitals and other customers could reduce budgets or put all or part of their budgets on hold or close their operations, which could have a negative effect on our sales, particularly the sales of capital equipment such as our ultrasonic surgical aspirators, neuromonitors and stereotactic products, or result in a reduction in elective and non-reimbursed procedures. The occurrence of those economic conditions could make it more difficult for us to accurately forecast and plan our future business activities and depending on their severity, could have a material, adverse effect on our business, financial condition and results of operations.

Our private-label product lines depend significantly on key relationships with third parties, which we could be unable to establish and maintain.

Our private-label business depends in part on entering into and maintaining long-term supply agreements with third parties. The third parties with whom we have entered into agreements might terminate these agreements for a variety of reasons, including developing other sources for the products that we supply. Termination of our most important relationships could adversely affect our expectations for the growth of private-label products.

RISKS RELATED TO OUR REGULATORY ENVIRONMENT

The adoption of healthcare reform in the U.S. and initiatives sponsored by other governments may adversely affect our business, results of operations and/or financial condition.

Our operations may be substantially affected by potential fundamental changes in the global political, economic and regulatory landscape of the healthcare industry. Government and private sector initiatives to limit the growth of healthcare costs are continuing in the U.S., and in many other countries in which we do business, causing the marketplace to put increased emphasis on the delivery of more cost-effective treatments. These initiatives include price regulation, competitive pricing, coverage and payment policies, comparative effectiveness of therapies, technology assessments and managed-care arrangements. The adoption of some or all of these initiatives could have a material, adverse effect on our financial condition and results of operations.

In the United States, the Patient Protection and Affordable Care Act (the "ACA"), signed into law in March 2010, includes several provisions that impact our businesses in the U.S. The ACA includes provisions that, among other things, reduce and/or limit Medicare reimbursement, require all individuals to have health insurance (with limited exceptions), and require detailed disclosure of transfers of value made to healthcare professionals. Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted, including The Budget Control Act of 2011, The American Taxpayer Relief Act of 2012 and Medicare Access and CHIP Reauthorization Act of 2015, which, among other things, have reduced payments under Medicare and Medicaid to certain healthcare providers or altered the formula by which Medicare makes annual payment adjustments.

We cannot predict what impact ongoing uncertainty regarding federal and state health reform proposals, including the implementation or repeal of the ACA, judicial review and interpretation of the ACA and other healthcare laws, instability of the insurance markets, changes in the U.S. administration and policy, an expansion in government's role in and/or additional proposals and/or changes to the U.S. health care system or its legislation will have on our customer's purchasing decisions and/or reimbursement which could have a material adverse effect on our business. We expect that additional state and federal health care reform measures will be adopted in the future, including those initiatives affecting coverage and reimbursement for our products, any of which could limit the amounts that federal and state governments will pay for health care products and services, which could adversely affect the growth of the market for our products or demand for our products, or result in additional pricing pressures. We cannot predict the ultimate content, timing or effect of any healthcare reform legislation or the impact of potential legislation on us. We continue to monitor the implementation of such legislation and, to the extent new market or industry trends or new governmental programs evolve, we will consider implementing or implement programs in response.



We are subject to stringent domestic and foreign medical device regulations and oversight and any adverse action may adversely affect our ability to compete in the marketplace and our financial condition and business operations.

Our products, development activities and manufacturing processes are subject to extensive and rigorous regulation by numerous government agencies, including the FDA and comparable foreign agencies, as discussed in "Part 1, Item 1. Business – Government Regulation." To varying degrees, each of these agencies monitors and enforces our compliance with laws and regulations governing the development, testing, manufacturing, labeling, marketing and distribution of our medical devices. We are also subject to regulations that may apply to certain of our products that are Drug/Device Combination products or are considered to be subject to pharmaceutical regulations outside the U.S. The process of obtaining marketing approval or clearance from the FDA and comparable foreign regulatory agencies for new products, or for enhancements or modifications to existing products could be costly, time consuming and burdensome, lead to failed clinical trials or weakened clinical evidence, involve modifications, repairs or replacements of our products and result in limitations on the indicated use of our products, which may negatively impact our ability to market our products and services, result in delays or prevent full commercial regulations govern the approval, initiation, conduct, monitoring, documentation and reporting of clinical studies to regulatory agencies in the countries or regions in which they are conducted. Failure to comply, could subject us to significant enforcement actions, and sanctions, including halting the study, rejection of data generated in the study, seizure of investigational devices or data, sanctions against investigators, civil or criminal penalties, and other actions, to secure reimbursement or demonstrate other requirements. We cannot assure you that access to clinical investigators, sites and subjects, documentation and data will be available on the terms and timeframes necessary.

We are subject to extensive complex regulatory requirements by domestic and foreign government agencies and any failure to comply with our ongoing responsibilities under their applicable laws and regulations could result in a material adverse impact on our business. Failure to comply with applicable regulations could result in future product recalls, injunctions preventing the shipment of products or other enforcement actions that could have a material adverse effect on our business.

We are also subject to the European Medical Device Regulation, which was adopted by the European Union ("EU") as a common legal framework for all EU member states. The implementation for Class I products occurred on May 26, 2021 and the EUDAMED Database is scheduled for May 26, 2022. Under this regulation, companies that wish to manufacture and distribute medical devices in EU member states must meet certain quality system, and safety requirements as well as ongoing product monitoring responsibilities. Companies must also obtain a "CE" marking (i.e., a mandatory conformity marking for certain products sold within the European Economic Area) for their products. Complying with the requirements of these regulations may require us to incur significant expenditures. Various penalties exist for non-compliance with the laws implementing the European Medical Device Regulations which if incurred, could have a material adverse impact on our business, results of operations and cash flows.

In addition, we are subject to laws and regulations that govern the means by which companies in the healthcare industry may market their products to healthcare professionals and may compete by discounting the prices of their products, including for example, the federal Anti-Kickback Statute, the federal False Claims Act, the federal Health Insurance Portability and Accountability Act of 1996, state law equivalents to these federal laws that are meant to protect against fraud and abuse and analogous laws in foreign countries. Violations of these laws are punishable by criminal and civil sanctions, including, but not limited to, in some instances civil and criminal penalties, damages, fines, exclusion from participation in federal and state healthcare programs, including Medicare and Medicaid. Although we exercise care in structuring our sales and marketing practices and customer discount arrangements to comply with those laws and regulations, we cannot assure that:

- government officials charged with responsibility for enforcing those laws will not assert that our sales and marketing practices or customer discount
 arrangements are in violation of those laws or regulations; or
- government regulators or courts will interpret those laws or regulations in a manner consistent with our interpretation.

We have in place policies and procedures for compliance that we believe are at least as stringent as those set forth in the AdvaMed Code of Ethics which was developed by AdvaMed, a trade association that represents the medical device industry, and which is intended to represent best practices with respect to medical device companies' interactions with healthcare providers. We regularly train our sales and marketing personnel on our policies regarding sales and marketing practices. Pursuant to the AdvaMed Code, we have certified our adoption of the AdvaMed Code. The sales and marketing practices of our industry have been the subject of increased scrutiny from federal and state government agencies, and we believe that this trend will continue. Various hospital organizations, medical societies and trade associations are establishing their own practices that may require detailed disclosures of relationships between healthcare professionals and medical device companies or ban or restrict certain marketing and sales practices such as gifts and business meals. Since these laws, regulations and ultimate enforcement continue to evolve, we cannot predict with certainty, what, if any, impact, changes to them may have on our business or our customers.



Outside of the U.S. we are subject to privacy and data security regulations at the international, national and regional level, as well as on an industry specific basis. For example, in Europe, we are subject to the EU General Data Protection Regulation ("GDPR") which is related to the collection, processing, storage, transfer and use of personal data. In the U.S., we are subject to the California Consumer Privacy Act of 2018 ("CCPA") and other similar laws in the United States, at both the federal and state level. Noncompliance with GDPR could trigger fines of up to 4% of global annual revenues. In addition, we are subject to the new China Personal Information Protection Law that went into effect November 1, 2021 which focuses on protecting personal information and cross border transfers of the information. Compliance with these requirements, either individually or in the aggregate, may require changes in business practices added complexity and additional management oversight. They also may complicate our clinical research activities, as well as product offerings that involve transmission or use of clinical data. Non-compliance may result in proceedings against us by governmental or other entities and/or significant fines which could negatively impact our reputation and adversely affect our business.

Should we delay or fail to comply with one or more of the regulatory requirements we could have reduced sales, increased costs, delays to new product introductions, enhancements or our strategic plans, or harm to our reputation or competitiveness, which could have a material adverse effect on our business and financial results.

Certain of our products contain materials derived from animal sources and may become subject to additional regulation.

Certain of our products are derived from bovine or porcine tissue sources. As a result, we may experience difficulties in processing and producing our bovine and porcine tissue products at scale, including problems related to yields, quality control and assurance, tissue availability, adequacy of control policies and procedures and availability of skilled personnel.

With respect to bovine, among other products, our dermal regeneration products, duraplasty products, wound care products, bone void fillers, nerve and tendon repair products and certain other products, contain material derived from bovine tissue. In 2021, approximately 43.3% of our revenues derived from products containing material derived from bovine tissue. Products that contain materials derived from animal sources, including food, pharmaceuticals and medical devices, are subject to scrutiny in the media and by regulatory authorities. Regulatory authorities are concerned about the potential for the transmission of disease from animals to humans via those materials. This public scrutiny has been particularly acute in Japan and Western Europe with respect to products derived from animal sources, because of concern that materials infected with the agent that causes bovine spongiform encephalopathy, otherwise known as BSE or mad cow disease, may, if ingested or implanted, cause a variant of the human Creutzfeldt-Jakob Disease, an ultimately fatal disease with no known cure. The World Organization for Animal Health recognizes the U.S. as having a negligible risk for BSE, which is the highest status available.

We take care to provide that our products are safe and free of agents that can cause disease. In particular, we qualified a source of collagen from a country outside the U.S. that is considered BSE/TSE-free. The World Health Organization classifies different types of bovine tissue for relative risk of BSE transmission. Deep flexor tendon and bovine fetal skin, which are used in our products, are in the lowest-risk categories for BSE transmission and are therefore considered to have a negligible risk of containing the agent that causes BSE (an improperly folded protein known as a prion). Nevertheless, products that contain materials derived from animals, including our products, could become subject to additional regulation, or even be banned in certain countries, because of concern over the potential for the transmission of prions. Significant new regulations, or a ban of our products, could have a material, adverse effect on our current business or our ability to expand our business.

Certain countries, such as Japan, China, Taiwan and Argentina, have issued regulations that require our collagen products be sourced from countries where no cases of BSE have occurred, and the EU has requested that our dural replacement products and other products that are used in neurological tissue be sourced from a country where no cases of BSE have occurred. Currently, we source bovine fetal hides from the U.S. and purchase tendon from the U.S. and New Zealand. New Zealand has never had a case of BSE. We received approval in the U.S., the EU, Japan, Taiwan, China, Argentina as well as other countries for the use of New Zealand-sourced tendon in the manufacturing of our products. If we cannot continue to use or qualify a source of tendon from New Zealand or another country that has never had a case of BSE, we could be prohibited from selling our collagen products in certain countries.

We are subject to current and potential future requirements relating to protection of the environment, such as hazardous materials regulations, which may impose significant compliance or other costs on us.

Certain of our processes in manufacturing and research and development involve the controlled use of certain hazardous materials. In addition, we own and/or lease a number of facilities at which hazardous materials have been used in the past. Finally, we have acquired various companies that historically have used certain hazardous materials and that have owned and/or leased facilities at which hazardous materials have been used. For all of these reasons, we are subject to federal, state, foreign, and local laws and regulations governing the use, manufacture, storage, transportation, handling, treatment, remediation, and disposal of hazardous materials and certain waste products ("Environmental, Health, Safety and Transportation Laws"). Although we believe that our procedures for handling, transporting, and disposing of hazardous materials comply with the Environmental, Health, Safety and Transportation Laws, such laws may be amended in ways that increase our cost of compliance, perhaps materially.

Furthermore, the potential risk of accidental contamination or injury from these materials cannot be eliminated, and there is also a risk that such contamination previously has occurred in connection with one of our facilities or in connection with one of the companies we have purchased. In the event of such an accident or contamination, we could be held liable for any damages that result and any related liability could exceed the limits or fall outside the coverage of our insurance and could exceed our resources. We may not be able to maintain insurance on acceptable terms or at all.

Our business and operations are subject to risks related to climate change.

The long-term effects of global climate change present both physical risks (from the increased frequency of extreme weather conditions or natural disasters) and transition risks (from regulatory requirements or technology changes). Such extreme weather conditions could pose physical risks to our facilities and disrupt operation of our supply chain and may impact operational costs. Concern over global climate change could result in new legal or regulatory requirements designed to mitigate the effects of climate change on the environment. If such laws or regulations are more stringent than current legal or regulatory requirements, we may experience increased compliance burdens and costs to meet the regulatory obligations and such measures may interrupt our operations or the operations of our suppliers, potentially leading to higher costs, and therefore negatively impact our results of operations.

We are subject to requirements relating to information technology which could adversely affect our business.

If we are unable to maintain reliable information technology systems and prevent disruptions, outages, or data breaches, we may suffer regulatory consequences in addition to business consequences. Our worldwide operations means that we are subject to laws and regulations, including data protection and cyber security laws and regulations, in many jurisdictions. The variety of U.S. and international privacy and cybersecurity laws and regulations impacting our operations are described in "Item 1. Business - Government Regulation - Other Factors - Data Privacy and Cybersecurity Laws and Regulations." We have programs to ensure compliance with such laws and regulations. However, there is no guarantee that we will avoid enforcement actions by governmental bodies. Enforcement actions may be costly and interrupt regular operations of our business. In addition, there has been a developing trend of civil lawsuits and class actions relating to breaches of consumer data held by large companies or incidents arising from other cyber-attacks. While Integra has not been named in any such suits, if a substantial breach or loss of data were to occur, we could become a target of such litigation.

RISKS RELATED TO TAX AND DEBT

We may have additional tax liabilities.

We are subject to income taxes in the U.S. and many foreign jurisdictions and are commonly audited by various tax authorities. In the ordinary course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. Significant judgment is required in determining our worldwide provision for income taxes. Although we believe that 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, adverse effect on our financial statements in the period or periods for which that determination is made.

Changes in tax laws or exposures to additional tax liabilities could negatively impact the Company's operating results.

We are subject to income taxes, as well as taxes that are not income-based, in both the U.S. and many foreign jurisdictions. Our future effective tax rate could be unfavorably affected by numerous factors including a change in, or the interpretation of, tax rules and regulations in the jurisdictions in which we operate (including changes in legislation currently being considered), a change in our geographic earnings mix, and/or to the jurisdictions in which we operate, or a change in the measurement of our deferred taxes.



Our leverage and debt service obligations could adversely affect our business.

Our leverage and debt service obligations could adversely affect our business. As of December 31, 2021, our total consolidated external debt was approximately \$1.6 billion (See Item 7 and Note 5,5 *Debt* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for a discussion of our consolidated external debt). We may also incur additional indebtedness in the future. Our substantial indebtedness could have material, adverse consequences, including:

- making it more difficult for us to satisfy our financial obligations;
- increasing our vulnerability to adverse economic, regulatory and industry conditions, and placing us at a disadvantage compared to our competitors that are less leveraged;
- limiting our ability to compete and our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate; and
- limiting our ability to borrow additional funds for working capital, capital expenditures, acquisitions and general corporate or other purposes.

Our debt service obligations will require us to use a portion of our operating cash flow to pay interest and principal on indebtedness instead of for other corporate purposes, including funding future expansion of our business, acquisitions, and ongoing capital expenditures, which could impede our growth. In addition, our ability to comply with, renegotiate or extend the Company's debt obligations will depend on our operating and financial performance, which in turn is subject to prevailing economic conditions and financial, business and other factors beyond our control. Any disruptions in our operations, the financial markets, or the overall economy, including as a result of COVID-19, may adversely affect the availability and cost of credit to us and/or our ability to comply with our existing obligations.

Changes in the calculation and or complete replacement of LIBOR could have an impact on our business.

The United Kingdom's Financial Conduct Authority ("FCA"), which regulates LIBOR, announced in July 2017 that it will no longer persuade or require banks to submit rates for LIBOR. On March 5, 2021, the ICE Benchmark Administration, which administers LIBOR, and the FCA announced that all LIBOR settings will either cease to be provided by any administrator, or no longer be representative immediately after December 31, 2021, for all non-U.S. dollar LIBOR settings and one-week and two-month U.S. dollar LIBOR settings, and immediately after June 30, 2023 for the remaining U.S. dollar LIBOR settings. We have multiple debt facilities which utilizes a variable rate equal to Eurodollar LIBOR rate as a component of our interest rate. This transition away from LIBOR as a common reference rate in the global financial market could have a material, adverse effect on our business. Management continues to monitor the status and discussions regarding LIBOR.

RISKS RELATED TO OUR INTELLECTUAL PROPERTY

Our intellectual property rights may not provide meaningful commercial protection for our products, potentially enabling third parties to use our technology or very similar technology and could reduce our ability to compete in the market.

To compete effectively, we depend, in part, on our ability to maintain the proprietary nature of our technologies and manufacturing processes, which includes the ability to obtain, protect and enforce patents on our technology and to protect our trade secrets. We own or have licensed patents that cover aspects of some of our product lines. Our patents, however, may not provide us with any significant competitive advantage. Others may challenge our patents and, as a result, our patents could be narrowed, invalidated or rendered unenforceable. Competitors may develop products similar to ours that our patents do not cover. In addition, the approval or rejection of patent applications may take several years and our current and future patent applications may not result in the issuance of patents in the U.S. or foreign countries.

Our competitive position depends, in part, upon unpatented trade secrets, which we may be unable to protect.

Our competitive position also depends upon unpatented trade secrets, which are difficult to protect. We cannot assure that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets, that our trade secrets will not be disclosed or that we can effectively protect our rights to unpatented trade secrets.

In an effort to protect our trade secrets, we require our employees, consultants and advisors to execute confidentiality and invention assignment agreements upon commencement of employment or consulting relationships with us. These agreements provide that, except in specified circumstances, all confidential information developed or made known to the individual during the course of their relationships with us must be kept confidential. We cannot assure, however, that these agreements will provide meaningful protection for our trade secrets or other proprietary information in the event of the unauthorized use or disclosure of confidential information.

Our success will depend partly on our ability to operate without infringing or misappropriating the proprietary rights of others.

We may be sued for infringing the intellectual property rights of others. In addition, we may find it necessary, if threatened, to initiate a lawsuit seeking a declaration from a court that we do not infringe the proprietary rights of others or that their rights are invalid or unenforceable. If we do not prevail in any litigation, in addition to any damages we might have to pay, we would be required to stop the infringing activity (which could include a cessation of selling the products in question) or obtain a license for the proprietary rights involved. Any required license may be unavailable to us on acceptable terms, if at all. In addition, some licenses may be nonexclusive and allow our competitors to access the same technology we license.

If we fail to obtain a required license or are unable to design our products so as not to infringe on the proprietary rights of others, we may be unable to sell some of our products, and this potential inability could have a material, adverse effect on our revenues and profitability.

We may be involved in lawsuits relating to our intellectual property rights and promotional practices, which may be expensive.

To protect or enforce our intellectual property rights, we may have to initiate or defend legal proceedings, such as infringement suits or opposition proceedings, against or by third parties. In addition, we may have to institute proceedings regarding our competitors' promotional practices or defend proceedings regarding our promotional practices. Legal proceedings are costly, and, even if we prevail, the cost of the legal proceedings could affect our profitability. In addition, litigation is time-consuming and could divert management's attention and resources away from our business. Moreover, in response to our claims against other parties, those parties could assert counterclaims against us.

RISKS RELATED TO GLOBAL OPERATIONS

If any of our facilities or those of our suppliers were damaged and/or our manufacturing or business processes interrupted, we could experience lost revenues and our business could be seriously harmed.

Damage to our manufacturing, distribution, development and/or research facilities because of fire, extreme weather conditions, natural disaster, power loss, communications failure, geopolitical disruption, unauthorized entry or other events, such as a flu or other health epidemic, such as COVID-19, could significantly disrupt our operations, the operations of suppliers and critical infrastructure and delay or prevent product manufacture and shipment during the time required to repair, rebuild or replace the damaged facilities. Certain of our manufacturing facilities are located in Puerto Rico, which in the past has experienced both severe earthquakes and other natural disasters.Climate change may increase both the frequency and severity of extreme weather conditions and natural disasters and, consequently, risks to our operations and growth. Although we maintain property damage and business interruption insurance coverage on these facilities, our insurance might not cover all losses under such circumstances, and we may not be able to renew or obtain such insurance in the future on acceptable terms with adequate coverage or at reasonable costs.

We are exposed to a variety of risks relating to our international sales and operations.

We generate significant revenues outside the U.S. in multiple foreign currencies, and in U.S. dollar-denominated transactions conducted with customers who generate revenue in currencies other than the U.S. dollar. For those foreign customers who purchase our products in U.S. dollars, currency fluctuations between the U.S. dollar and the currencies in which those customers do business may have a negative impact on the demand for our products in foreign countries where the U.S. dollar has increased in value compared to the local currency.

Since we have operations based outside the U.S. and we generate revenues and incur operating expenses in multiple foreign currencies, we experience currency exchange risk with respect to those foreign currency-denominated revenues and expenses. Our most significant currency exchange risk relates to transactions conducted in Australian dollars, British pounds, Canadian dollars, Chinese yuan, euros, Japanese yen, and Swiss francs.

We cannot predict the consolidated effects of exchange rate fluctuations upon our future operating results because of the number of currencies involved, the variability of currency exposure and the potential volatility of currency exchange rates. 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. For a description of our use of derivative financial instruments, see Note 6, *Derivative Instruments* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K).

Our international operations subject us to laws regarding sanctioned countries, entities and persons, customs, import-export, laws regarding transactions in foreign countries, the U.S. Foreign Corrupt Practices Act and local anti-bribery and other laws regarding interactions with healthcare professionals, and product registration requirements. Among other things, these laws restrict, and in some cases prevent, U.S. companies from directly or indirectly selling goods, technology or services to people or entities in certain countries. In addition, these laws require that we exercise care in structuring our sales and marketing practices and effecting product registrations in foreign countries.

The United Kingdom's ("UK") exit from the European Union on January 31, 2020, commonly referred to as Brexit, has caused, and may continue to cause uncertainty in the global political markets. It is possible that Brexit could, among other things, affect the legal and regulatory environments to which our business is subject, impose greater restrictions on imports and exports between the UK and the EU and other parties, and create economic and political uncertainty in the region.

From time to time, proposals are made to significantly change existing trade agreements and relationships between the U.S. and other countries. Owing to the complex relationships between the U.S. and such other countries, political, diplomatic, military, or other events could result in business disruptions, including increased regulatory enforcement against companies, tariffs, trade embargoes, and export restrictions. The imposition of such restrictions could increase the cost of the Company's products and the components and raw materials that go into making them, require the Company to change its operations and the products it offers and negatively impact consumer confidence and spending, all of which, both individually and in the aggregate, could materially and adversely affect our operations and financial results.

GENERAL RISK FACTORS

Cyber-attacks or other disruptions to our information technology systems could adversely affect our business.

We are increasingly dependent on sophisticated information technology for our infrastructure and to support business decisions. Our information systems 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 processing technology, evolving systems and regulatory standards, the increasing need to protect patient and customer information, and changing customer patterns. An experienced third party maintains the enterprise business system used to support our transaction processing, accounting and financial reporting, and supply chain and manufacturing processes. Any significant breakdown, intrusion, interruption, corruption, or destruction of these systems, as well as any data breaches, could have a material, adverse effect on our business.

Third parties may attempt to breach our systems and may obtain data relating to patients, proprietary or sensitive information. As a result of the COVID-19 pandemic, we may face increased cybersecurity risks due to our reliance on internet technology and the number of our employees who are working remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities. If we, or third parties on whom we rely, fail to maintain or protect our information systems and data integrity effectively, we could lose existing customers, have difficulty attracting new customers, suffer backlash from negative public relations, have regulatory sanctions or penalties imposed, have increases in operating expenses, incur expenses or lose revenues as a result of a data privacy breach, or suffer other adverse consequences.

We have programs, processes (including ongoing improvements) and technologies in place to prevent, detect, contain, respond to and mitigate security related threats and potential incidents. Because the techniques used to obtain unauthorized access or interrupt services change frequently and can be difficult to detect, anticipating, identifying or preventing these threats or mitigating them if and when they occur, may be challenging. We are also dependent on third party vendors to supply and/or support certain aspects of our information technology systems which may contain defects in design or manufacture or other problems that could result in system disruption or unexpectedly compromise the information security of our own systems. In addition, as we grow in part through new acquisitions we may face risks due to implementation, modification, or remediation of controls, procedures, and policies relating to data privacy and cybersecurity at the acquired business. We continue to consolidate and integrate the number of systems we operate, and to upgrade and expand our information system capabilities for stable and secure business operations.

ITEM 2. **PROPERTIES**

As of December 31, 2021, we lease approximately 166,991 square feet of space in Princeton, NJ, where we house our principal headquarters, sales operations, and support functions. This lease expires in 2035.



We have key manufacturing and research facilities located in California, Indiana, Maryland, Massachusetts, New Jersey, Ohio, Puerto Rico, Tennessee, Utah, Canada, China, France, Germany, Ireland and Switzerland. Our instrument procurement operations are located in Germany. Our primary distribution centers are located in Nevada, Ohio, Kentucky, Australia, Belgium, Canada, Japan and France. In addition, we lease several smaller facilities to support additional administrative, assembly, and distribution operations. Third parties own and operate the facilities in Nevada, Kentucky, Japan and Belgium. We own facilities in Biot, France, Saint Aubin Le Monial, France, Rietheim-Weilheim, Germany and Ohio and we lease all of our other facilities. We also have repair centers in Ohio, Australia, France, Japan, China and Germany, and field service presence in Canada, Dubai, India, Italy, Netherlands, Singapore, Thailand and United Kingdom.

Our manufacturing facilities are registered with the FDA. Our facilities are subject to FDA inspection to ensure compliance with Quality System regulations. For further information regarding the status of FDA inspections, see the "Government Regulation" and "Management's Discussion and Analysis of Financial Condition and Results of Operations - Update on Remediation Activities" sections in this Form 10-K.

ITEM 3. LEGAL PROCEEDINGS

Information pertaining to legal proceedings can be found in Note 15. Commitment and Contingencies of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K).

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information, Holders and Dividends

Our common stock trades on The NASDAQ Global Select Market under the symbol "IART." The number of stockholders of record as of February 22, 2022 was approximately 777, which includes stockholders whose shares were held in nominee name.

Sales of Unregistered Securities

There were no sales of unregistered securities during the years ended December 31, 2021, 2020 or 2019.

Sale of Registered Securities

There were no sales of registered securities during the years ended December 31, 2021, 2020 or 2019.

Issuer Purchases of Equity Securities

On December 7, 2020, the Board of Directors authorized the Company to repurchase up to \$225 million of the Company's common stock. The program allows the Company to repurchase its shares opportunistically from time to time. The repurchase authorization expires in December 2022. This stock repurchase authorization replaces the previous \$225 million stock repurchase authorization, of which \$125 million remained authorized at the time of its replacement, and which was otherwise set to expire on December 31, 2020. Purchases may be affected through one or more open market transactions, privately negotiated transactions, transactions structured through investment banking institutions, or a combination of the foregoing.

For the year ended December 31, 2021, there were no repurchases of the Company's common stock as part of the share repurchase authorization.

On January 12, 2022, the Company entered into a \$125.0 million accelerated share repurchase ("2022 ASR") and received 1.5 million shares of Company common stock at inception of the 2022 ASR, which represented approximately 80% of the expected total shares under the 2022 ASR. The remaining 20% of the expected total shares is expected to settle in the first half of 2022, upon which additional shares of common stock may be delivered to the Company or, under certain circumstances, the Company may be required to make a cash payment or may elect to deliver shares of our common stock to the 2022 ASR counterparty in each case pursuant to the terms of the 2022 ASR agreement between the Company and the 2022 ASR counter party. The total number of shares to be delivered or the amount of such payment, as well as the final average price per share, will be based on the volume-weighted average price, less a discount, of the Company's common stock during the term of the transaction. As a result of this transaction, \$100.0 million remains available under the \$225.0 million stock repurchase authorization.

During the twelve months ended December 31, 2020, the Company repurchased 2.1 million shares of Integra's common stock as part of the previous share repurchase authorization. The Company utilized \$100.0 million of net proceeds from the offering of convertible notes to execute the share repurchase transactions. This included \$7.6 million from certain purchasers of the convertible notes in conjunction with the closing of the offering. On February 5, 2020, the Company entered into a \$92.4 million accelerated share repurchase ("2020 ASR") to complete the remaining \$100.0 million of share repurchase. The Company received 1.3 million shares at inception of the 2020 ASR, which represented approximately 80% of the expected total shares. Upon settlement of the 2020 ASR in June 2020, the Company received an additional 0.6 million shares determined using the volume-weighted average price of the Company's common stock during the term of the transaction.

See Note 8, Treasury Stock of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for further details.

ITEM 6. [Reserved]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis provides information management believes to be relevant to understanding our financial condition and results of operations. For a full understanding of financial condition and results of operations, it should be read together with the selected consolidated financial data and our financial statements with the related notes appearing elsewhere in this report. The discussion focuses on our financial results for the year ended December 31, 2021 and 2020. The comparison of fiscal 2020 to 2019 has been omitted from this Form 10-K, but can be referenced in our Form 10-K for the fiscal year ended December 31, 2020—"Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" filed on February 23, 2021.

We have made statements in this report which constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act"). These forward-looking statements are subject to a number of risks, uncertainties and assumptions about the Company and other matters. These forward-looking statements include, but are not limited to, statements related to the Company's expectations regarding the potential impacts of the COVID-19 pandemic on our business, financial condition, and results of operations. These statements should, therefore, be considered in light of various important factors, including, but not limited to, the following: the risk that the COVID-19 pandemic could lead to further material delays and cancellations of, or reduced demand for, procedures; delayed capital spending by the Company's customers; disruption and/or higher costs to the Company's supply chain; staffing shortages in hospitals; labor impacts in our facilities; delays in gathering clinical evidence; diversion of management and other resources to respond to the COVID-19 outbreak; the impact of global and regional economic and credit market conditions on healthcare spending; the risk that the COVID-19 virus disrupts local economies and causes economies in our key markets to enter prolonged recessions. The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of many factors, including but not limited to those set forth under the heading "Risk Factors."



GENERAL

Integra, headquartered in Princeton, New Jersey, is a world leader in medical technology. The Company was founded in 1989 with the acquisition of an engineered collagen technology platform used to repair and regenerate tissue. Since then, Integra has developed numerous product lines from this technology for applications ranging from burn and deep tissue wounds to the repair of dura mater in the brain, as well as nerves and tendons. The Company has expanded its base regenerative technology business to include surgical instruments, neurosurgical products and advanced wound care through a combination of several global acquisitions and product development to meet the needs of its customers and impact patient care.

Integra manufactures and sells medical technologies and products in two reportable business segments: Codman Specialty Surgical ("CSS") and Tissue Technologies ("TT"). The CSS segment, which represents two-thirds of our total revenue, consists of market-leading technologies and instrumentation used for a wide range of specialties, such as neurosurgery, neurocritical care and otolaryngology. We are the world leader in neurosurgery and one of the top three providers in instruments used in precision, specialty, and general surgical procedures. Our TT segment generates about one-third of our overall revenue and focuses on three main areas: complex wound surgery, surgical reconstruction, and peripheral nerve repair.

We have key manufacturing and research facilities located in California, Indiana, Maryland, Massachusetts, New Jersey, Ohio, Puerto Rico, Tennessee, Utah, Canada, China, France, Germany, Ireland and Switzerland. We also source most of our handheld surgical instruments and dural sealant products through specialized third-party vendors.

Integra is committed to delivering high quality products that positively impact the lives of millions of patients and their families. We focus on four key pillars of our strategy: 1) enabling an execution-focused culture, 2) optimizing relevant scale, 3) advancing innovation and agility, and 4) leading in customer experience. We believe that by sharpening our focus on these areas through improved planning and communication, optimization of our infrastructure, and strategically aligned tuck-in acquisitions, we can build scale, increase competitiveness and achieve our long-term goals.

To this end, the executive leadership team has established the following key priorities aligned to the following areas of focus:

Strategic Acquisitions. An important part of the Company's strategy is pursuing strategic transactions and licensing agreements that increase relevant scale in the clinical areas in which Integra competes. During 2021, the Company acquired ACell Inc. ("ACell"), an innovative regenerative medicine company specializing in the manufacturing of porcine urinary bladder extracellular matrices. This acquisition not only expanded the Company's product offering of regenerative technologies, but it also supported the Company's long-term growth and profitability strategy as this product line has a financial profile similar to Integra's other regenerative tissue products. All critical components of ACell have been integrated into the Company's TT segment. See Note 4, *Acquisitions and Divestitures*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for additional details. In 2021, we continued to advance the development of pioneering neurosurgical technologies from our 2019 acquisitions, Arkis Biosciences, Inc. and Rebound Therapeutics Corporation.

Portfolio Optimization and New Product Introductions. We are investing in innovative product development to drive a multi-generational pipeline for our key product franchises. Our product development efforts span across our key global franchises focused on potential for significant returns on investment. In addition to new product development, we are funding studies to gather clinical evidence to support launches, ensure market access and improve reimbursement for existing products. In addition to acquisitions and organic reinvestment, we continually look to optimize our portfolio towards higher growth and higher margin businesses. As such, we may opportunistically divest businesses or discontinue products where we see limited runway for future value creation in line with our aspirations due in part to changes in the market, business fundamentals or the regulatory environment.

In January 2021, we completed the sale of our Extremity Orthopedics business to Smith & Nephew USD Limited ("Smith & Nephew"), a subsidiary of Smith & Nephew plc, for approximately \$240 million in cash. This transaction enables us to increase our investments in our core neurosurgery and tissue technologies businesses and fund pipeline opportunities to expand our addressable markets to strengthen our existing leadership positions in these segments and drive future growth. See Note 4, *Acquisitions and Divestitures*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

Commercial Channel Investments. Investing in our sales channels is a core part of our strategy to create specialization and greater focus on reaching new and existing customers and addressing their needs. To support our commercial efforts in Tissue Technologies, we expanded our two-tier specialist model to increase our presence in focused segments by creating a virtual selling organization to help serve the evolving needs of our customers. In addition, we continue to build upon our leadership brands across our product franchises in both CSS and TT to engage customers through enterprise-wide contracts with leading hospitals, integrated delivery networks and global purchasing organizations in the United States. Internationally, we have increased our commercial resources significantly in key emerging markets and are making investments to support our sales organization and maximize our commercial opportunities. These investments in our international sales channel position us well for expansion and long-term growth.



Customer Experience. We aspire to be ranked as a best-in-class provider and are committed to strengthen our relationships with all customers. We continue to invest in technologies, systems and processes to enhance the customer experience. Additionally, we launched digital tools and programs, resources and virtual product training to drive continued customer familiarity with our growing portfolio of medical technologies globally.

Clinical and Product Development Activities

We continue to invest in collecting clinical evidence to support the Company's existing products and new product launches, and to ensure that we obtain market access for broader and more cost-effective solutions. In each area, we continue to benefit from products launched over the past several years, including our new electrosurgery generator and irrigator system, an innovative customer-centric toolkit for our Certas Plus Programmable Valve along with additional shunt configurations. In Japan, we are experiencing strong growth as a result of the successful launch of DuraGen in mid-2019, which is the first and only collagen xenograft approved for use as a dural substitute in the country. We are focused on the development of core clinical applications in our electromechanical technologies portfolio. Also, we continue to update our CUSA Clarity platform by incorporating new ultrasonic handpiece, surgical tips and integrated electrosurgical capabilities. We continue to work with several instrument partners to bring new surgical instrument platforms to the market.

In the third quarter of 2021, our CereLink ICP Monitor System was launched in the U.S. and Europe. CereLink provides enhanced accuracy, usability and advanced data presentation that provides clinicians with uncompromised, advanced continuous ICP monitoring that until now, has not been available when treating patients with traumatic brain injuries.

We continued to advance the early-stage technology platforms we acquired in 2019. Through the acquisition of Arkis Biosciences, we added a platform technology, CerebroFlo[®] external ventricular drainage ("EVD"), catheter with Endexo[®] technology, a permanent additive designed to reduce the potential for catheter obstruction due to thrombus formation. The CerebroFlo EVD Catheter has demonstrated an average of 99% less thrombus accumulation onto its surface, in vitro, compared to a market leading EVD catheter. In 2019, we also acquired Rebound Therapeutics, a Company that specialized in a single-use medical device, known as Aurora Surgiscope, which is the only tubular retractor system designed for cranial surgery with an integrated access channel, camera and lighting. In the third quarter of 2021, we conducted a limited clinical launch of the Aurora Surgiscope for use in minimally invasive neurosurgery as well as initiated a registry called MIRROR to collect data on early surgical intervention using this same technology platform for the treatment of ICH.

Within our TT segment, during 2020, we announced positive clinical and economic data on Integra[®] Bilayer Wound Matrix ("IBWM") in complex lower extremity reconstruction based on two retrospective studies recently published in Plastic and Reconstructive Surgery, the official journal of the American Society of Plastic Surgeons. As surgeons look for ways to efficiently and effectively repair and close wounds, IBWM helps address the efficiency needed in operating rooms by reducing both the operating time and costs to hospitals and patients. In 2021, we completed one of the largest diabetic foot ulcers ("DFU"), randomized controlled trials of the PriMatrix[®] Dermal Repair Scaffold for the management of DFU. This multi-center study enrolled more than 225 patients with chronic DFU's over the course of 12-week treatments and 4-week follow-up phases. The results of this study, which was published in the Journal of Wound Care, demonstrated that PriMatrix plus standard of care ("SOC") consisting of sharp debridement, infection elimination, use of dressings and offloading was significantly more likely to achieve complete wound closure compared with SOC alone, with a median number of one application of the product.

COVID-19 Pandemic

During this global crisis, the Company's focus remained on supporting patients, providing customers with life-saving products, and protecting the well-being of our employees. The global COVID-19 pandemic, together with the preventative and precautionary measures taken by businesses, communities and governments, has resulted in an unprecedented challenge to the global healthcare industry. In response to the pandemic, we acted swiftly by implementing protocols to ensure continuity of our manufacturing and distribution sites around the world and to provide for the safety of our employees.

The COVID-19 pandemic continues to have widespread and unpredictable impacts and the Company has continued to manage the risks in this uncertain environment. We remain confident that the underlying markets in which the Company competes remain attractive. We also remain focused on managing the business for the long-term. The Company's adaptability and resiliency in the face of this unprecedented crisis is made possible in part by prior investments in technology infrastructure and operations, as well as our talented and committed global workforce.

Capital markets and worldwide economies have also been significantly impacted by the COVID-19 pandemic, and it is possible that it could cause a local and/or global economic recession. Any such economic recession could have a material adverse effect on the Company's long-term business as hospitals curtail and reduce capital as well as overall spending. The COVID-19 pandemic and local actions, such as "shelter-in-place" orders and restrictions on travel and access to our customers or temporary closures of our facilities or the facilities of our suppliers and their contract manufacturers, disruption and/or higher costs to the Company's supply chain, staffing shortages in hospitals and labor constraints in our facilities, could further impact our sales and our ability to ship our products and supply our customers. Any of these events could negatively impact the number of surgical and medical intervention procedures performed and have a material adverse effect on our business, financial condition, results of operations, or cash flows.

FDA Matters

We manufacture and distribute products derived from human tissue for which FDA has specific regulations governing human cells, tissues and cellular and tissue-based products ("HCT/Ps"). An HCT/P is a product containing or consisting of human cells or tissue intended for transplantation into a human patient. Refer to Item 1. *Business* and Item 1A. *Risk Factors* for further details around these FDA regulations and their potential effect on the Company's portfolio of morselized amniotic material-based products as well as the impact on consolidated revenues.

On March 7, 2019, TEI Biosciences, Inc. ("TEI") a wholly-owned subsidiary of the Company received a Warning Letter (the "Warning Letter"), dated March 6, 2019, from the FDA. The warning letter related to quality systems issues at TEI's manufacturing facility located in Boston, Massachusetts. The letter resulted from an inspection held at that facility in October and November 2018 and did not identify any new observations that were not already provided in the Form 483 that followed the inspection. The Company submitted its initial response to the FDA Warning Letter on March 28, 2019 and provides regular progress reports to the FDA as to its corrective actions and, since the conclusion of the inspection, has undertaken significant efforts to remediate the observations and continues to do so. On October 28, 2021 FDA initiated an inspection of the facility and at the conclusion of the inspection issued a Form 483 on November 12, 2021 (the "2021 Form 483"). The Company provided an initial response to the inspectional observations and will continue to provide responses to FDA. The Warning Letter and the 2021 Form 483 do not restrict the Company's ability to manufacture or ship products or require the recall of any products, nor do they restrict our ability to seek FDA 510(k) clearance of products. The Warning Letter states that requests for Certificates to Foreign Governments would not be granted. However, due to our monthly progress reports, the FDA agreed to issue Certificates to Foreign Governments for the products manufactured at TEI due to substantial progress and the length of time it takes to resolve the Warning Letter. Additionally, premarket approval applications for Class III devices to which the Quality System regulation violations are reasonably related will not be approved until the violations have been corrected. The TEI Boston facility manufactures extracellular bovine matrix products. We cannot give any assurances that the FDA will be satisfied with our response to the Warning Letter or as to the expected date of the resolution of the matters included in the letter. Until the issues cited in the letter are resolved to the FDA's satisfaction, the FDA may initiate additional regulatory action without further notice. 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.

Revenues of products manufactured in the TEI Boston facility for the year ended December 31, 2021 were approximately 4.7% of consolidated revenues.

ACQUISITIONS & DIVESTITURES

Divestiture

On January 4, 2021, the Company completed its sale of its Extremity Orthopedics business to Smith & Nephew. The transaction included the sale of the Company's upper and lower Extremity Orthopedics product portfolio, including ankle and shoulder arthroplasty and hand and wrist product lines. The Company received an aggregate purchase price of \$240.0 million from Smith & Nephew and concurrently paid \$41.5 million to the Consortium of Focused Orthopedists, LLC ("CFO"), effectively terminating the licensing agreement between Integra and CFO relating to the development of shoulder arthroplasty products. The Company recognized a gain of \$41.8 million in connection with the sale that is presented in "Gain from the sale of business" in the consolidated statement of operations for the year ended December, 31, 2021. See Note 4, *Acquisitions and Divestitures* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

Acquisitions

Our growth strategy includes the acquisition of businesses, assets or products lines to increase the breadth of our offerings and the reach of our product portfolios and drive relevant scale to our customers. As a result of several acquisitions from 2019 through 2021, our financial results for the year ended December 31, 2021 may not be directly comparable to those of the corresponding prior-year periods. See Note 4, *Acquisitions and Divestitures* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for a further discussion.



ACell Inc.

On January 20, 2021, the Company acquired ACell, Inc. for an acquisition purchase price of \$306.9 million plus contingent consideration obligations of up to \$100 million, that may be payable upon achieving certain revenue-based performance milestones in 2022, 2023 and 2025. ACell was a privately-held company that offered a portfolio of regenerative products for complex wound management, including developing and commercializing products based on MatriStem Urinary Bladder Matrix ("UBM"), a technology platform derived from porcine urinary bladder extracellular matrix. See Note 4, *Acquisitions and Divestitures* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

Arkis BioSciences Inc.

On July 29, 2019, the Company acquired Arkis BioSciences Inc. ("Arkis") for an acquisition purchase price of \$30.6 million (the "Arkis Acquisition") plus contingent consideration of up to \$25.5 million, that may be payable based on the successful completion of certain development and commercial milestones. The Company estimated the fair value of the contingent consideration to be \$13.1 million at the acquisition date. The Company estimated fair value of the contingent consideration as of December 31, 2021 to be \$15.1 million. The Company recorded \$3.7 million in accrued expenses and other current liabilities and \$11.4 million in other liabilities at December 31, 2021 in the consolidated balance sheets of the Company. Arkis was a privately-held company that marketed the CerebroFlo external ventricular drainage ("EVD") catheter with Endexo technology, a permanent additive designed to reduce the potential for catheter obstruction due to clotting. See Note 4, *Acquisitions and Divestitures* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

Rebound Therapeutics Corporation

On September 9, 2019, the Company acquired Rebound Therapeutics Corporation ("Rebound"), developers of a single-use medical device known as the Aurora which enables minimally invasive access, using optics and illumination, for visualization, diagnostic and therapeutic use in neurosurgery (the "Rebound transaction"). Under the terms of the Rebound transaction, the Company made an upfront payment of \$67.1 million and committed to pay up to \$35.0 million of contingent development milestones upon achievement of certain regulatory milestones. The acquisition of Rebound was primarily concentrated in one single identifiable asset and thus, for accounting purposes, the Company concluded that the acquired assets did not meet the accounting definition of a business. The initial payment was allocated primarily to Aurora, resulting in a \$59.9 million in-process research and development ("IPR&D") expense. The balance of approximately \$7.2 million, which included \$2.1 million of cash and cash equivalents and a net deferred tax asset of \$4.2 million, was allocated to the remaining net assets acquired. The deferred tax asset primarily resulted from a federal net operating loss carryforward. See Note 4, *Acquisitions and Divestitures* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

OPTIMIZATION AND INTEGRATION ACTIVITIES

As a result of our ongoing acquisition strategy and significant growth in recent years, we have undertaken cost-saving initiatives to consolidate manufacturing operations, distribution facilities and transfer activities, implement a common ERP system, eliminate duplicative positions, realign various sales and marketing activities, and expand and upgrade production capacity for our regenerative technology products. These efforts are expected to continue and while we expect a positive impact from ongoing restructuring, integration, and manufacturing transfer and expansion activities, such results remain uncertain.

RESULTS OF OPERATIONS

Executive Summary

Net income for the year ended December 31, 2021 was \$169.1 million, or \$1.98 per diluted share, compared to \$133.9 million, or \$1.57 per diluted share for the year ended December 31, 2020. The increase in net income for the year ended December 31, 2021, was primarily driven by higher revenues across most franchises driven by continued recovery in surgical procedure volumes from prior year COVID-19 pandemic levels. This was partially offset by higher operating expenses as costs continued to normalize after 2020 cost reduction actions. Within non-operating income and expense, the Company benefited from lower interest expense, higher other income and a gain of \$41.8 million as a result of the sale of its Extremity Orthopedics business to Smith & Nephew. The Company also had a net tax benefit in 2020 due to the impact of the intra-entity transfer of certain intellectual property which resulted in the recognition of a deferred tax benefit in the amount of \$59.2 million.



Special Charges

Income before taxes includes the following special charges:

		Years Ended December 31,		
Dollars in thousands	2021		2020	
Acquisition, divestiture and integration-related charges ⁽¹⁾	\$	(11,712)	\$	32,906
Structural optimization charges		20,385		15,363
EU medical device regulation		24,375		9,372
Discontinued product lines charges		377		6,342
Expenses related to debt refinancing		—		6,168
COVID-19 pandemic related charges ⁽²⁾		—		3,482
Convertible debt non-cash interest expense		—		15,415
Total		33,425		89,048

⁽¹⁾ The Company completed its sale of its Extremity Orthopedics business and recognized a gain of \$41.8 million for the year ended December 31, 2021 which was partially offset by other acquisition, divestiture and integration-related charges. See Note 4, *Acquisitions and Divestitures* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

⁽²⁾ Charges relate to business interruptions and costs associated with the COVID-19 pandemic which impacted the Company's operations globally, partially offset by Coronavirus government relief programs.

The items reported above are reflected in the consolidated statements of operations as follows:

	Years Ended December 31,			
Dollars in thousands		2021		2020
Cost of goods sold	\$	32,334	\$	34,557
Research and development		17,487		3,163
Selling, general and administrative		31,013		29,745
Interest expense ⁽¹⁾		—		21,583
Gain from the sale of business		(41,798)		
Other (income) expense		(5,611)		
Total		33,425		89,048

⁽¹⁾ Upon adoption of ASU No. 2020-06, the Company will no longer incur non-cash interest expense for the amortization of debt discount. See Note 1, *Basis* of Presentation of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K), for details.

We typically define special charges as items for which the amounts and/or timing of such expenses may vary significantly from period to period, depending upon our acquisition, divestiture, integration and restructuring activities, and for which the amounts are non-cash in nature, or for which the amounts are not expected to recur at the same magnitude. We believe that given our ongoing strategy of seeking acquisitions, our continuing focus on rationalizing our existing manufacturing and distribution infrastructure and our continuing review of various product lines in relation to our current business strategy, some of the special charges discussed above could recur with similar materiality in the future.

We believe that the separate identification of these special charges provides important supplemental information to investors regarding financial and business trends relating to our financial condition and results of operations. Investors may find this information useful in assessing comparability of our operating performance from period to period, against the business model objectives that management has established, and against other companies in our industry. We provide this information to investors so that they can analyze our operating results in the same way that management does and to use this information in their assessment of our core business and valuation of Integra.

Revenues and Gross Margin

Our revenues and gross margin on product revenues were as follows:

	Years Ended December 31,				
Dollars in thousands		2021		2020	
Segment Net Sales					
Codman Specialty Surgical	\$	1,025,232	\$	894,831	
Tissue Technologies		517,216		477,037	
Total revenues		1,542,448		1,371,868	
Cost of goods sold		597,808		520,834	
Gross margin on total revenues	\$	944,640	\$	851,034	
Gross margin as a percentage of total revenues		61.2 %)	62.0 %	

Revenues

For the year ended December 31, 2021, total revenues increased by \$170.6 million, or 12.4%, to \$1,542.4 million from \$1,371.9 million during the prior year. Domestic revenues increased by \$117.6 million, or 12.1%, to \$1,089.5 million and were 70.6% of total revenues for the year ended December 31, 2021. International revenues increased by \$53.0 million or 13.3% to \$452.9 million, compared to \$399.9 million during 2020. The increase in revenues was primarily driven by recovery experienced from the COVID-19 pandemic across most franchises compared to the prior year. Foreign exchange fluctuations had a favorable impact of \$9.8 million on revenues for the year.

In the CSS segment, revenues were \$1,025.2 million which was an increase of \$130.4 million, or 14.6% as compared to the prior-year period as a result of the continued recovery experienced from the COVID-19 pandemic, and the launch of our new CereLink ICP monitoring system in the third quarter in U.S. and European markets. The Company saw growth within our Neurosurgery portfolio increasing low double digits primarily due to sales in neuromonitoring, advanced energy and dural access and repair. Sales in our instruments portfolio increased low double digits as compared to the same period in the prior year driven by order recovery.

In the TT segment, revenues were \$517.2 million, which was an increase of \$40.2 million, or 8.4% as compared to the prior-year period. Within TT, our Extremity Orthopedics business was divested on January 4, 2021 and the acquisition of ACell was completed on January 20, 2021. Sales in our Wound Reconstruction business, excluding the impact of the divestiture and acquisition, increased low double digits. Sales in our Private Label business increased low double digits as a result of continued recovery experienced from the COVID-19 pandemic.

As we look forward to 2022 and beyond, we continue to closely monitor local, regional, and global COVID-19 surges as well as recent variants of the virus for an impact on procedures. The reallocation of hospital resources to treat COVID-19 and staffing shortages may continue to cause a financial strain on healthcare systems and reduce procedural volumes.

Gross Margin

Gross margin was \$944.6 million for the year ended December 31, 2021, an increase of \$93.6 million from \$851.0 million for the same period last year. Gross margin as a percentage of revenues was 61.2% in 2021 and 62.0% in 2020. The decrease in gross margin percentage was due to increased amortization associated with technology-based intangible assets and inventory step-up amortization in connection with the acquisition of ACell.

Operating Expenses

The following is a summary of operating expenses as a percent of total revenues:

	Years Ended 1	Years Ended December 31,		
	2021	2020		
Research and development	6.0 %	5.6 %		
Selling, general and administrative	41.3 %	43.3 %		
Intangible asset amortization	1.1 %	2.0 %		
Total operating expenses	48.4 %	50.9 %		



Total operating expenses, which consist of research and development, selling, general and administrative, and intangible asset amortization expenses, increased by \$47.7 million or 6.8% to \$747.4 million in 2021, compared to \$699.7 million in the prior year. The increase in operating expenses compared to the prior year reflects costs associated with higher employee related costs, increased research and development as well as increased outside spending as revenue recovered. We also benefited from reduced operating expenses from the sale of the Extremity Orthopedics business and cost synergies as a result of the acquisition of ACell.

The Company continues to manage and prioritize its operating costs to increase organic investments that will drive long-term growth including the support of new product development and introductions, clinical studies, geographic expansion and targeted U.S. sales channel expansion.

Research and Development

Research and development expenses for the year ended December 31, 2021 increased by \$15.7 million as compared to the prior year. This increase in spending resulted from additional spending on new product development, clinical studies and spending related to European Union Medical Device Regulation compliance activities.

Selling, General and Administrative

Selling, general and administrative expenses for the year ended December 31, 2021 increased by \$42.9 million as compared to the prior year driven primarily due to higher employee related costs, higher incentive and stock-based compensation, as well as increased outside spending as revenue recovered.

Intangible Asset Amortization

Amortization expense (excluding amounts reported in cost of product revenues for technology-based intangible assets) in 2021 was \$16.9 million compared to \$27.8 million in 2020 primarily due to a reduction in amortization expense associated with intangible assets sold in conjunction with the sale of the Extremity Orthopedics business during the current year as well as accelerated amortization expense associated with an intangible asset which was recorded in the prior year.

We may discontinue certain products in the future as we continue to assess the profitability of our product lines. As our profitability assessment evolves, we may make further decisions about our trade names and incur additional impairment charges or accelerated amortization. We expect total annual amortization expense to be approximately \$79.1 million in 2022, \$78.4 million in 2023, \$77.7 million in 2024, \$77.7 million in 2025, \$77.6 million in 2026 and \$585.8 million thereafter.

Non-Operating Income and Expenses

The following is a summary of non-operating income and expenses:

		Years Ended Decemb	December 31,		
Dollars in thousands	2	021	2020		
Interest income	\$	6,737 \$	9,297		
Interest expense		(50,395)	(71,581)		
Gain from sale of business		41,798	—		
Other income, net		19,307	4,434		
Total non-operating income and expense	\$	17,447 \$	(57,850)		

Interest Income

Interest income for the year ended December 31, 2021 decreased by \$2.6 million as compared to the same period last year primarily due to the settlement of cross-currency swaps designated as net investment hedges during Q4 2020.

Interest Expense

Interest expense for the year ended December 31, 2021 decreased by \$21.2 million as compared to the same period last year primarily due to the elimination of the non-cash interest expense as the result of the adoption ASU 2020-06 and the expenses associated with Amended and Restated Senior Credit Agreement which occurred in the prior period. See Note 2, *Summary of Significant Accounting Policies* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details in relation to the adoption of ASU 2020-06.

Gain from the sale of business

On January 4, 2021, the Company completed its sale of its Extremity Orthopedics business and recognized a gain of \$41.8 million in the first quarter of the current year.

Other Income, Net

Other income, net for the year ended December 31, 2021 increased by \$14.9 million primarily due to income associated with the transition services agreement with Smith & Nephew, favorable impact of foreign exchange in the current year and higher income from additional cross currency swaps that were entered into during Q4 2020.

Income Taxes

Our effective income tax rate was 21.2% and (43.2)% of income before income taxes in 2021 and 2020, respectively. See Note 13, *Income Taxes*, in our consolidated financial statements for a reconciliation of the United States federal statutory rate to our effective tax rate. Our effective tax rate could vary from year to year depending on, among other factors, tax law changes, the geographic and business mix and taxable earnings and losses. We consider these factors and others, including our history of generating taxable earnings, in assessing our ability to realize deferred tax assets.

In December 2020, the Company completed an intra-entity transfer of certain intellectual property rights to one of its subsidiaries in Switzerland. While the transfer did not result in a taxable gain; the Company's Swiss subsidiary received a step-up in tax basis based on the fair value of the transferred intellectual property rights. The Company determined the fair value using a discounted cash flow model based on expectations of revenue growth rates, royalty rates, discount rates, and useful lives of the intellectual property. The Company recorded a \$59.2 million deferred tax benefit in Switzerland related to the amortizable tax basis in the transferred intellectual property.

Our effective tax rate could vary from year to year depending on, among other factors, tax law changes, the geographic and business mix and taxable earnings and losses. We consider these factors and others, including our history of generating taxable earnings, in assessing our ability to realize deferred tax assets. We estimate our worldwide effective income tax rate for 2022 to be approximately 18.4%.

At December 31, 2021, the Company had \$9.8 million of valuation allowance against the remaining \$190.7 million of gross deferred tax assets recorded at December 31, 2021. Our deferred tax asset valuation allowance decreased by \$0.1 million in 2021 and remained substantially unchanged in 2020. This valuation allowance relates to deferred tax assets for which the Company does not believe it has satisfied the more likely than not threshold for realization.

At December 31, 2021, we had net operating loss carryforwards of \$71.7 million for federal income tax purposes, \$26.6 million for foreign income tax purposes and \$39.0 million for state income tax purposes to offset future taxable income. The federal net operating loss carryforwards decreased during 2021 due to the use of net operating losses. Of the total federal net operating loss carryforwards, \$67.5 million expire through 2037 and \$4.1 million have an indefinite carryforward period. Regarding the foreign net operating loss carryforwards, \$26.6 million have an indefinite carryforward period. The state net operating loss carryforwards expire in 2036.

As of December 31, 2021, the Company has not provided deferred income taxes on unrepatriated earnings from foreign subsidiaries as they are deemed to be indefinitely reinvested. Such taxes would primarily be attributable to foreign withholding taxes and local income taxes when such earnings are distributed. As such, the Company has determined the tax impact of repatriating these earnings would not be material as of December 31, 2021.

GEOGRAPHIC PRODUCT REVENUES AND OPERATIONS

The Company attributes revenues to geographic areas based on the location of the customer. Total revenue by major geographic area consisted of the following:

	Years Ended December 31,			
Dollars in thousands	2021		2020	
United States	\$ 1,089,526	\$	971,975	
Europe	191,327		172,689	
Asia Pacific	182,034		157,174	
Rest of World	79,561		70,030	
Total Revenues	\$ 1,542,448	\$	1,371,868	

The Company generates significant revenues outside the U.S., a portion of which are U.S. dollar-denominated transactions conducted with customers that generate revenue in currencies other than the U.S. dollar. As a result, currency fluctuations between the U.S. dollar and the currencies in which those customers do business could have an impact on the demand for the Company's products in foreign countries. Local economic conditions, regulatory compliance or political considerations, the effectiveness of our sales representatives and distributors, local competition and changes in local medical practice all may combine to affect our sales into markets outside the U.S.

Domestic revenues increased by \$117.6 million for the year ended December 31, 2021 compared to the same period last year. European sales increased by \$18.6 million for the year ended December 31, 2021 compared to the same period last year. Sales to customers in Asia Pacific increased by \$24.9 million for the year ended December 31, 2021 compared to the same period last year. The Rest of the World for the year ended December 31, 2021 increased by \$9.5 million compared to the same period last year. The increase in revenues globally was primarily driven by the continued recovery experienced from the COVID-19 pandemic across all franchises compared to the prior year due to rebound in surgical procedure volumes. Sales in China, Japan Canada, Europe and our indirect markets continue to drive international growth. The Company also benefited from the launch of the CereLink ICP Monitor which occurred during the second half of the 2021.

LIQUIDITY AND CAPITAL RESOURCES

Working Capital

At December 31, 2021 and December 31, 2020, working capital was \$813.7 million and \$836.2 million, respectively. Working capital consists of total current assets less total current liabilities as presented in the consolidated balance sheets.

Cash and Marketable Securities

The Company had cash and cash equivalents totaling approximately \$513.4 million and \$470.2 million at December 31, 2021 and 2020, respectively, which are valued based on Level 1 measurements in the fair value hierarchy. At December 31, 2021, our non-U.S. subsidiaries held approximately \$245.2 million of cash and cash equivalents that are available for use outside the U.S. The Company asserts that it has the ability and intends to indefinitely reinvest the undistributed earnings from its foreign operations unless there is no material tax cost to remit the earnings into the U.S.

Cash Flows

	Year Ended December 31,		
Dollars in thousands	 2021 2020		2020
Net cash provided by operating activities	\$ 312,427	\$	203,832
Net cash used in investing activities	(161,443)		(68,073)
Net cash used (provided) by financing activities	(98,226)		121,625
Effect of exchange rate fluctuations on cash	(9,476)		13,871
Net increase (decrease) in cash and cash equivalents	\$ 43,282	\$	271,255

Cash Flows Provided by Operating Activities

Operating cash flows for the year ended December 31, 2021 increased by \$108.6 million compared to the same period in 2020. Net income after removing the impact of the gain on sale of business and non-cash adjustments increased for the year ended December 31, 2021, by approximately \$49.1 million as compared to the same period in 2020 primarily due to the continuing revenue recovery in the current year as compared to the height of the COVID-19 pandemic in the prior year. The changes in assets and liabilities, net of business acquisitions, increased cash flows from operating activities in the current year by \$18.2 million compared to the decrease of \$41.3 million for the same period in 2020. The improvement in 2021 working capital is attributable to a decrease in inventory of \$5.4 million due to investments in building safety stock made in the prior year where inventory increased by \$48.3 million as well as improved sales in 2021.

Operating cash flows for the year ended December 31, 2020 decreased compared to the same period in 2019. Net income after non-cash adjustments increased by approximately \$0.8 million to \$245.1 million from \$245.9 million. The changes in assets and liabilities, net of business acquisitions, decreased cash flows from operating activities by \$41.3 million in the year ended December 31, 2020 compared to a decrease of \$14.5 million for the same period in 2019. The decrease in 2020 is attributable to an increase in inventory to improve safety stock of select products. In addition, decreases were also driven by reduced payables offset by decreases in accounts receivable due to lower revenues and continued collection efforts.

Cash Flows Used in Investing Activities

During the year ended December 31, 2021, we paid a net cash amount of \$303.9 million in relation to the acquisition of ACell and received net proceeds of \$190.5 million for the sale of the Extremity Orthopedics business. The Company also paid for \$48.0 million capital expenditures to support operations improvement initiatives at a number of our manufacturing facilities and other information technology investments.

During the year ended December 31, 2020, we paid \$38.9 million for capital expenditures, most of which were directed to our facilities located in Mansfield, MA; Boston, MA; Memphis, TN; and Princeton, NJ and \$25.0 million associated with achieving developmental milestones paid to the former shareholders of Rebound.

Cash Flows (Used in) Provided by Financing Activities

Uses of cash from financing activities for the year ended December 31, 2021 were repayments of \$125.5 million on the revolving portion of our Senior Credit Facility and Securitization Facility. In addition, the Company had \$4.8 million in cash taxes paid in net equity settlements. These uses were offset by \$6.8 million proceeds from the exercise of stock options and \$25.5 million borrowings under our Senior Credit Facility and Securitization Facility.

Our principal sources of cash from financing activities for the year ended December 31, 2020 were \$515.3 million in proceeds from the issuance of Convertible Senior Notes including the call and warrant transactions and \$171.5 million borrowing under our Senior Credit Facility and Securitization Facility. These were offset by repayments of \$441.0 million on the revolving portion of our Senior Credit Facility and Securitization Facility, \$24.3 million in debt issuance costs related to the Amended and Restated Senior Credit Agreement and the issuance of Convertible Senior Notes and \$100.0 million in purchases of treasury stock.

Amended and Restated Senior Credit Agreement, Convertible Senior Notes, Securitization and Related Hedging Activities

See Note 5, *Debt*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for a discussion of our Amended and Restated Senior Credit Agreement, the 2025 Notes and Securitization Facility and Note 6, *Derivative Instruments* to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for discussion of our hedging activities. We are forecasting that sales and earnings for the next twelve months will be sufficient to remain in compliance with our financial covenants under the terms of the February 2020 Amendment and July 2020 Amendment to the Senior Credit Facility.

Share Repurchase Plan

On December 7, 2020, the Board of Directors authorized the Company to repurchase up to \$225 million of the Company's common stock. The program allows the Company to repurchase its shares opportunistically from time to time. The repurchase authorization expires in December 2022. This stock repurchase authorization replaces the previous \$225 million stock repurchase authorization, of which \$125 million remained authorized at the time of its replacement, and which was otherwise set to expire on December 31, 2021.

For the year ended December 31, 2021, there were no repurchases of the Company's common stock as part of the share repurchase authorization.

On January 12, 2022, the Company entered into a \$125.0 million accelerated share repurchase ("2022 ASR") and received 1.5 million shares of the Company common stock at inception of the 2022 ASR, which represented approximately 80% of the expected total shares under the 2022 ASR. The remaining 20% of the expected total shares is expected to settle in the first half of 2022, upon which additional shares of common stock may be delivered to the Company or, under certain circumstances, the Company may be required to make a cash payment or may elect to deliver shares of our common stock to the 2022 ASR counterparty in each case pursuant to the terms of the 2022 ASR agreement between the Company and the 2022 ASR counterparty. The total number of shares to be delivered or the amount of such payment, as well as the final average price per share, will be based on the volume-weighted average price, less a discount, of the Company's common stock during the term of the transaction. As a result of this transaction, \$100.0 million remains available under the \$225.0 million stock repurchase authorization.

During the twelve months ended December 31, 2020, the Company repurchased 2.1 million shares of Integra's common stock as part of the previous share repurchase authorization. The Company utilized \$100.0 million of net proceeds from the offering of convertible notes to execute the share repurchase transactions. This included \$7.6 million from certain purchasers of the convertible notes in conjunction with the closing of the offering. On February 5, 2020, the Company entered into a \$92.4 million accelerated share repurchase ("2020 ASR") to complete the remaining \$100.0 million of share repurchase. The Company received 1.3 million shares at inception of the 2020 ASR, which represented approximately 80% of the expected total shares. Upon settlement of the 2020 ASR in June 2020, the Company received an additional 0.6 million shares determined using the volume-weighted average price of the Company's common stock during the term of the transaction.

See Note 8, Treasury Stock of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for further details.

Dividend Policy

We have not paid any cash dividends on our common stock since our formation. Our Senior Credit Facility limits the amount of dividends that we may pay. Any future determinations to pay cash dividends on our common stock will be at the discretion of the Board and will depend upon our financial condition, results of operations, cash flows and other factors deemed relevant by the Board.

Capital Resources

We believe that our cash and available borrowings under the Senior Credit Facility are sufficient to finance our operations and capital expenditures for the foreseeable future. Our future capital requirements will depend on many factors, including the growth of our business, the timing and introduction of new products and investments, strategic plans and acquisitions, among others. Additional sources of liquidity available to us include short term borrowings and the issuance of long term debt and equity securities.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet financing arrangements during the year-ended December 31, 2021 that have or are reasonably likely to have, a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to our interests.



Contractual Obligations and Commitments

We will continue to have cash requirements to support seasonal working capital needs and capital expenditures, to pay interest, to service debt, and to fund acquisitions. As part of our ongoing operations, we enter into contractual arrangements that obligate us to make future cash payments.

Our primary obligations include principal and interest payments on revolving portion and Term Loan component of the Senior Credit Facility, Securitization Facility and Convertible Securities. See Note 5, *Debt*, to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details. The Company also leases some of our manufacturing facilities and office buildings which have future minimum lease payments associated. See Note 11, *Leases and Related Party Leases* to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for a schedule of our future minimum lease payments. Amounts related to the Company's other obligations, including employment agreements and purchase obligations were not material.

The Company has contingent consideration obligation related to prior and current year acquisitions and future pension contribution obligations. See Note 10, *Retirement Benefit Plans* and Note 15, *Commitments and Contingencies* to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details. The associated obligations are not fixed. The Company also has a liability for uncertain tax benefits including interest and penalties. See Note 12, *Income Taxes* to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details. The Company cannot make a reliable estimate of the period in which the uncertain tax benefits may be realized.

Employee Termination Benefits

The Company incurred restructuring costs of \$3.4 million and \$4.9 million in cost of goods sold, \$0.5 million and \$1.2 million in selling, general and administrative and \$0.3 million and \$0.3 million in research and development related to employee terminations associated with a future plant closure in the consolidated statement of operations for the years ended December 31, 2021 and 2020, respectively. Restructuring costs of \$10.2 million were included in accrued expenses and other current liabilities and \$6.4 million were included in other liabilities in the consolidated balance sheet for the year ended December 31, 2021 and 2020, respectively. Restructuring costs of \$10.2 million were included in other liabilities in the consolidated balance sheet for the year ended December 31, 2021 and 2020, respectively. See Note 2, *Summary of Significant Accounting Policies* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for further details.

CRITICAL ACCOUNTING POLICIES AND THE USE OF ESTIMATES

Our discussion and analysis of financial conditions and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities, and the reported amounts of revenues and expenses. Significant estimates affecting amounts reported or disclosed in the consolidated financial statements include allowances for doubtful accounts receivable and sales returns and allowances, net realizable value of inventories, valuation of intangible assets including amortization periods for acquired intangible assets, discount rates and estimated projected cash flows used to value and test impairments of long-lived assets and goodwill, estimates of projected cash flows and depreciation and amortization periods for long-lived assets, computation of taxes, valuation allowances recorded against deferred tax assets, the valuation of stock-based compensation, valuation of derivative instruments, valuation of contingent liabilities, the fair value of debt instruments and loss contingencies. These estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the current circumstances.

As we continue to navigate the COVID-19 pandemic and recent variants of the virus, as well as the adverse impacts to global economic conditions, supply chain and our operations, there may be impact to future estimates including, but not limited to, inventory valuations, fair value measurements, goodwill and long-lived asset impairments, the effectiveness of the Company's hedging instruments, deferred tax valuation allowances, and allowances for doubtful accounts receivable.

We believe that the following accounting policies, which form the basis for developing these estimates, are those that are most critical to the presentation of our consolidated financial statements and require the more difficult subjective and complex judgments, often because of the need to make estimates about the effect of matters that are inherently uncertain. Because of this uncertainty, actual results could differ from these estimates.

Allowances for Doubtful Accounts Receivable and Sales Returns and Allowances

We evaluate the collectability of accounts receivable based on a combination of factors. The Company recognizes a provision for doubtful accounts that reflects the Company's estimate of expected credit losses for trade accounts receivable. In circumstances where a specific customer is unable to meet its financial obligations to us, we record an allowance against amounts due to reduce the net recognized receivable to the amount that we reasonably expect to collect. For all other customers, the Company evaluates measurement of all expected credit losses for trade receivables held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. If the financial condition of customers or the length of time that receivables are past due were to change, we may change the recorded amount of allowances for doubtful accounts in the future through charges or reductions to selling, general and administrative expense.

We record a provision for estimated sales returns and allowances on revenues in the same period as the related revenues are recorded. We base these estimates on historical sales returns and allowances and other known factors. If actual returns or allowances differ from our estimates and the related provisions for sales returns and allowances, we may change the provision in the future through an increase or decrease in revenues.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* We adopted this guidance on January 1, 2020 using a modified retrospective transition method which requires a cumulative-effect adjustment to the opening balance of retained earnings to be recognized on the date of adoption with no change to financial results reported in prior periods. The cumulative-effect adjustment recorded on January 1, 2020 was not material. The adoption of this ASU did not have a significant impact on our consolidated financial statements and related disclosures. Our exposure to credit losses may increase if its customers are adversely affected by changes in healthcare laws, coverage, and reimbursement, economic pressures or uncertainty associated with local or global economic recessions, disruption associated with the COVID-19 pandemic and recent variants of the virus, and other customer-specific factors. Although we have historically not experienced significant credit losses, it is possible that there could be an adverse impact due to customer and governmental responses to the COVID-19 pandemic.

Inventories

Inventories, consisting of purchased materials, direct labor and manufacturing overhead, are stated at the lower of cost (determined by the first-in, first-out method) or net realizable value. At each balance sheet date, we evaluate ending inventories for excess quantities, obsolescence or shelf-life expiration. Our evaluation includes an analysis of historical sales levels by product, projections of future demand by product, the risk of technological or competitive obsolescence for our products, general market conditions, a review of the shelf-life expiration dates for our products, and the feasibility of reworking or using excess or obsolete products or components in the production or assembly of other products that are not obsolete or for which we do not have excess quantities in inventory. To the extent that we determine there are excess or obsolete quantities or quantities with a shelf life that is too near its expiration for us to reasonably expect that we can sell those products prior to their expiration, we adjust their carrying value to estimated net realizable value. If future demand or market conditions are lower than our projections, or if we are unable to rework excess or obsolete quantities into other products, we may record further adjustments to the carrying value of inventory through a charge to cost of product revenues in the period the revision is made.

The Company capitalizes inventory costs associated with certain products prior to regulatory approval, based on management's judgment of probable economic benefit. The Company could be required to expense previously capitalized costs related to pre-approval inventory upon a change in such judgment, due to, among other potential factors, a denial or delay of approval by necessary regulatory bodies or a decision by management to discontinue the related development program.

Acquisitions

Results of operations of acquired companies are included in the Company's results of operations as of the respective acquisition dates. The Company accounts for the acquisition of a business in accordance with ASC 805, Business Combinations (ASC 805). Amounts paid to acquire a business are allocated to the assets acquired and liabilities assumed based on the fair values at the date of acquisition. Any excess of the purchase price over the fair value of the net assets acquired in recorded as goodwill. Transaction costs and costs to restructure the acquired company are expensed as incurred.

Contingent consideration is recorded at fair value as measured on the date of acquisition. The value recorded is based on estimates of future financial projections under various potential scenarios using either a Monte Carlo simulation or the probability-weighted income approach derived from revenue estimates and probability assessment with respect to the likelihood of achieving contingent obligations. Contingent payments related to acquisitions consist of development, regulatory, and commercial milestone payments, in addition to sales-based payments, and are valued using discounted cash flow techniques. Each quarter until such contingent amounts are earned, the fair value of the liability is remeasured at each reporting period and adjusted as a component of operating expenses based on changes to the underlying assumptions. The change in the fair value of sales-based payments is based upon future revenue estimates and increases or decreases as revenue estimates or expectation of timing of payment charges. The estimates used to determine the fair value of the contingent consideration liability are subject to significant judgment and actual results are likely to differ from the amounts originally recorded.

The Company determines the fair value of acquired intangible assets based on detailed valuations that use certain information and assumptions provided by management. The Company allocates any excess purchase price over the fair value of the net tangible and intangible assets acquired to goodwill. Determining the fair value of these intangible assets, acquired as part of a business combination requires the Company to make significant estimates. These estimates include the amount and timing of projected future cash flows, the discount rate used to discount those cash flows to present value, the assessment of the asset's life cycle, and the consideration of legal, technical, regulatory, economic, and competitive risks. The fair value assigned to other intangible assets is determined by estimating the future cash flows of each project or technology and discounting the net cash flows back to their present values. The discount rate used is determined at the time of measurement in accordance with accepted valuation methodologies.

Acquired IPR&D is recognized at fair value and initially characterized as an indefinite-lived intangible asset, irrespective of whether the acquired IPR&D has an alternative future use. The Company uses the income approach to determine the fair value of developed technology and IPR&D acquired in a business combination. This approach determines fair value by estimating the after-tax cash flows attributable to the respective asset over its useful life and then discounting these after-tax cash flows back to a present value. Some of the more significant assumptions inherent in the development of those asset valuations include the estimated net cash flows for each year for each product including net revenues, cost of sales, R&D costs, selling and marketing costs, the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, and competitive trends impacting the asset and each cash flow stream. The Company also uses the income approach, as described above, to determine the estimated fair value of certain other identifiable intangible assets including customer relationships, trade names and business licenses. Customer relationships represent established relationships with customers, which provide a ready channel for the sale of additional products and services. Trade names represent acquired company and product names.

IPR&D acquired in a business combination is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred. Upon receipt of regulatory approval, the indefinite-lived intangible asset is then accounted for as a finite-lived intangible asset and amortized on a straight-line basis or accelerated basis, as appropriate, over its estimated useful life. If the research and development project is subsequently abandoned, the indefinite-lived intangible asset is charged to expense. IPR&D acquired outside of a business combination is expensed immediately.

Due to the uncertainty associated with research and development projects, there is risk that actual results will differ materially from the original cash flow projections and that the research and development project will result in a successful commercial product. The risks associated with achieving commercialization include, but are not limited to, delay or failure to obtain regulatory approvals to conduct clinical trials, delay or failure to obtain required market clearances, delays or issues with patent

issuance, or validity and litigation.

If the acquired net assets do not constitute a business under the acquisition method of accounting, the transaction is accounted for as an asset acquisition and no goodwill is recognized. In an asset acquisition, the amount allocated to acquired IPR&D with no alternative future use is charged to expense at the acquisition date. Payments that would be recognized as contingent consideration in a business combination are expensed when probable in an asset acquisition. Refer to Note 4, *Acquisitions and Divestitures* to the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for details.

Valuation of Goodwill

The excess of the cost over the fair value of net assets of acquired businesses is recorded as goodwill. Goodwill is not subject to amortization but is reviewed for impairment at the reporting unit level annually, or more frequently if impairment indicators arise. The Company's assessment of the recoverability of goodwill is based upon a comparison of the carrying value of goodwill with its estimated fair value. The Company reviews goodwill for impairment in the third quarter every year in accordance with ASC Topic 350 and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. Refer to Note 7, *Goodwill and Other Intangibles* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K) for more information.



Valuation of Identifiable Intangible Assets

The Company tests intangible assets with indefinite lives for impairment annually in the third quarter in accordance with ASC Topic 350. Additionally, the Company may perform interim tests if an event occurs or circumstances change that could potentially reduce the fair value of a indefinite lived intangible asset below its carrying amount. The Company tests for impairment by either performing a qualitative evaluation or a quantitative test. The qualitative evaluation is an assessment of factors, including specific operating results as well as industry, market and general economic conditions, to determine whether it is more likely than not that the fair values of the intangible asset is less than its carrying amount. The Company may elect to bypass this qualitative evaluation and perform a quantitative test.

Product rights and other definite-lived intangible assets are tested periodically for impairment in accordance with ASC Topic 360 when events or changes in circumstances indicate that an asset's carrying value may not be recoverable. The impairment test involves comparing the carrying amount of the asset or asset group to the forecasted undiscounted future cash flows. In the event the carrying value of the asset exceeds the undiscounted future cash flows, the carrying value is considered not recoverable and impairment exists. An impairment loss is measured as the excess of the asset's carrying value over its fair value, calculated using discounted future cash flows. The computed impairment loss is recognized in the period that the impairment occurs.

Derivatives

We develop, manufacture, and sell medical devices globally. Our earnings and cash flows are exposed to market risk from changes in interest rates and currency exchange rates. We address these risks through a risk management program that includes the use of derivative financial instruments and operate the program pursuant to documented corporate risk management policies. All derivative financial instruments are recognized in the financial statements at fair value in accordance with the authoritative guidance. Under the guidance, for those instruments that are designated and qualify as hedging instruments, the hedging instrument must be designated as a fair value hedge, cash flow hedge, or a hedge of a net investment in a foreign operation, based on the exposure being hedged. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and, further, on the type of hedging relationship. Our derivative instruments do not subject our earnings or cash flows to material risk, and gains and losses on these derivatives generally offset losses and gains on the item being hedged. We have not entered into derivative transactions for speculative purposes. From time to time, we may enter into derivatives that are not designated as hedging instruments in order to protect the Company from currency volatility due to intercompany balances.

All derivative instruments are recognized at their fair values as either assets or liabilities on the balance sheet. We determine the fair value of our derivative instruments, by considering the estimated amount we would receive to sell or transfer these instruments at the reporting date and by taking into account expected forward interest rates, currency exchange rates, the creditworthiness of the counterparty for assets, and our creditworthiness for liabilities. In certain instances, we may utilize a discounted cash flow model to measure fair value. Generally, we use inputs that include quoted prices for similar assets or liabilities in active markets, other observable inputs for the asset or liability, and inputs that are derived principally from, or corroborated by, observable market data by correlation or other means.

Income Taxes

Since we conduct operations on a global basis, our effective tax rate has and will depend upon the geographic distribution of our pre-tax earnings among locations with varying tax rates. Changes in the tax rates of the various jurisdictions in which we operate affect our profits. In addition, we maintain a reserve for uncertain tax benefits, changes to which could impact our effective tax rate in the period such changes are made. The effective tax rate can also be impacted by changes in valuation allowances of deferred tax assets, and tax law changes.

Our provision for income taxes may change period-to-period based on specific events, such as the settlement of income tax audits and changes in tax laws, as well as general factors, including the geographic mix of income before taxes, state and local taxes and the effects of the Company's global income tax strategies. We maintain strategic management and operational activities in overseas subsidiaries. See Note 12, *Income Taxes* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K), in our consolidated financial statements for disclosures related to foreign and domestic pretax income, foreign and domestic income tax expense (benefit) and the effect foreign taxes have on our overall effective tax rate.

We recognize a tax benefit from an uncertain tax position only if it is more likely than not to be sustained upon examination based on the technical merits of the position. The amount of the accrual for which an exposure exists is measured by determining the amount that has a greater than 50 percent likelihood of being realized upon ultimate settlement of the position. Components of the reserve are classified as a long-term liability in the consolidated balance sheets. We record interest and penalties accrued in relation to uncertain tax benefits as a component of income tax expense.

We believe that we have identified all reasonably identifiable exposures and that the reserve we have established for identifiable exposures is appropriate under the circumstances; however, it is possible that additional exposures exist and that exposures will be settled at amounts different from the amounts reserved. It is also possible that changes in facts and circumstances could cause us to either materially increase or reduce the carrying amount of our tax reserves.

Our deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and their basis for income tax purposes, and the temporary differences created by the tax effects of capital loss, net operating loss and tax credit carryforwards. We record valuation allowances when it is more likely than not that some portion or all of the deferred tax assets will not be realized. We could recognize no benefit from our deferred tax assets or we could recognize some or all of the future benefit depending on the amount and timing of taxable income we generate in the future.

We intend to indefinitely reinvest substantially all of our foreign earnings in our foreign subsidiaries unless there is a tax–free manner under which to remit the earnings. The current analysis indicates that we have sufficient U.S. liquidity, including borrowing capacity, to fund foreseeable U.S. cash needs without requiring the repatriation of foreign cash. One time or unusual items that may impact our ability or intent to keep the foreign earnings and cash indefinitely reinvested include significant U.S. acquisitions, loans from a foreign subsidiary, and changes in tax laws.

As of December 31, 2021, the Company has not provided deferred income taxes on unrepatriated earnings from foreign subsidiaries as they are deemed to be indefinitely reinvested. Such taxes would primarily be attributable to foreign withholding taxes and local income taxes when such earnings are distributed. As such, the Company has determined the tax impact of repatriating these earnings would not be material as of December 31, 2021.

Loss Contingencies

We are subject to claims and lawsuits in the ordinary course of our business, including claims by employees or former employees, and claims with respect to our products and involving commercial disputes. We accrue for loss contingencies when it is deemed probable that a loss has been incurred and that loss is estimable. The amounts accrued are based on the full amount of the estimated loss before considering insurance proceeds, if applicable, and do not include an estimate for legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with the loss contingency. We consistently accrue legal fees expected to be incurred in connection with loss contingencies as those fees are incurred by outside counsel as a period cost. Our financial statements do not reflect any material amounts related to possible unfavorable outcomes of claims and lawsuits to which we are currently a party because we currently believe that such claims and lawsuits are not expected, individually or in the aggregate, to result in a material, adverse effect on our financial condition. However, it is possible that these contingencies could materially affect our results of operations, financial position and cash flows in a particular period if we change our assessment of the likely outcome of these matters.

Pension Benefits

The Company maintains defined benefit pension plans that cover certain employees in France, Japan, Germany and Switzerland. Various factors are considered in determining the pension liability, including the number of employees expected to be paid their salary levels and years of service, the expected return on plan assets, the discount rate used to determine the benefit obligations, the timing of benefit payments and other actuarial assumptions. If the actual results and events for the pension plans differ from current assumptions, the benefit obligation may be over or under valued. We recognize the underfunded status of the defined benefit pension plans as an asset or a liability in the balance sheet, with changes in the funded status recorded through other comprehensive income in the year in which those changes occur.

The Company's discount rates are determined by considering current yield curves representing high quality, long-term fixed income instruments. The resulting discount rates are consistent with the duration of plan liabilities. In 2021, the discount rate was prescribed as the current yield on corporate bonds with an average rating of AA or AAA of equivalent currency and term to the liabilities.

The expected return on plan assets represents the average rate of return expected to be earned on plan assets over the period the benefits included in the benefit obligation are to be paid. In developing the expected rate of return, the Company considers returns of historical market data as well as actual returns on the plan assets. Using this reference information, the long-term return expectations for each asset category are developed according to the allocation among those investment categories.

The net plan assets of the pension plans are invested in common trusts as of December 31, 2021. Common trusts are classified as Level 2 in fair value hierarchy. The fair value of common trusts are valued at net asset value based on the fair values of the underlying investments of the trusts as determined by the sponsor of the trusts.

The following weighted average assumptions were used to develop net periodic pension benefit cost and the actuarial present value of projected pension benefit obligations for the year ended December 31, 2021 and 2020, respectively:

	As of Decemb	er 31,
Expected return on plan assets Rate of compensation increase	2021	2020
Discount rate	0.37 %	0.34 %
Expected return on plan assets	3.59 %	2.04 %
Rate of compensation increase	2.10 %	2.14 %
Interest crediting rate for cash balance plans	1.0 %	1.0 %

A change of plus (minus) 25 basis points on expected rate of return on plan assets, with other assumptions held constant, would have an estimated \$0.1 million favorable (unfavorable) impact on pension plan costs. As of December 31, 2021, contributions expected to be paid to the plan in 2022 are \$2.3 million.

We use the corridor approach in the valuation of defined benefit pension benefit plans. The corridor approach defers all actuarial gains and losses resulting from variances between actual results and actuarial assumptions. Those unrecognized gains and losses are amortized when the net gains and losses exceed 10% of the greater of the market-related value of plan assets or the projected benefit obligation at the beginning of the year. The amount in excess of the corridor is amortized over the average remaining service period to retirement date of active plan participants.

Stock-based Compensation

We apply the authoritative guidance for stock-based compensation. This guidance requires companies to recognize the expense related to the fair value of their stock-based compensation awards. Stock-based compensation expense for stock option awards is based on the grant date fair value on using the binomial distribution model. The Company recognizes compensation expense for stock option awards, restricted stock awards, performance stock awards and contract stock awards on a ratable basis over the requisite service period of the award. All excess tax benefits and taxes and tax deficiencies from stock-based compensation are included in the provision for income taxes in the consolidated statement of operations.

Recently Issued and Adopted Accounting Standards

Refer to Note 2, *Summary of Significant Accounting Policies* of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K), to the consolidated financial statements for recently adopted accounting pronouncements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to various market risks, including changes in foreign currency exchange rates and interest rates that could adversely affect our results of operations and financial condition. To manage the volatility relating to these typical business exposures, we may enter into various derivative transactions when appropriate. We do not hold or issue derivative instruments for trading or other speculative purposes.

Foreign Currency Exchange and Other Rate Risks

We operate on a global basis and are exposed to the risk that changes in foreign currency exchange rates could adversely affect our financial condition, results of operations and cash flows. We are primarily exposed to foreign currency exchange rate risk with respect to transactions and net assets denominated in Euros, British pounds, Swiss francs, Canadian dollars, Japanese yen, Mexican pesos, Brazilian reais, Australian dollars and Chinese yuan. We manage the foreign currency exposure centrally, on a combined basis, which allows us to net exposures and to take advantage of any natural offsets. To mitigate the impact of currency fluctuations on transactions denominated in nonfunctional currencies, we periodically enter into derivative financial instruments in the form of foreign currency exchange forward contracts with major financial institutions. We temporarily record realized and unrealized gains and losses on these contracts that qualify as cash flow hedges in other comprehensive income, and then recognize them in other income or expense when the hedged item affects net earnings.

From time to time, we enter into foreign currency forward exchange contracts to manage currency exposures for transactions denominated in a currency other than an entity's functional currency. As a result, the impact of foreign currency gains/losses recognized in earnings are partially offset by gains/losses on the related foreign currency forward exchange contracts in the same reporting period. Refer to Note 6, *Derivative Instruments* for further information of the Notes to Consolidated Financial Statements (Part II, Item 8 of this Form 10-K).

We maintain written policies and procedures governing our risk management activities. With respect to derivatives, changes in hedged items are generally expected to be completely offset by changes in the fair value of hedge instruments. 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 or transactions being hedged.

The results of operations discussed herein have not been materially affected by inflation.

Interest Rate Risk

Cash and Cash Equivalents - We are exposed to the risk of interest rate fluctuations on the interest income earned on our cash and cash equivalents. A hypothetical 100 basis points movement in interest rates applicable to our cash and cash equivalents outstanding at December 31, 2021 would increase interest income by approximately \$5.1 million on an annual basis. No significant decrease in interest income would be expected as our cash balances are earning interest at rates of approximately one basis points. We are subject to foreign currency exchange risk with respect to cash balances maintained in foreign currencies.

Debt - Our interest rate risk relates primarily to U.S. dollar LIBOR-indexed borrowings. We use interest rate swap derivative instruments to manage our earnings and cash flow exposure to changes in interest rates. These interest rate swaps fix the interest rate on a portion of our expected LIBOR-indexed floating-rate borrowings. The Company held the following interest rate swaps as of December 31, 2021 (dollar amounts in thousands):

Hedged Item	Notional Amount	Designation Date	Effective Date	Termination Date	Fixed Interest Rate	Estimated Fair Value
						Assets (Liabilities)
1-month USD LIBOR Loan	300,000	December 13, 2017	January 1, 2018	December 31, 2022	2.201 %	(5,268)
1-month USD LIBOR Loan	150,000	December 13, 2017	July 1, 2019	June 30, 2024	2.423 %	(5,520)
1-month USD LIBOR Loan	200,000	December 13, 2017	January 1, 2018	December 31, 2024	2.313 %	(7,421)
1-month USD LIBOR Loan	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.220 %	(5,512)
1-month USD LIBOR Loan	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.199 %	(5,464)
1-month USD LIBOR Loan	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.209 %	(5,494)
1-month USD LIBOR Loan	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.885 %	(6,886)
1-month USD LIBOR Loan	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.867 %	(6,764)
1-month USD LIBOR Loan	575,000	December 15, 2020	July 31, 2025	December 31, 2027	1.415 %	3,552
1-month USD LIBOR Loan	125,000	December 15, 2020	July 1, 2025	December 31, 2027	1.404 %	821
	\$ 1,775,000				-	\$ (43,957)

These interest rate swaps were designated as cash flow hedges as of December 31, 2021. The total notional amounts related to the Company's interest rate swaps were \$1.8 billion and with \$875.0 million effective as of December 31, 2021. Based on our outstanding borrowings at December 31, 2021, a 100 basis points change in interest rates would have impacted interest expense on the unhedged portion of the debt by \$1.1 million on an annualized basis.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Financial statements and the financial statement schedule specified by this Item, together with the report thereon of PricewaterhouseCoopers LLP, are presented following Item 15 of this report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

Not applicable.



ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in our Exchange Act reports 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 principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure. Disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Management has designed our disclosure controls and procedures to provide reasonable assurance of achieving the desired control objectives.

As required by Exchange Act Rule 13a-15(b), we have carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2021. Based upon this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2021 to provide such reasonable assurance.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) under the Securities Exchange Act of 1934, as amended. Internal control over financial reporting is 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 in the United States of America ("GAAP"). We recognize that 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 and procedures may deteriorate.

To evaluate the effectiveness of our internal control over financial reporting, management used the criteria described in *Internal Control* — *Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based upon this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2021.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2021 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

INCORPORATION BY REFERENCE

The information called for by Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities relating to equity compensation plans, Item 10. Directors, Executive Officers and Corporate Governance, Item 11. Executive Compensation, Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, Item 13. Certain Relationships and Related Transactions, and Director Independence and Item 14. Principal Accountant Fees and Services is incorporated herein by reference to the Company's definitive proxy statement for its Annual Meeting of Stockholders scheduled to be held on May 13, 2022, which definitive proxy statement is expected to be filed with the Commission not later than 120 days after the end of the fiscal year to which this report relates.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

(a) Documents filed as a part of this report:

1. Financial Statements.

The following financial statements and financial statement schedules are filed as a part of this report:

Report of Independent Registered Public Accounting Firm (PricewaterhouseCoopers LLP, Florham Park, New Jersey, PCAOB ID# 238)	<u>F-1</u>
Consolidated Statements of Operations for the years ended December 31, 2021, 2020 and 2019	<u>F-3</u>
Consolidated Statements of Comprehensive Income for the years ended December 31, 2021, 2020 and 2019	<u>F-4</u>
Consolidated Balance Sheets as of December 31, 2021 and 2020	<u>F-5</u>
Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019	<u>F-6</u>
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2021, 2020 and 2019	<u>F-7</u>
Notes to Consolidated Financial Statements	<u>F-8</u>

2. Financial Statement Schedule.

Schedule II — Valuation and Qualifying Accounts for the years ended December 31, 2021, 2020 and 2019

<u>F-49</u>

All other schedules not listed above have been omitted, because they are not applicable or are not required, or because the required information is included in the consolidated financial statements or notes thereto.

3. Exhibits required to be filed by Item 601 of Regulation S-K. Stock Purchase Agreement, dated as of October 25, 2013, by and between Covidien Group S.A.R.L. and Integra LifeSciences Corporation (Incorporated by Reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 15, 2014). 2.1 2.1(a) Put Option Agreement, dated September 29, 2020, between the Company and certain of its subsidiaries and Smith & Nephew USD Limited, a subsidiary of Smith+Nephew (including the Purchase and Sale Agreement attached as Appendix 1 thereto) (Incorporated by reference to Exhibit 2.1 to the Company's Quarterly Report on Form 10-Q for the guarter ended September 30, 2020). Agreement and Plan of Merger by among Integra LifeSciences Holdings Corporation and ACell Inc. dated as of December 15, 2020 (Incorporated by reference to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020) 2.1(b) Stock and Asset Purchase Agreement by and among Medtronic, Inc., Medtronic Xomed Instrumentation, SAS, and Integra LifeSciences. Corporation, dated as of September 12, 2014 (Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on October 27, 2014). 2.2 Separation and Distribution Agreement between Integra LifeSciences Holdings Corporation and SeaSpine Holdings Corporation, dated as of June 30, 2015 (Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on July 7, 2015) 2.3 Agreement and Plan of Merger by and among Integra LifeSciences Corporation, Patriot S1, Inc., TEI Biosciences Inc. and Dr. Yiannis Monovoukas, dated as of June 26, 2015 (Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on 2.4 July 20, 2015) 2.5

2.5 Agreement and Plan of Merger by and among Integra LifeSciences Corporation, Patriot S2, Inc., TEI Medical Inc. and Dr. Yiannis Monovoukas, dated as of June 26, 2015 (Incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed on July 20, 2015)

- 2.6 Agreement and Plan of Merger by and among Integra LifeSciences Holdings Corporation, Integra Derma, Inc., and Derma Sciences, Inc., dated as of January 10, 2017 (Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on January 11, 2017)
- 2.7 Binding Offer Letter by and among Integra LifeSciences Holdings Corporation and DePuy Synthes, Inc., dated as of February 14, 2017 (Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on February 15, 2017
- 2.8(a) <u>Asset Purchase Agreement accepted and countersigned by DePuy Synthes, dated May 11, 2017 (Incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on May 15, 2017)</u>
- 2.8(b) <u>Asset Purchase Agreement, dated September 8, 2017, between the Company and certain of its subsidiaries and Natus Medical</u> Incorporated (Incorporated by reference to Exhibit 2.1 to the Company's Quarterly Report on Form 10-Q filed on October 26, 2017)
- 3.1(a) <u>Amended and Restated Certificate of Incorporation of the Company dated February 16, 1993 (Incorporated by reference to Exhibit 3.1(a)</u> to the Company's Annual Report on Form 10-K for the year ended December 31, 2005)
- 3.1(b) Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company dated May 22, 1998 (Incorporated by reference to Exhibit 3.1(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 1998)
- 3.1(c) Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company dated May 17, 1999 (Incorporated by reference to Exhibit 3.1(c) to the Company's Annual Report on Form 10-K for the year ended December 31, 2004)
- 3.1(d) Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company dated December 21, 2016 (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on December 22, 2016)
- 3.2(a) <u>Amended and Restated Bylaws of the Company, effective as of May 17, 2012 (Incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on April 13, 2012)</u>
- 3.2(b) Second Amended and Restated Bylaws of Integra LifeSciences Holdings Corporation, effective as of December 11, 2018 (Incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-k filed on December 12, 2018)
- 4.1 Indenture, dated as of February 7, 2020, by and between Integra LifeSciences Holdings Corporation and Citibank, N.A., as trustee (including Form of 0.50% Convertible Senior Notes due 2025) (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on February 7, 2020).
- 4.2 First Supplemental Indenture, by and between Integra LifeSciences Holdings Corporation and Citibank, N.A., as trustee (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 9, 2020)
- 4.3 Integra LifeSciences Deferred Compensation Plan, effective as of May 16, 2019 (Incorporated by reference to Exhibit 4.13 to the Company's Current Form S-8 Registration Statement filed on May 23, 2019)
- 4.4 <u>Description of Securities+</u>
- 10.1(a) Lease Modification #2 entered into as of October 28, 2005, by and between Plainsboro Associates and Integra LifeSciences Corporation (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 2, 2005)
- 10.1(b)
 Lease Modification #3 entered into as of March 2, 2011, by and between Plainsboro Associates and Integra LifeSciences Corporation (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 3, 2011)
- 10.1(c) Lease Modification #4 entered into as of April 20, 2017, by and between Plainsboro Associates and Integra LifeSciences Corporation (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 25, 2017)
- 10.2(a)
 Form of Indemnification Agreement for Non-Employee Directors and Officers (effective prior to February 15, 2019) (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 24, 2008)*

- 10.2(b) Form of Indemnification Agreement for Non-Employee Director and Officers effective February 15, 2019. *
- 10.3
 1996 Incentive Stock Option and Non-Qualified Stock Option Plan (as amended through December 27, 1997) (Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on February 3, 1998)*
- 10.4
 1998 Stock Option Plan (amended and restated as of July 26, 2005) (Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005)*
- 10.5
 1999 Stock Option Plan (amended and restated as of July 26, 2005) (Incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005)*
- 10.6(a)
 Employee Stock Purchase Plan (as amended on May 17, 2004) (Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-8 (Registration No. 333-127488) filed on August 12, 2005)*
- 10.6(b)
 First Amendment to Employee Stock Purchase Plan, dated October 26, 2005 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 1, 2005)*
- 10.7(a)
 Second Amended and Restated 2003 Equity Incentive Plan effective May 19, 2010 (Incorporated by reference to Exhibit 10 to the Company's Current Report on Form 8-K filed May 21, 2010)*
- 10.7(b)
 Amendment to the Second Amended and Restated 2003 Equity Incentive Plan effective May 17, 2012 (Incorporated by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012)*
- 10.7(c) Amendment to the Second Amended and Restated 2003 Equity Incentive Plan effective January 1, 2013 (Incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013)*
- 10.7(d) Third Amended and Restated 2003 Equity Incentive Plan effective May 22, 2015 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 29, 2015)*
- 10.7(e) Fourth Amended and Restated 2003 Equity Incentive Plan, effective May 23, 2017 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 25, 2017)
- 10.7(f) Amendment to the Integra LifeSciences Holdings Corporation Fourth Amended and Restated 2003 Equity Incentive Plan (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020)*
- 10.7(g)
 Integra LifeSciences Holdings Corporation Fifth Amended and Restated 2003 Equity Incentive Plan (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 18, 2021)*
- 10.8 Additional Call Option Transaction Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Morgan Stanley & Co. International plc. (Incorporated by reference to Exhibit 10.11 of the Company's Current Report on Form 8-K filed on February 7, 2020)
- 10.9(a)
 Letter Agreement dated June 7, 2012 between Stuart M. Essig and the Company (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 7, 2012)*
- 10.9(b)
 Indemnity letter agreement dated December 27, 1997 from the Company to Stuart M. Essig (Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed on February 3, 1998)*
- 10.10 Registration Rights Provisions for Stuart M. Essig (Incorporated by reference to Exhibit B of Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 3, 1998)*
- 10.11(a) Registration Rights Provisions for Stuart M. Essig (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on January 8, 2001)*
- 10.11(b) Registration Rights Provisions for Stuart M. Essig (Incorporated by reference to Exhibit B of Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004)*
- 10.12 Issuer Forward Repurchase Transaction Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and JPMorgan Chase Bank, National Association, New York Branch. (Incorporated by reference to Exhibit 10.17 of the Company's Current Report on Form 8-K filed on February 7, 2020)



10.13(a)	Lease Contract, dated April 1, 2005, between the Puerto Rico Industrial Development Company and Integra CI, Inc. (executed on
	September 15, 2006) (Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended
	<u>September 30, 2006)</u>

- 10.13(b) <u>Amendment to Lease Contract dated as of November 2, 2011, between Integra CI, Inc. and Puerto Rico Industrial Development Company</u> (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 7, 2011)
- 10.13(c) Termination of Amendment to Lease Contract, dated as of April 2, 2012, between Integra CI, Inc. and Puerto Rico Industrial Development Company (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012)
- 10.14
 Restricted Units Agreement dated December 27, 1997 between the Company and Stuart M. Essig (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 3, 1998)*
- 10.15(a) <u>Stock Option Grant and Agreement pursuant to 1999 Stock Option Plan dated December 22, 2000 between the Company and Stuart M.</u> <u>Essig (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on January 8, 2001)*</u>
- 10.15(b)
 Stock Option Grant and Agreement pursuant to 2000 Equity Incentive Plan dated December 22, 2000 between the Company and Stuart

 M. Essig (Incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on January 8, 2001)*
- 10.16(a)
 Restricted Units Agreement dated December 22, 2000 between the Company and Stuart M. Essig (Incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on January 8, 2001)*
- 10.16(b)
 Amendment 2006-1, dated as of October 30, 2006, to the Stuart M. Essig Restricted Units Agreement dated as of December 22, 2000 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 3, 2006)*
- 10.17 Stock Option Grant and Agreement pursuant to 2003 Equity Incentive Plan dated July 27, 2004 between the Company and Stuart M. Essig (Incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004)*
- 10.18(a) Contract Stock/Restricted Units Agreement pursuant to 2003 Equity Incentive Plan dated July 27, 2004 between the Company and Stuart M. Essig (Incorporated by reference to Exhibit 10.31 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004)*
- 10.18(b) <u>Amendment 2006-1, dated as of October 30, 2006, to the Stuart M. Essig Contract Stock/Restricted Units Agreement dated as of July 27, 2004 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on November 3, 2006)*</u>
- 10.18(c) <u>Amendment 2008-1, dated as of March 6, 2008, to the Stuart M. Essig Contract Stock/Restricted Units Agreement dated as of July 27, 2004 (Incorporated by reference to Exhibit 10.25(c) to the Company's Annual Report on Form 10-K for the year ended December 31, 2007)*</u>
- 10.18(d) Amendment 2011-1, dated as of May 17, 2011, to the Stuart M. Essig Contract Stock/Restricted Units Agreement dated as of July 24, 2004 (Incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011)*
- 10.19 Contract Stock/Units Agreement dated as of May 17, 2011 between the Company and Stuart M. Essig (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on May 23, 2011)*
- 10.20 Form of Amendment 2011-1 to Contract Stock/Restricted Units Agreements between the Company and Mr. Essig (Incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011)*
- 10.21 Form of Stock Option Grant and Agreement between the Company and Stuart M. Essig (Incorporated by reference to Exhibit 10.32 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004)*
- 10.22(a) Form of Contract Stock/Restricted Units Agreement for Stuart M. Essig (Incorporated by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008)*

- 10.22(b) New Form of Contract Stock/Restricted Units Agreement (for Annual Equity Awards) for Stuart M. Essig (Incorporated by reference to Exhibit 10.28(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 2010)*
- 10.22(c) Form of Amendment 2011-1 to Contract Stock/Restricted Units Agreement between the Company and Mr. Essig (Incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011)*
- 10.23 Form of Performance Stock Agreement for Stuart M. Essig (Incorporated by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008)*
- 10.24 Form of Restricted Stock Agreement for Stuart M. Essig for 2009 (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed April 13, 2009)*
- 10.25(a) Form of Performance Stock Agreement (Executive Officers) (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 25, 2013)*
- 10.25(b) Form of Performance Stock Agreement (Executive Officers) (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 29, 2016)*
- 10.25(c) Form of Performance Stock Agreement for Peter J. Arduini (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 8-K filed on February 29, 2016)*
- 10.25(d) Form of Performance Stock Agreement (Executive Officers) (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018) *
- 10.25(e) Form of Performance Stock Agreement for Peter J. Arduini (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018)*
- 10.26 Performance Incentive Compensation Plan effective January 1, 2013 (Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013)*
- 10.27(a) First Amendment, dated as of February 15, 2017, to the Performance Incentive Compensation Plan (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 17, 2017)
- 10.27(b) <u>2018 Performance Incentive Compensation Plan, effective January 1, 2018 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on May 25, 2017)</u>
- 10.28 New Form of Contract Stock/Restricted Units Agreement pursuant to 2003 Equity Incentive Plan (for 2011) Annual Equity Award for Stuart M. Essig) (Incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011)*
- 10.29 Form of Notice of Grant of Stock Option and Stock Option Agreement (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 29, 2005)*
- 10.30 Form of Non-Qualified Stock Option Agreement (Non-Directors) (Incorporated by reference to Exhibit 10.35 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004)*
- 10.31 Form of Incentive Stock Option Agreement (Incorporated by reference to Exhibit 10.36 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004)*
- 10.32 Form of Non-Qualified Stock Option Agreement (Directors) (Incorporated by reference to Exhibit 10.37 to the Company's Annual Report on Form 10-K for the year ended December 31, 2004)*
- 10.33 Form of Stock Option Agreement (Executive Officers) (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)*
- 10.34 Form of Stock Option Agreement for Glenn Coleman (Incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)*
- 10.35
 Form of Change in Control Severance Program (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 19, 2020)*
- 10.36(a)
 Form of Restricted Stock Agreement for Non-Employee Directors under the 2003 Equity Incentive Plan (Incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012)*

- 10.36(b)
 New Form of Restricted Stock Agreement for Non-Employee Directors under the 2003 Equity Incentive Plan (Incorporated by reference to Exhibit 10.38(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)*
- 10.37(a) Form of Restricted Stock Agreement for Executive Officers Annual Vesting (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 25, 2009)*
- 10.37(b) Form of Restricted Stock Agreement for Executive Officers Annual Vesting (Incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012)*
- 10.37(c) <u>New Form of Restricted Stock Agreement for Executive Officers Annual Vesting (Incorporated by reference to Exhibit 10.38(e) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)*</u>
- 10.38(a) Form of Restricted Stock Agreement for Executive Officers Cliff Vesting (Incorporated by reference to Exhibit 10.8 to the Company's Quarter Report on Form 10-Q for the quarter ended March 31, 2009)*
- 10.38(b) Form of Restricted Stock Agreement for Executive Officers Cliff Vesting (Incorporated by reference to Exhibit 10.6 to the Company's quarterly report on Form 10-Q for the quarter ended June 30, 2012)*
- 10.38(c) <u>New Form of Restricted Stock Agreement for Executive Officers Cliff Vesting (Incorporated by reference to Exhibit 10.38(h) to the Company's Annual Report on Form 10-K for the year ended December 31, 2012)*</u>
- 10.39
 Davis Promotion Summary, effective December 1, 2016 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 5, 2016)*
- 10.40 <u>Coleman Promotion Summary, effective June 24, 2019(Incorporated by reference to the Current Report on Form 8-K filed on June 24, 2019)</u>
- 10.41 Anderson Offer Summary, effective June 24, 2019(Incorporated by reference to the Current Report on Form 8-K filed on June 24, 2019)
- 10.42 Annual Executive Physical Medical Exam Arrangement (Incorporated by reference to the Exhibit 10.2 to the Company's Current Report on Form 8-K filed on July 29, 2013)*
- 10.43
 Amended and Restated Management Incentive Compensation Plan, as of January 1, 2008 (Incorporated by reference to Exhibit 10.43(c))

 to the Company's Annual Report on Form 10-K for the year ended December 31, 2007)*
- 10.44(a) Lease Agreement between 109 Morgan Lane, LLC and Integra LifeSciences Corporation, dated May 15, 2008 (Incorporated by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008)
- 10.44(b)
 First Amendment to Lease Agreement between 109 Morgan Lane, LLC and Integra LifeSciences Corporation, dated March 9, 2009 (Incorporated by reference to Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2009)
- 10.44(c) Lease Agreement dated as of July 1, 2013, between 109 Morgan Lane, LLC and Integra LifeSciences Corporation (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 1, 2013)
- 10.45(a) Receivables Financing Agreement, dated as of December 21, 2018, by and among Integra Receivables LLC, Integra LifeSciences Sales LLC, as Servicer, PNC Bank, National Association, as Administrative Agent, PNC Capital Markets LLC, as Structuring Agent, and certain lenders and group agents that are parties thereto from time to time (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 28, 2018)
- 10.45(b) Amendment No. 1 to Receivables Financing Agreement and Reaffirmation of Performance Guaranty, dated as of March 29, 2019, by and among Integra Receivables LLC, Integra LifeSciences Sales LLC, as Servicer, PNC Bank, National Associations, as Administrative Agent, Committed Lender and Group Agent, Mizuho Bank, Ltd., as Committed Lender and Group Agent and PNC Capital Markets LLC, as Structuring Agent, and certain lenders and group agents that are parties thereto from time to time (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021)

- 10.45(c) Amendment No. 2 to Receivables Financing Agreement and Reaffirmation of Performance Guaranty, dated as of July 17, 2020, by and among, Integra Receivables LLC, Integra LifeSciences Sales LLC, as Servicer, PNC Bank, National Associations, as Administrative Agent, Committed Lender and Group Agent, Mizuho Bank, Ltd., as Committed Lender and Group Agent and PNC Capital Markets LLC, as Structuring Agent, and certain lenders and group agents that are parties thereto from time to time (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021)
- 10.45(d) Amendment No. 3 to Receivables Financing Agreement and Reaffirmation of Performance Guaranty, dated as of May 28, 2021, by and among, Integra Receivables LLC, Integra LifeSciences Sales LLC, as Servicer, PNC Bank, National Associations, as Administrative Agent, PNC Capital Markets LLC, as Structuring Agent, Committed Lender and Group Agent, and certain lenders and group agents that are parties thereto from time to time (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021)
- 10.46 Purchase and Sale Agreement, dated as of December 21, 2018, by and among Integra LifeSciences Sales LLC, Integra LifeSciences Corporation and Integra Receivables LLC (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 28, 2018)
- 10.47(a) Sixth Amended and Restated Credit Agreement, dated as of February 3, 2020, among Integra LifeSciences Holdings Corporation, the lenders party thereto, Bank of America, N.A., as Administrative Agent, Swing Line Lender and an L/C Issuer, Citibank N.A., Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, N.A., as Co-Syndication Agents, and PNC Bank, N.A., Bank of Nova Scotia, Bank of the West, BBVA USA, Capital One, National Association, Citizens Bank, N.A., DNB Capital LLC, Santander Bank, N.A., TD Bank, N.A. and Truist Bank, as Co-Documentation Agents. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 3, 2020).
- 10.47(b) <u>Amendment, dated July 14, 2020, to that Sixth Amended and Restated Credit Agreement, among Integra LifeSciences Holdings</u> <u>Corporation, a syndicate of lending banks, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, Citibank</u> <u>N.A., Morgan Stanley MUFG Loan Partners, LLC and Wells Fargo Bank, N.A. as Co-Syndication Agents, and PNC Bank, N.A., Bank of</u> <u>Nova Scotia, Bank of the West, BBVA USA, Capital One, National Association, Citizens Bank, N.A., DNB Capital LLC, Santander</u> <u>Bank, N.A., T.D. Bank, N.A. and Truist Bank, as Co-Documentation Agents (as amended, restated, modified and supplemented from time</u> to time prior to the date hereof, the "Credit Agreement") (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on July 20, 2020).
- 10.48
 Base Call Option Transaction Confirmation, dated as of February 4, 2020, between Integra LifeSciences Holdings Corporation and Citibank, N.A. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 7, 2020)
- 10.49 Ratification Agreement, dated as of February 3, 2020, between Integra LifeSciences Holdings Corporation, the Subsidiary Guarantors of Integra LifeSciences Holdings Corporation and Bank of America, N.A., as Administrative Agent (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 3, 2020)
- 10.50 Base Call Option Transaction Confirmation, dated as of February 4, 2020, between Integra LifeSciences Holdings Corporation and Morgan Stanley & Co. International plc. (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 7, 2020)
- 10.51 Base Call Option Transaction Confirmation, dated as of February 4, 2020, between Integra LifeSciences Holdings Corporation and Wells Fargo, National Association. (Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed on February 7, 2020)
- 10.52 Base Warrant Confirmation, dated as of February 4, 2020, between Integra LifeSciences Holdings Corporation and Citibank, N.A. (Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed on February 7, 2020)
- 10.53 Base Warrant Confirmation, dated as of February 4, 2020, between Integra LifeSciences Holdings Corporation and Goldman Sachs & Co. LLC. (Incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed on February 7, 2020)
- 10.54
 Base Warrant Confirmation, dated as of February 4, 2020, between Integra LifeSciences Holdings Corporation and Morgan Stanley & Co. International plc. (Incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K filed on February 7, 2020)
- 10.55
 Base Warrant Confirmation, dated as of February 4, 2020, between Integra LifeSciences Holdings Corporation and Wells Fargo, National Association. (Incorporated by reference to Exhibit 10.8 to the Company's Current Report on Form 8-K filed on February 7, 2020)

10.56	Additional Call Option Transaction Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Citibank, N.A. (Incorporated by reference to Exhibit 10.9 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.57	Additional Call Option Transaction Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Goldman Sachs & Co. LLC. (Incorporated by reference to Exhibit 10.10 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.58	Additional Call Option Transaction Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Morgan Stanley & Co. International plc. (Incorporated by reference to Exhibit 10.11 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.59	Additional Call Option Transaction Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Wells Fargo, National Association. (Incorporated by reference to Exhibit 10.12 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.60	Additional Warrant Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Citibank, N.A. (Incorporated by reference to Exhibit 10.13 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.61	Additional Warrant Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Goldman Sachs & Co. LLC. (Incorporated by reference to Exhibit 10.14 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.62	Additional Warrant Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Morgan Stanley & Co. plc. (Incorporated by reference to Exhibit 10.15 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.63	Additional Warrant Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation and Wells Fargo, National Association. (Incorporated by reference to Exhibit 10.16 to the Company's Current Report on Form 8-K filed on February 7, 2020)
10.64	<u>Issuer Forward Repurchase Transaction Confirmation, dated as of February 5, 2020, between Integra LifeSciences Holdings Corporation</u> and JPMorgan Chase Bank, National Association, New York Branch. (Incorporated by reference to Exhibit 10.17 to the Company's <u>Current Report on Form 8-K filed on February 7, 2020</u>)
10.65	Employment Agreement, dated October 28, 2021, by and between Integra LifeSciences Holdings Corporation, Integra LifeSciences Corporation and Jan De Witte (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 28, 2021)*
21.1	Subsidiaries of the Company+
23.1	Consent of PricewaterhouseCoopers LLP+
31.1	Certification of Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002+
31.2	Certification of Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002+
32.1	Certification of Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002+
32.2	Certification of Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002+
99.1	Letter, dated December 21, 2011, from the United States Food and Drug Administration to Integra LifeSciences Corporation (Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on January 5, 2012)
99.2	Food and Drug Administration Form FDA-483, dated July 30, 2012, relating to inspection of Plainsboro, NJ manufacturing facility (Incorporated by reference to Exhibit 99.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012)
99.3	Letter, dated November 1, 2012, from the United States Food and Drug Administration to Integra NeuroSciences Ltd. (Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on November 13, 2012)
99.4	Letter, dated February 13, 2013, from the United States Federal Drug Administration to Integra LifeSciences Corporation (Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on February 19, 2013)

- 99.5 Letter, dated September 24, 2013, from the United States Federal Drug Administration to Integra LifeSciences Corporation (Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on September 27, 2013)
- 99.6 Food and Drug Administration Form FDA-483, dated November 26, 2013, relating to the inspection of the Añasco Facility (Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on December 3, 2013)
- 99.7 Letter, dated January 14, 2015, from the United States Food and Drug Administration to Integra LifeSciences Corporation (Incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on January 20, 2015)
- 99.8 Letter, dated May 29, 2015, from the United States Food and Drug Administration to TEI Biosciences Inc. (Incorporated by reference to Exhibit 99.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015)
- 99.9 Letter, dated June 30, 2015, from the United States Food and Drug Administration to Integra LifeSciences (Ireland) Limited (Incorporated by reference to Exhibit 99.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015)
- 101.INS XBRL Instance Document+#
- 101.SCH XBRL Taxonomy Extension Schema Document+#
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document+#
- 101.DEF XBRL Definition Linkbase Document
- 101.LAB XBRL Taxonomy Extension Labels Linkbase Document+#
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document+#

* Indicates a management contract or compensatory plan or arrangement.

- + Indicates this document is filed as an exhibit herewith.
- # The financial information of Integra LifeSciences Holdings Corporation Annual Report on Form 10-K for the year ended December 31, 2021 filed on February 24, 2022 formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Statements of Operations, (ii) the Consolidated Statement of Comprehensive Income (Loss), (iii) the Consolidated Balance Sheets, (iv) Parenthetical Data to the Consolidated Balance Sheets, (v) the Consolidated Statements of Cash Flows, (vi) the Consolidated Statements of Changes in Stockholders' Equity, and (vii) Notes to Consolidated Financial Statements, is furnished electronically herewith.

The Company's Commission File Number for Reports on Form 10-K, Form 10-Q and Form 8-K is 0-26224.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 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.

INTEGRA LIFESCIENCES HOLDINGS CORPORATION

By: /s/ Jan De Witte

Jan De Witte President and Chief Executive Officer (Principal Executive Officer)

By: /s/ Carrie L. Anderson

Carrie L. Anderson Executive Vice President and Chief Financial Officer (Principal Financial Officer)

By: /s/ Jeffrey A. Mosebrook

Jeffrey A. Mosebrook Senior Vice President, Finance (Principal Accounting Officer)

Date: February 24, 2022

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 in the capacities indicated.

Signature	Title	Date
/s/ Jan De Witte Jan De Witte	President and Chief Executive Officer, and Director (Principal Executive Officer)	February 24, 2022
/s/ Carrie L. Anderson Carrie L. Anderson	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 24, 2022
/s/ Jeffrey A. Mosebrook Jeffrey A. Mosebrook	Senior Vice President, Finance (Principal Accounting Officer)	February 24, 2022
/s/ Stuart M. Essig, Ph.D. Stuart M. Essig, Ph.D.	Chairman of the Board	February 24, 2022
/s/ Rhonda Germany Ballintyn Rhonda Germany Ballintyn	Director	February 24, 2022
/s/ Keith Bradley, Ph.D. Keith Bradley, Ph.D.	Director	February 24, 2022
/s/ Shaundra Clay Shaundra Clay	Director	February 24, 2022
/s/ Barbara B. Hill Barbara B. Hill	Director	February 24, 2022
/s/ Donald E. Morel, Jr., Ph.D. Donald E. Morel, Jr., Ph.D.	Director	February 24, 2022
/s/ Raymond G. Murphy Raymond G. Murphy	Director	February 24, 2022
/s/ Christian S. Schade Christian S. Schade	Director	February 24, 2022

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Integra LifeSciences Holdings Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Integra LifeSciences Holdings Corporation and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of operations, of comprehensive income, of changes in stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes and financial statement schedule listed in the index 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, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 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, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for convertible instruments in 2021 and leases in 2019.

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 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 matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates 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 matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

ACell, Inc. Acquisition - Valuation of Developed Technology Intangible Assets

As described in Notes 2, 4 and 7 to the consolidated financial statements, in January 2021, the Company acquired ACell Inc. for an acquisition purchase price of \$306.9 million plus contingent consideration of up to \$100 million, which resulted in \$245M of developed technology intangible assets being recorded. The estimated fair value of the developed technology acquired was determined by management using the multi-period excess earnings method of the income approach. Management's significant assumptions used in the estimate of fair value included the estimated net cash flows, net revenues, cost of sales, selling and marketing costs, discount rates and each asset's life cycle.

The principal considerations for our determination that performing procedures relating to the valuation of developed technology intangible assets from the acquisition of ACell Inc. is a critical audit matter are the (i) the significant judgment by management in developing the fair value of the acquired developed technology intangible assets, (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's assumptions related to net revenues, cost of sales, selling and marketing costs, discount rates and each asset's life cycle; 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 acquisition accounting, including controls over management's valuation of the intangible assets and controls over the development of significant assumptions related to net revenues, cost of sales, selling and marketing costs, discount rates and each asset's life cycle. These procedures also included, among others (i) reading the purchase agreement and (ii) testing management's process for developing the fair value of the developed technology intangible assets. Testing management's process included evaluating the appropriateness of the multi-period excess earnings method, testing the completeness, accuracy, and relevance of underlying data used in the method, and evaluating the reasonableness of significant assumptions used by management related to net revenues, cost of sales, selling and marketing costs, discount rates and each asset's life cycle. Evaluating the reasonableness of management's assumptions related to net revenues, cost of sales, selling and marketing costs, discount rates and each asset's life cycle involved considering (i) current and past performance of the products associated with the developed technology acquired, as well as the performance of the reporting unit that assumed the products associated with the developed technology acquired; (ii) the consistency with external market and industry data; and (iii) and whether the assumptions are consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's multi-period excess earnings method and the discount rates and each asset's life cycle assumptions.

/s/ PricewaterhouseCoopers LLP Florham Park, New Jersey February 24, 2022

We have served as the Company's auditor since 1989.



INTEGRA LIFESCIENCES HOLDINGS CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in thousands, except per share amounts)

	Years Ended December 31,								
	 2021		2020		2019				
Total revenue, net	\$ 1,542,448	\$	1,371,868	\$	1,517,557				
Costs and expenses:									
Cost of goods sold	597,808		520,834		564,681				
Research and development	93,051		77,381		79,573				
In-process research and development			—		64,916				
Selling, general and administrative	637,445		594,526		687,599				
Intangible asset amortization	16,914		27,757		27,028				
Total costs and expenses	1,345,218		1,220,498		1,423,797				
Operating income	 197,230		151,370		93,760				
Interest income	6,737		9,297		10,779				
Interest expense	(50,395)		(71,581)		(53,957)				
Gain from sale of business	41,798		—						
Other income, net	19,307		4,434		9,522				
Income before income taxes	214,677		93,520		60,104				
Provision (benefit) for income taxes	45,602		(40,372)		9,903				
Net income	\$ 169,075	\$	133,892	\$	50,201				
Net income per share									
Basic	\$ 2.00	\$	1.58	\$	0.59				
Diluted	\$ 1.98	\$	1.57	\$	0.58				
Weighted average common shares outstanding (See Note 13):									
Basic	84,698		84,650		85,637				
Diluted	85,485		85,228		86,494				

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (Dollars in thousands)

	Ye	Years Ended December 31,				
	 2021 2020		2019			
Net income	\$ 169,075	\$	133,892	\$	50,201	
			_			
Other comprehensive (loss) income, before tax:						
Change in foreign currency translation adjustments	(17,362)		53,363		(174)	
Unrealized gain (loss) on derivatives						
Unrealized derivative gain (loss) arising during period	68,192		(96,837)		(13,671)	
Less: Reclassification adjustments for gain (loss) included in net income	17,024		(24,442)		14,865	
Unrealized gain (loss) on derivatives	 51,168		(72,395)		(28,536)	
Defined benefit pension plan - net gain (loss) arising during period	6,998		4,604		(8,973)	
Total other comprehensive gain (loss), before tax	40,804		(14,428)		(37,683)	
Income tax (expense) benefit related to items in other comprehensive loss	(11,900)		16,771		6,724	
Total other comprehensive gain (loss), net of tax	28,904		2,343		(30,959)	
Comprehensive income, net of tax	\$ 197,979	\$	136,235	\$	19,242	

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION CONSOLIDATED BALANCE SHEETS

(Dollars in thousands, except per share amounts)

		Decem	ber 31,	
		2021	,	2020
ASSETS				
Current Assets:				
Cash and cash equivalents	\$	513,448	\$	470,166
Trade accounts receivable, net of allowances of \$4,735 and \$6,439		231,831		225,532
Inventories, net		317,386		310,117
Prepaid expenses and other current assets		91,051		69,282
Assets held for sale		_		162,105
Total current assets		1,153,716		1,237,202
Property, plant and equipment, net		311,703		287,529
Right of use asset - operating leases		84,543		83,635
Intangible assets, net		1,145,573		989,436
Goodwill		1,013,458		932,367
Deferred tax assets, net		56,950		73,690
Other assets		16,440		11,277
Total assets	\$	3,782,383	\$	3,615,136
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current Liabilities:				
Current portion of borrowings under senior credit facility	\$	45.000	\$	33,750
Current portion of borrowings under securitization facility	•			112,500
Current portion of lease liability - operating leases		14,775		12,818
Accounts payable, trade		61,837		54,608
Contract liabilities		5,295		5,275
Accrued compensation		92,656		76,117
Accrued expenses and other current liabilities		120,458		94,194
Liabilities held for sale		_		11,751
Total current liabilities		340,021		401,013
Long-term borrowings under senior credit facility		824,257		933,387
Long-term borrowings under securitization facility		112,500		
Long-term convertible securities		564,426		474,834
Lease liability - operating leases		90,329		88,118
Deferred tax liabilities		45,788		16,190
Other liabilities		120,258		186,727
Total liabilities		2.097.579		2,100,269
Stockholders' Equity:		_,,		_,,
Preferred Stock; no par value; 15,000 authorized shares; none outstanding				
Common stock; \$0.01 par value; 240,000 authorized shares; 89,600 and 89,251 issued at December 31, 2021 and 2020,				
respectively	,	896		893
Additional paid-in capital		1,264,943		1,290,909
Treasury stock, at cost; 4,899 and 4,914 shares at December 31, 2021 and 2020, respectively		(234,448)		(235,141)
Accumulated other comprehensive loss		(45,155)		(74,059)
Retained earnings		698,568		532,265
Total stockholders' equity		1,684,804		1,514,867
Total liabilities and stockholders' equity	\$	3,782,383	\$	3,615,136

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS (Dollars in thousands)

(=)		Years Ended December 31,	
	2021	2020	2019
OPERATING ACTIVITIES:			
Net income	\$ 169,075	\$ 133,892	\$ 50,201
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	119,836	116,031	109,462
Non-cash in-process research and development expense	—	519	64,916
Non-cash impairment charges	2,754	_	5,764
Deferred income tax (benefit) provision	(2,755)	(64,138)	(19,046)
Share-based compensation	36,210	19,590	21,255
Amortization of debt issuance costs and expenses associated with debt refinancing	7,030	12,076	5,390
Non-cash lease expense	3,834	2,955	5,060
Accretion of bond issuance discount	—	15,415	_
Loss on disposal of property and equipment and construction in-progress	2,240	7,855	1,821
Gain from the sale of business	(41,798)	_	_
Change in fair value of contingent consideration and others	(2,162)	951	1,119
Changes in assets and liabilities:			
Accounts receivable	7,265	52,105	(9,428)
Inventories	5,374	(48,348)	(43,308)
Prepaid expenses and other current assets	(21,143)	1,632	13,071
Other non-current assets	7,875	13,735	13,156
Accounts payable, accrued expenses and other current liabilities	32,874	(57,512)	14,666
Contract liabilities	28	(37)	(607)
Other non-current liabilities	(14,110)	(2,889)	(2,059)
Net cash provided by operating activities	312,427	203,832	231,433
INVESTING ACTIVITIES:		· · · · · ·	
Purchases of property and equipment	(48,022)	(38,890)	(69,537)
Proceeds from sale of Extremity Orthopedics Business	190,468	_	_
Acquired in-process research and development and intangibles	(58)	(25,000)	(64,995)
Proceeds from note receivable		_	752
Cash paid for business acquisitions, net of cash acquired	(303,910)	_	(30,509)
Proceeds from sales of property and equipment	3	3,657	37
Net proceeds (payments) on swaps designated as net investment hedges	76	(7,840)	1,584
Net cash used in investing activities	(161,443)	(68,073)	(162,668)
FINANCING ACTIVITIES:	(,)	(00,0.0)	(,)
Proceeds from borrowings of long-term indebtedness	25,500	171,500	236,900
Payments on debt	(125,500)	(441,000)	(246,100)
Purchase of option hedge on convertible notes	(===;;===;	(104,248)	(,,
Proceeds from convertible notes issuance	_	575,000	_
Proceeds from sale of stock purchase warrants	_	44,563	_
Payment of debt issuance costs	(249)	(24,347)	_
Purchase of treasury stock	(,	(100,000)	_
Proceeds from exercised stock options	6,824	5,232	6,948
Cash taxes paid in net equity settlement	(4,801)	(5,075)	(6,514)
Net cash (used in) provided by financing activities	(98,226)	121,625	(8,766)
Effect of exchange rate changes on cash and cash equivalents	(9,476)	13,871	74
Net increase in cash and cash equivalents	43,282	271,255	60,073
Cash and cash equivalents at beginning of period	43,282	198,911	138,838
Cash and cash equivalents at end of period	\$ 513,448	\$ 470,166	\$ 198,911
כמאו מווע כמאו בקוווימוכווגא מל לווע טו ויברוטע	ə 513,448	ə 470,166	ə 198,911

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

INTEGRA LIFESCIENCES HOLDINGS CORPORATION CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (Dollars in thousands)

	Common Stock		Treasury Stock				Accumulated Other								
	Shares	Am	ount	Shares		Amount	Additional Paid- In Capital		Comprehensive Loss			Retained Earnings		Total Equity	
Balance, January 1, 2019	88,044	\$	880	(2,881)	\$	(120,615)	\$	1,192,601	\$	(45,443)	\$	348,373	\$	1,375,796	
Net income			_									50,201		50,201	
Other comprehensive loss, net of tax	—		_			_				(30,959)		—		(30,959)	
Issuance of common stock through employee stock purchase plan	17		_	_		_		716		_		_		716	
Issuance of common stock for vesting of share-based awards, net of shares withheld for taxes	674		7	16		672		(961)		_		_		(282)	
Share-based compensation	—		—	—		—		21,264		—		_		21,264	
Balance, December 31, 2019	88,735		887	(2,865)		(119,943)		1,213,620		(76,402)		398,574		1,416,736	
Net income			_									133,892		133,892	
Other comprehensive loss, net of tax	_		_			_		_		2,343		_		2,343	
Issuance of common stock through employee stock purchase plan	13		_	_		_		694		_		_		694	
Issuance of common stock for vesting of share-based awards, net of shares withheld for taxes	503		2	11		526		(1,066)		_		_		(538)	
Share-based compensation	—		4	—		_		19,397		_		—		19,401	
Share repurchase and equity component of the convertible note issuance, net	_		_	_		_		42,539		_		_		42,539	
Accelerated shares repurchased	_		_	(2,060)		(115,724)		15,724		_		—		(100,000)	
Adoption of Update No. 2016-13			_			_				_		(200)		(200)	
Balance, December 31, 2020	89,251		893	(4,914)		(235,141)		1,290,908		(74,059)		532,266		1,514,867	
Net income			_			_				_		169,075		169,075	
Other comprehensive loss, net of tax	_		_			_		_		28,904		—		28,904	
Issuance of common stock through employee stock purchase plan	18			_		_		1,127		_		_		1,127	
Issuance of common stock for vesting of share-based awards, net of shares withheld for taxes	331		1	15		693		201		_		_		895	
Share-based compensation	—		2	_				35,981		_		_		35,983	
Adoption of Update No. 2020-06								(63,274)				(2,773)		(66,047)	
Balance, December 31, 2021	89,600	\$	896	(4,899)	\$	(234,448)	\$	1,264,943	\$	(45,155)	\$	698,568	\$	1,684,804	

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

1. BUSINESS

Integra LifeSciences Holdings Corporation (the "Company") was incorporated in Delaware in 1989. The Company is a worldwide leader in medical technology. The Company was founded with the acquisition of an engineered collagen technology platform used to repair and regenerate tissue. Since then, Integra has developed numerous product lines from this technology for applications ranging from burn and deep tissue wounds to the repair of dura mater in the brain, as well as nerves and tendons. The Company has expanded its base regenerative technology business to include surgical instruments, neurosurgical products and advanced wound care through global acquisitions and product development to meet the evolving needs of its customers and enhance patient care. The Company sells its products directly through various sales forces and through a variety of other distribution channels.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF PRESENTATION

These financial statements and the accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America and conform to Regulation S-X under the Securities Exchange Act of 1934, as amended.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Intercompany accounts and transactions have been eliminated in consolidation. See Note 4, *Acquisitions and Divestitures*, for details of new subsidiaries included in the consolidation.

USE OF ESTIMATES

The preparation of consolidated financial statements is in conformity with generally accepted accounting principles in the United States ("GAAP") which requires management to make estimates and assumptions that affect the reported amount of assets and liabilities, the disclosure of contingent liabilities, and the reported amounts of revenues and expenses. Significant estimates affecting amounts reported or disclosed in the consolidated financial statements include allowances for doubtful accounts receivable and sales returns and allowances, net realizable value of inventories, valuation of intangible assets including amortization periods for acquired intangible assets, discount rates and estimated projected cash flows used to value and test impairments of long-lived assets and goodwill, estimates of projected cash flows and depreciation and amortization periods for long-lived assets, computation of taxes, valuation allowances recorded against deferred tax assets, the valuation of stock-based compensation, valuation of derivative instruments, valuation of contingent liabilities, the fair value of debt instruments and loss contingencies. These estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the current circumstances. Actual results could differ from these estimates. As the Company continues to navigate the novel coronavirus ("COVID-19") pandemic and recent variants of the virus as well as the adverse impacts to global economic conditions, supply chain and the operations, there may be impact to future estimates including, but not limited to, inventory valuations, fair value measurements, goodwill and long-lived asset impairments, the effectiveness of the Company's hedging instruments, deferred tax valuation allowances, and allowances for doubtful accounts receivable.

RECLASSIFICATIONS

Certain amounts from the prior year's financial statements have been reclassified in order to conform to the current year's presentation.

CASH AND CASH EQUIVALENTS

The Company considers all short-term, highly liquid investments purchased with original maturities of three months or less to be cash equivalents. These investments are carried at cost, which approximates fair value.

TRADE ACCOUNTS RECEIVABLE AND ALLOWANCES FOR DOUBTFUL ACCOUNTS RECEIVABLE

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The Company grants credit to customers in the normal course of business, but generally does not require collateral or any other security to support its receivables.



The Company evaluates the collectability of accounts receivable based on a combination of factors. The Company recognizes a provision for doubtful accounts that reflects the Company's estimate of expected credit losses for trade accounts receivable. In circumstances where a specific customer is unable to meet its financial obligations to the Company, a provision to the allowances for doubtful accounts is recorded against amounts due to reduce the net recognized receivable to the amount that is reasonably expected to be collected. For all other customers, the Company evaluates measurement of all expected credit losses for trade receivables held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* The Company adopted this guidance on January 1, 2020 using a modified retrospective transition method which requires a cumulative-effect adjustment to the opening balance of retained earnings to be recognized on the date of adoption with no change to financial results reported in prior periods. The cumulative-effect adjustment recorded on January 1, 2020 was not material. The adoption of this ASU did not have a significant impact on the Company's consolidated financial statements and related disclosures. The Company's exposure to credit losses may increase if its customers are adversely affected by changes in healthcare laws, coverage, and reimbursement, economic pressures or uncertainty associated with local or global economic recessions, disruption associated with the COVID-19 pandemic and recent variants of the virus, and other customer-specific factors. Although the Company has historically not experienced significant credit losses, it is possible that there could be an adverse impact due to customer and governmental responses to the COVID-19 pandemic.

Provisions to the allowances for doubtful accounts are recorded to selling, general and administrative expenses. Account balances are charged off against the allowance when it is probable that the receivable will not be recovered. Provision for doubtful accounts net of recoveries, associated with accounts receivable, included in selling, general and administrative expense, was recoveries of \$1.1 million for the year ended December 31, 2021, and charges of \$3.6 million, and \$2.1 million for the years ended December 31, 2020 and 2019, respectively.

INVENTORIES

Inventories, consisting of purchased materials, direct labor and manufacturing overhead, are stated at the lower of cost, the value determined by the first-in, first-out method, or net realizable value. Inventories consisted of the following:

	Decen	nber 31,
Dollars in thousands	2021	2020
Finished goods	162,528	\$ 180,301
Work in process	65,323	53,336
Raw materials	89,535	76,480
Total inventories, net	\$ 317,386	\$ 310,117

At December 31, 2020, \$52.8 million of inventories, net was presented separately as "Assets held for sale" in conjunction with the sale of the Extremity Orthopedics business. See Note 4, *Acquisitions and Divestitures*.

At each balance sheet date, the Company evaluates inventories for excess quantities, obsolescence or shelf life expiration. This evaluation includes analysis of historical sales levels by product, projections of future demand, the risk of technological or competitive obsolescence for products, general market conditions, a review of the shelf life expiration dates for products, as well as the feasibility of reworking or using excess or obsolete products or components in the production or assembly of other products that are not obsolete or for which there are not excess quantities in inventory. To the extent that management determines there are excess or obsolete inventory or quantities with a shelf life that is too near its expiration for the Company to reasonably expect that it can sell those products prior to their expiration, the Company adjusts the carrying value to estimated net realizable value.

The Company capitalizes inventory costs associated with certain products prior to regulatory approval, based on management's judgment of probable economic benefit. The Company could be required to expense previously capitalized costs related to pre-approval inventory upon a change in such judgment, due to, among other potential factors, a denial or delay of approval by necessary regulatory bodies or a decision by management to discontinue the related development program. No such amounts were capitalized at December 31, 2021 or 2020.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at historical cost less accumulated depreciation and any impairment charges. The Company provides for depreciation using the straight-line method over the estimated useful lives of the assets. Leasehold improvements are amortized over the lesser of the lease term or the useful life. The cost of major additions and improvements is capitalized, while maintenance and repair costs that do not improve or extend the lives of the respective assets are charged to operations as incurred. The cost of computer software developed or obtained for internal use is accounted for in accordance with the Accounting Standards Codification 350-40, *Internal-Use Software*.

Property, plant and equipment balances and corresponding lives were as follows:

	Decem		
Dollars in thousands	2021	2020	Useful Lives
Land	\$ 1,512	\$ 1,541	
Buildings and building improvements	19,032	17,345	5-40 years
Leasehold improvements	155,495	144,852	1-20 years
Machinery and production equipment	183,270	166,973	3-20 years
Surgical instrument kits	2,791	1,164	4-5 years
Information systems and hardware	148,706	143,770	1-7 years
Furniture, fixtures, and office equipment	20,921	20,843	1-15 years
Construction-in-progress	94,850	73,890	
Total	 626,577	 570,378	
Less: Accumulated depreciation	(314,874)	(282,849)	
Property, plant and equipment, net	\$ 311,703	\$ 287,529	

At December 31, 2020, \$37.9 million of property, plant and equipment, net was presented separately as "Assets held for sale" in conjunction with the sale of the Extremity Orthopedics business. See Note 4, *Acquisitions and Divestitures*.

Depreciation expense associated with property, plant and equipment was \$39.4 million, \$42.1 million, and \$42.6 million for the years ended December 31, 2021, 2020 and 2019, respectively.

During the fourth quarter of 2020, the Company wrote-off certain construction in progress of \$6.7 million related to a manufacturing project that the Company decided to discontinue. The Company determined that the carrying amounts of these assets were not recoverable.

CAPITALIZED INTEREST

The interest cost on capital projects, including facilities build-out and internal use software, is capitalized and included in the cost of the project. Capitalization commences with the first expenditure for the project and continues until the project is substantially complete and ready for its intended use. When no debt is incurred specifically for a project, interest is capitalized on project expenditures using the weighted average cost of the Company's outstanding borrowings. For the years ended December 31, 2021 and 2020, respectively, the Company capitalized \$1.2 million and \$2.3 million of interest expense into property, plant and equipment.

ACQUISITIONS

Results of operations of acquired companies are included in the Company's results of operations as of the respective acquisition dates. The Company accounts for the acquisition of a business in accordance with ASC 805, Business Combinations (ASC 805). Amounts paid to acquire a business are allocated to the assets acquired and liabilities assumed based on their fair values at the date of acquisition. Any excess of the purchase price over the fair value of the net assets acquired in recorded as goodwill. Transaction costs and costs to restructure the acquired company are expensed as incurred.

Contingent consideration is recorded at fair value as measured on the date of acquisition. The value recorded is based on estimates of future financial projections under various potential scenarios using either a Monte Carlo simulation or the probability-weighted income approach derived from revenue estimates and probability assessment with respect to the likelihood of achieving contingent obligations. Contingent payments related to acquisitions consist of development, regulatory, and commercial milestone payments, in addition to sales-based payments, and are valued using discounted cash flow techniques. Each quarter until such contingent amounts are earned, the fair value of the liability is remeasured at each reporting period and adjusted as a component of operating expenses based on changes to the underlying assumptions. The change in the fair value of sales-based payments is based upon future revenue estimates and increases or decreases as revenue estimates or expectation of timing of payment charges. The estimates used to determine the fair value of the contingent consideration liability are subject to significant judgment and actual results are likely to differ from the amounts originally recorded.

The Company determines the fair value of acquired intangible assets based on detailed valuations that use certain information and assumptions provided by management. The Company allocates any excess purchase price over the fair value of the net tangible and intangible assets acquired to goodwill. Determining the fair value of these intangible assets, acquired as part of a business combination requires the Company to make significant estimates. These estimates include the amount and timing of projected future cash flows, the discount rate used to discount those cash flows to present value, the assessment of the asset's life cycle, and the consideration of legal, technical, regulatory, economic, and competitive risks. The fair value assigned to other intangible assets is determined by estimating the future cash flows of each project or technology and discounting the net cash flows back to their present values. The discount rate used is determined at the time of measurement in accordance with accepted valuation methodologies.

Acquired IPR&D is recognized at fair value and initially characterized as an indefinite-lived intangible asset, irrespective of whether the acquired IPR&D has an alternative future use. The Company uses the income approach to determine the fair value of developed technology and IPR&D acquired in a business combination. This approach determines fair value by estimating the after-tax cash flows attributable to the respective asset over its useful life and then discounting these after-tax cash flows back to a present value. Some of the more significant assumptions inherent in the development of those asset valuations include the estimated net cash flows for each year for each product including net revenues, cost of sales, R&D costs, selling and marketing costs, the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, and competitive trends impacting the asset and each cash flow stream. The Company also uses the income approach, as described above, to determine the estimated fair value of certain other identifiable intangible assets including customer relationships, trade names and business licenses. Customer relationships represent established relationships with customers, which provide a ready channel for the sale of additional products and services. Trade names represent acquired company and product names.

IPR&D acquired in a business combination is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred. Upon receipt of regulatory approval, the indefinite-lived intangible asset is then accounted for as a finite-lived intangible asset and amortized on a straight-line basis or accelerated basis, as appropriate, over its estimated useful life. If the research and development project is subsequently abandoned, the indefinite-lived intangible asset is charged to expense. IPR&D acquired outside of a business combination is expensed immediately.

Due to the uncertainty associated with research and development projects, there is risk that actual results will differ materially from the original cash flow projections and that the research and development project will result in a successful commercial product. The risks associated with achieving commercialization include, but are not limited to, delay or failure to obtain regulatory approvals to conduct clinical trials, delay or failure to obtain required market clearances, delays or issues with patent

issuance, or validity and litigation.

If the acquired net assets do not constitute a business under the acquisition method of accounting, the transaction is accounted for as an asset acquisition and no goodwill is recognized. In an asset acquisition, the amount allocated to acquired IPR&D with no alternative future use is charged to expense at the acquisition date. Payments that would be recognized as contingent consideration in a business combination are expensed when probable in an asset acquisition. Refer to Note 4, *Acquisitions and Divestitures* for more information.

GOODWILL AND OTHER INTANGIBLE ASSETS

The excess of the cost over the fair value of net assets of acquired businesses is recorded as goodwill. Goodwill is not subject to amortization but is reviewed for impairment at the reporting unit level annually, or more frequently if impairment indicators arise. The Company's assessment of the recoverability of goodwill is based upon a comparison of the carrying value of goodwill with its estimated fair value. The Company reviews goodwill for impairment in the third quarter every year in accordance with ASC Topic 350 and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. Refer to Note 7, *Goodwill and Other Intangibles* for more information.

The Company has two reportable segments with three underlying reporting units. Refer to Note 16, Segment and Geographic Information for more information on reportable segments.

Other intangible assets include patents, trademarks, purchased technology, and supplier and customer relationships. Identifiable intangible assets are initially recorded at fair market value at the time of acquisition generally using an income or cost approach. The Company capitalizes costs incurred to renew or extend the term of recognized intangible assets and amortizes those costs over their expected useful lives.

The Company tests intangible assets with indefinite lives for impairment annually in the third quarter in accordance with ASC Topic 350. Additionally, the Company may perform interim tests if an event occurs or circumstances change that could potentially reduce the fair value of a indefinite lived intangible asset below its carrying amount. The Company tests for impairment by either performing a qualitative evaluation or a quantitative test. The qualitative evaluation is an assessment of factors, including specific operating results as well as industry, market and general economic conditions, to determine whether it is more likely than not that the fair values of the intangible asset is less than its carrying amount. The Company may elect to bypass this qualitative evaluation and perform a quantitative test.

Product rights and other definite-lived intangible assets are tested periodically for impairment in accordance with ASC Topic 360 when events or changes in circumstances indicate that an asset's carrying value may not be recoverable. The impairment testing involves comparing the carrying amount of the asset or asset group to the forecasted undiscounted future cash flows. In the event the carrying value of the asset exceeds the undiscounted future cash flows, the carrying value is considered not recoverable and impairment exists. An impairment loss is measured as the excess of the asset's carrying value over its fair value, calculated using discounted future cash flows. The computed impairment loss is recognized in the period that the impairment occurs.

LONG-LIVED ASSETS

Long-lived assets held and used by the Company, including property, plant and equipment, intangible assets, and leases are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. For purposes of evaluating the recoverability of long-lived assets to be held and used, a recoverability test is performed using projected undiscounted net cash flows applicable to the longlived assets. If an impairment exists, the amount of such impairment is calculated based on the estimated fair value of the asset. Impairments to long-lived assets to be disposed of are recorded based upon the difference between the carrying value and the fair value of the applicable assets.

INTEGRA FOUNDATION

The Company may periodically make contributions to the Integra Foundation, Inc. The Integra Foundation was incorporated in 2002 exclusively for charitable, educational, and scientific purposes and qualifies under IRC 501(c)(3) as an exempt private foundation. Under its charter, the Integra Foundation engages in activities that promote health, the diagnosis and treatment of disease, and the development of medical science through grants, contributions and other appropriate means. The Integra Foundation is a separate legal entity and is not a subsidiary of the Company; therefore, its results are not included in these consolidated financial statements. The Company contributed \$1.2 million, \$0.8 million and \$0.3 million to the Integra Foundation during the years ended December 31, 2021, 2020 and 2019, respectively. These contributions were recorded in selling, general, and administrative expense.

DERIVATIVES

The Company develops, manufactures, and sells medical devices globally and its earnings and cash flows are exposed to market risk from changes in interest rates and currency exchange rates. The Company addresses these risks through a risk management program that includes the use of derivative financial instruments and operates the program pursuant to documented corporate risk management policies. All derivative financial instruments are recognized in the financial statements at fair value in accordance with the authoritative guidance. Under the guidance, for those instruments that are designated and qualify as hedging instruments, the hedging instrument must be designated as a fair value hedge, cash flow hedge, or a hedge of a net investment in a foreign operation, based on the exposure being hedged. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and, further, on the type of hedging relationship. The Company's derivative instruments do not subject its earnings or cash flows to material risk, and gains and losses on these derivatives generally offset losses and gains on the item being hedged. The Company has not entered into derivative transactions for speculative purposes. From time to time, the Company may enter into derivatives that are not designated as hedging instruments in order to protect itself from currency volatility due to intercompany balances.

All derivative instruments are recognized at the fair values as either assets or liabilities on the balance sheet. The Company determines the fair value of its derivative instruments using the framework prescribed by the authoritative guidance, by considering the estimated amount the Company would receive to sell or transfer these instruments at the reporting date and by taking into account: expected forward interest rates, currency exchange rates, the creditworthiness of the counterparty for assets, and its creditworthiness for liabilities. In certain instances, the Company utilizes a discounted cash flow model to measure fair value. Generally, the Company uses inputs that include quoted prices for similar assets or liabilities in active markets, other observable inputs for the asset or liability and inputs derived principally from, or corroborated by, observable market data by correlation or other means. The Company has classified all of its derivative assets and liabilities within Level 2 of the fair value hierarchy because observable inputs are available for substantially the full term of its derivative instruments. The Company classifies derivatives designated as hedges in the same category as the item being hedged for cash flow presentation purposes.

The Company entered into foreign currency forward and foreign currency swap contracts that are not designated as a hedging instruments for accounting purposes. These contracts are recorded at fair value, with the changes in fair value recognized into other income, net on the consolidated financial statements. Refer to Note 6, *Derivative Instruments* for more information.

FOREIGN CURRENCY

All assets and liabilities of foreign subsidiaries which have a functional currency other than the U.S. dollar are translated at the rate of exchange at year-end, while elements of the income statement are translated at the average exchange rates in effect during the year. The net effect of these translation adjustments is shown as a component of accumulated other comprehensive income (loss). These currency translation adjustments are not currently adjusted for income taxes as they relate to permanent investments in non-U.S. subsidiaries. Foreign currency transaction net gains of less than \$0.1 million, and net losses of \$1.6 million and \$0.3 million are reported in other income, net in the statements of operations, for the year ended December 31, 2021, 2020 and 2019, respectively.

INCOME TAXES

Income taxes are accounted for by using the asset and liability method. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. A valuation allowance is provided when it is more likely than not that some portion or all of the deferred tax assets will not be realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period when the change is enacted.

The Company recognizes a tax benefit from an uncertain tax position only if it is more likely than not to be sustained upon examination based on the technical merits of the position. Reserves are established for positions that don't meet this recognition threshold. The reserve is measured as the largest amount of benefit determined on a cumulative probability basis that the Company believes is more likely than not to be realized upon ultimate settlement of the position. These reserves are classified as long-term liabilities in the consolidated balance sheets of the Company, unless the reserves are expected to be paid in cash during the next twelve months, in which case they are classified as current liabilities. The Company also records interest and penalties accrued in relation to uncertain tax benefits as a component of income tax expense.

While the Company believes it has identified all reasonable exposures and the reserve it has established is appropriate under the circumstances, it is possible that additional exposures exist and that exposures may be settled at amounts different than the amounts reserved. It is also possible that changes in facts and circumstances could cause the Company to either materially increase or reduce the carrying amount of its tax reserve.

The Company continues to indefinitely reinvest substantially all of its foreign earnings. The current provisional analysis indicates that the Company has sufficient U.S. liquidity, including borrowing capacity, to fund foreseeable U.S. cash needs without requiring the repatriation of foreign cash. One time or unusual items that may impact the ability or intent to keep the foreign earnings and cash indefinitely reinvested include significant U.S. acquisitions, loans from a foreign subsidiary and changes in tax laws.

REVENUE RECOGNITION

Revenue is recognized upon the transfer of control of promised products or services to the customers in an amount that reflects the consideration the Company expects to receive in exchange for those products and services.

Total revenue, net, includes product sales, product royalties and other revenues, such as fees received from services.

For products shipped with FOB shipping point terms, the control of the product passes to the customer at the time of shipment. For shipments in which the control of the product is transferred when the customer receives the product, the Company recognizes revenue upon receipt by the customer. Certain products that the Company produces for private label customers have no alternative use and the Company has a right of payment for performance to date. Revenues from those products are recognized over the period that the Company manufactures these products, which is typically one to three months. The Company uses the input method to measure the manufacturing activities completed to date, which depicts the progress of the Company's performance obligation of transferring control of goods being manufactured for private label customers.

A portion of the Company's product revenue is generated from consigned inventory maintained at hospitals and distributors, and also from inventory physically held by field sales representatives. For these types of products sales, the Company retains control until the product has been used or implanted, at which time revenue is recognized.

Revenues from sale of products and services are evidenced by either a contract with the customer or a valid purchase order and an invoice which includes all relevant terms of sale. For product sales, invoices are generally issued upon the transfer of control (or upon the completion of the manufacturing in the case of the private label transactions recognized over time) and are typically payable 30 days after the invoice date. The Company performs a review of each specific customer's creditworthiness and ability to pay prior to acceptance as a customer. Further, the Company performs periodic reviews of its customers' creditworthiness prospectively. Refer to Note 3, *Revenue From Contracts With Customers* for more information.

RESEARCH AND DEVELOPMENT

Research and development costs, including salaries, depreciation, consultant and other external fees, and facility costs directly attributable to research and development activities, are expensed in the period in which they are incurred.

EMPLOYEE TERMINATION BENEFITS

The Company does not have a written severance plan, and it does not offer similar termination benefits to affected employees in all restructuring initiatives. Accordingly, in situations where minimum statutory termination benefits must be paid to the affected employees, the Company records employee severance costs associated with these restructuring activities in accordance with the authoritative guidance for non-retirement post-employment benefits. Charges associated with these activities are recorded when the payment of benefits is probable and can be reasonably estimated. In all other situations where the Company pays out termination benefits, including supplemental benefits paid in excess of statutory minimum amounts and benefits offered to affected employees based on management's discretion, the Company records these termination costs in accordance with the authoritative guidance for ASC Topic 712 *Compensation-Nonretirement Benefits* and ASC Topic 420 *One-time Employee Termination Benefits*.

The timing of the recognition of charges for employee severance costs other than minimum statutory benefits depends on whether the affected employees are required to render service beyond their legal notification period in order to receive the benefits. If affected employees are required to render service beyond their legal notification period over the future service period. Otherwise, charges are recognized when management has approved a specific plan and employee communication requirements have been met.



The Company incurred restructuring costs of \$3.4 million and \$4.9 million in cost of goods sold, \$0.5 million and \$1.2 million in selling, general and administrative and \$0.3 million and \$0.3 million in research and development related to employee terminations associated with a future plant closure in the consolidated statement of operations for the years ended December 31, 2021 and 2020, respectively. Restructuring costs of \$10.2 million were included in accrued expenses and other current liabilities and \$6.4 million were included in other liabilities in the consolidated balance sheet for the year ended December 31, 2021 and 2020, respectively.

STOCK-BASED COMPENSATION

Relevant authoritative guidance requires companies to recognize the expense related to the fair value of their stock-based compensation awards. Stock-based compensation expense for stock option awards are based on the grant date fair value using the binomial distribution model. The Company recognizes compensation expense for stock option awards, restricted stock awards, performance stock awards and contract stock awards over the requisite service period of the award. All excess tax benefits and taxes and tax deficiencies from stock-based compensation are included in provision for income taxes in the consolidated statement of operations. Refer to Note 9, *Stock-based Compensation* for more information.

PENSION BENEFITS

The Company maintains defined benefit pension plans that cover certain employees in France, Japan, Germany and Switzerland. Various factors are considered in determining the pension liability, including the number of employees expected to be paid their salary levels and years of service, the expected return on plan assets, the discount rate used to determine the benefit obligations, the timing of benefit payments and other actuarial assumptions.

Retirement benefit plan assumptions are reassessed on an annual basis or more frequently if changes in circumstances indicate a re-evaluation of assumptions are required. The key benefit plan assumptions are the discount rate and expected rate of return on plan assets. The discount rate is based on average rates on bonds that matched the expected cash outflows of the benefit plans. The expected rate of return is based on historical and expected returns on the various categories of plan assets.

The Company uses the corridor approach in measuring the amount of net periodic benefit pension cost to recognize each period. The corridor approach defers all actuarial gains and losses resulting from variances between actual results and actuarial assumptions. Those unrecognized gains and losses are amortized when the net gains and losses exceed 10% of the greater of the market-related value of plan assets or the projected benefit obligation at the beginning of the year. The amount in excess of the corridor is amortized over the average remaining service period to retirement date of active plan participants.

Deferred Compensation Plan

The Company maintains a deferred compensation plan in which certain employees of the Company may defer the payment and taxation of up to 75% of their base salary and up to 100% of bonus amounts and other eligible cash compensation.

This deferred compensation is invested in funds offered under the Plan and is valued based on Level 1 measurements in the fair value hierarchy. The purpose of the plan is to retain key employees by providing them with an opportunity to defer a portion of their compensation as elected by the participant in accordance with the plan. Any amounts set aside to defray the liabilities assumed by the Company will remain the general assets of the Company until such amounts are distributed to the participants. Assets of the Company's deferred compensation plan are included in Other current assets and recorded at fair value based on their quoted market prices.

CONCENTRATION OF CREDIT RISK

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of cash and cash equivalents, which are held at major financial institutions, investment-grade marketable debt securities and trade receivables.

The Company's products are sold on an uncollateralized basis and on credit terms based upon a credit risk assessment of each customer. A portion of the Company's trade receivables to customers outside the United States includes sales to foreign distributors, who then sell to government owned or supported healthcare systems.

None of the Company's customers accounted for 10% or more of the consolidated net sales during the years ended December 31, 2021, 2020 and 2019.

RECENT ACCOUNTING PRONOUNCEMENTS

In August 2018, the FASB issued ASU 2018-14, *Compensation-Retirement Benefits-Defined Benefit Plans-General (Subtopic 715-20): Disclosure Framework-Changes to the Disclosure Requirements for Defined Benefit Plans.* This guidance modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The ASU is effective for fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. Early adoption was permitted. The Company adopted this guidance during the year ended December 31, 2020. The adoption of this guidance did not have a significant impact on the Company's consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40)*, relating to a customer's accounting for implementation, set-up, and other upfront costs incurred in a cloud computing arrangement that is hosted by a vendor (e.g., a service contract). Under this guidance, a customer will apply the same criteria for capitalizing implementation costs as it would for an arrangement that has a software license. The new guidance also prescribes the balance sheet, income statement, and cash flow classification of the capitalized implementation costs and related amortization expense, and requires additional quantitative and qualitative disclosures. The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The Company adopted this guidance on January 1, 2020 using a prospective transition method. The adoption of this guidance did not have a significant impact on the Company's consolidated financial statements and related disclosures.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes*: Simplifying the Accounting for Income Taxes, intended to simplify the accounting for income taxes by eliminating certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. This guidance also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. The standard is effective for annual periods beginning after December 15, 2020 and interim periods within, with early adoption permitted. The Company adopted ASU 2019-12 as of January 1, 2021. Adoption of the standard requires certain changes to be made prospectively, with some changes to be made retrospectively. The adoption of this guidance did not have a significant impact on the Company's consolidated financial statements and related disclosures.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform*, which provides optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. This amendment applies to all entities, subject to meeting certain criteria, that have contracts, hedging relationships, and other transactions that reference London Inter-Bank Offered Rate ("LIBOR") or another reference rate expected to be discontinued because of reference rate reform. This ASU is effective immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. In January 2021, the FASB also issued ASU 2021-01, *Reference Rate Reform- Scope* which clarified certain optional expedients and exceptions to entities that are affected because of the reference rate reform. The amendments in this ASU affect the guidance in ASU 2020-04 and are effective in the same timeframe as ASU 2020-04. The Company currently has contracts that are indexed to LIBOR and are continuing to monitor this activity and evaluate the associated risk. The Company is continuing to evaluate the scope of impacted contracts and the potential impact. The Company is also monitoring the developments regarding alternative rates and may amend certain contracts to accommodate those rates if the contract does not already specify a replacement rate. While the notional value of agreements potentially indexed to LIBOR is material, the Company does not expect a material impact consolidated financial statements and related disclosures associated with this transition.

In August 2020, the FASB issued ASU 2020-06, *Debt- Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40):Accounting for Convertible Instruments and Contracts in an Entity's Own Equity.* The guidance simplifies accounting for convertible instruments by removing major separation models required under current GAAP. Consequently, more convertible debt instruments will be reported as a single liability instrument with no separate accounting for embedded conversion features. The ASU removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception, which will permit more equity contracts to qualify. The guidance also simplifies the diluted net income per share calculation in certain areas. The ASU will be effective for annual and interim periods beginning after December 15, 2021, and early adoption is permitted for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years using either the modified retrospective or full retrospective method.

As detailed in Note 5, *Debt*, on February 4, 2020, the Company issued \$575.0 million aggregate principal amount of its 0.5% Convertible Senior Notes due 2025 (the "2025 Notes"). The 2025 Notes are subject to the guidance included in ASU 2020-06. The Company adopted this guidance on January 1, 2021 using the modified retrospective approach which resulted in a cumulative-effect adjustment that increased (decreased) the following consolidated balance sheet accounts:

ADJUSTMENT	CONSOLIDATED BALANCE SHEET CLASSIFICATION	 AMOUNT (in millions)
Deferred tax impact of cumulative-effect adjustment	Deferred tax liabilities	\$ (20.6)
Debt discount reclassification	Long-term convertible securities	89.1
Equity issuance costs reclassification	Long-term convertible securities	(2.5)
Debt discount amortization and equity costs reclassification, net of tax	Retained Earnings	(2.8)
Net impact of cumulative-effect adjustment	Additional paid-in capital	(63.3)

On December 9, 2020, the Company made an irrevocable election under the indenture to require the principal portion of its 2025 Notes to be settled in cash and any excess in shares. Following the irrevocable notice, only the amounts settled in excess of the principal will be considered in diluted earnings per share under the "if-converted" method. Upon adoption of ASU 2020-06, the Company's 2025 Notes were reflected entirely as a liability since the embedded conversion feature will no longer be separately presented within stockholders' equity. Additionally, from January 1, 2021, the Company is no longer incurring non-cash interest expense for the amounts and comprehensive loss, is lower as compared to the fiscal year of 2020.

In October 2020, the FASB issued ASU 2020-10, *Codification Improvements*, which updates various codification topics by clarifying or improving disclosure requirements to align with the regulations of the U.S. Securities and Exchange Commission (the "SEC"). The ASU has been effective for the Company for annual and interim periods beginning after January 1, 2021. The Company adopted this standard on the January 1, 2021. The adoption of this guidance did not have a significant impact on the Company's consolidated financial statements and related disclosures.

In May 2021, the FASB issued ASU 2021-04, *Earnings Per Share (Topic 260)*, *Debt—Modifications and Extinguishments (Subtopic 470-50)*, *Compensation —Stock Compensation (Topic 718)*, and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options which provides guidance to clarify and reduce diversity in an issuer's accounting for modifications or exchanges of freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange. The amendments in this ASU No. 2021-04 are effective for all entities for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years, with early adoption permitted, including interim periods within those fiscal years. The amendment currently has no impact to the Company as the effect will largely depend on the terms of written call options or financings issued or modified in the future.

There are no other recently issued accounting pronouncements that are expected to have any significant effect on the Company's financial position, results of operations or cash flows.

SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION

Cash paid for interest during the years ended December 31, 2021, 2020 and 2019 was \$43.2 million (net of \$1.2 million that was capitalized into construction in progress), \$47.3 million (net of \$2.3 million that was capitalized into construction in progress) and \$48.9 million (net of \$3.1 million that was capitalized into construction in progress), respectively.

Cash paid for income taxes, net of refunds, for the years ended December 31, 2021, 2020 and 2019 was \$49.5 million, \$29.8 million and \$16.2 million, respectively.

NON-CASH INVESTING AND FINANCING ACTIVITIES

Property and equipment purchases included in liabilities at December 31, 2021, 2020 and 2019 were \$4.7 million, \$1.6 million and \$11.0 million, respectively.

During the fourth quarter of 2021, the Company achieved its final developmental milestone which triggered a \$5.0 million obligation to be paid to former shareholders of Rebound Therapeutics Corporation ("Rebound"). The Company recorded \$5.0 million as an intangible asset in the consolidated balance sheet upon achieving the milestone. The remaining obligation was included in accrued liabilities at December 31, 2021 in the consolidated balance sheets. The milestone is expected to be fully paid during the first quarter of 2022.

During the fourth quarter of 2020, the Company achieved another developmental milestone which triggered a \$20.0 million obligation to be paid to the former shareholders of Rebound. The Company recorded \$20.0 million as an intangible asset in the consolidated balance sheet upon achieving the milestone. The milestone was paid during the fourth quarter of 2020.



During the fourth quarter of 2019, the Company achieved the first developmental milestone which triggered a \$5.0 million obligation to be paid to former shareholders of Rebound. In addition, the Company recorded \$5.0 million as in-process research and development expense in the consolidated statements of operations. The obligation was included in accrued liabilities at December 31, 2019 in the consolidated balance sheets. The milestone was paid during the first quarter of 2020.

3. REVENUES FROM CONTRACTS WITH CUSTOMERS

Summary of Accounting Policies on Revenue Recognition

Revenue is recognized upon the transfer of control of promised products or services to the customers in an amount that reflects the consideration the Company expects to receive in exchange for those products and services.

Performance Obligations

The Company's performance obligations consist mainly of transferring control of goods and services identified in the contracts, purchase orders, or invoices. The Company has no significant multi-element contracts with customers.

Significant Judgments

Usage-based royalties and licenses are estimated based on the provisions of contracts with customers and recognized in the same period that the royalty-based products are sold by the Company's strategic partners. The Company estimates and recognizes royalty revenue based upon communication with licensees, historical information, and expected sales trends. Differences between actual reported licensee sales and those that were estimated are adjusted in the period in which they become known, which is typically the following quarter. Historically, such adjustments have not been significant.

The Company estimates returns, price concessions, and discount allowances using the expected value method based on historical trends and other known factors. Rebate allowances are estimated using the most likely method based on each customer contract.

The Company's return policy, as set forth in its product catalogs and sales invoices, requires review and authorization in advance prior to the return of product. Upon the authorization, a credit will be issued for the goods returned within a set amount of days from the shipment, which is generally ninety days.

The Company disregards the effects of a financing component if the Company expects, at contract inception, that the period between the transfer and customer payment for the goods or services will be one year or less. The Company has no significant revenues recognized on payments expected to be received more than one year after the transfer of control of products or services to customers.

Contract Asset and Liability

Revenues recognized from the Company's private label business that are not invoiced to the customers as a result of recognizing revenue over time are recorded as a contract asset included in the prepaid expenses and other current assets account in the consolidated balance sheet.

Other operating revenues may include fees received under service agreements. Non-refundable fees received under multiple-period service agreements are recognized as revenue as the Company satisfies the performance obligations to the other party. A portion of the transaction price allocated to the performance obligations to be satisfied in the future periods is recognized as contract liability.



The following table summarized the changes in the contract asset and liability balances for the year ended December 31, 2021:

Dollars in thousands	Total
Contract Asset	
Contract asset, January 1, 2021	\$ 7,430
Transferred to trade receivable of contract asset included in beginning of the year contract asset	(7,430)
Contract asset, net of transferred to trade receivables on contracts during the period	11,412
Contract asset, December 31, 2021	\$ 11,412
Contract Liability	
Contract liability, January 1, 2021	\$ 11,961
Recognition of revenue included in beginning of year contract liability	(5,164)
Contract liability, net of revenue recognized on contracts during the period	5,175
Foreign currency translation	(26)
Contract liability, December 31, 2021	\$ 11,946

At December 31, 2021, the short-term portion of the contract liability of \$5.3 million and the long-term portion of \$6.7 million is included in current liabilities and other liabilities, respectively, in the consolidated balance sheet.

As of December 31, 2021, the Company is expected to recognize revenue of approximately \$5.3 million in 2022, \$2.9 million in 2023, \$1.8 million in 2024, \$0.9 million in 2025, \$0.6 million in 2026, and \$0.4 million thereafter.

Shipping and Handling Fees

The Company elected to account for shipping and handling activities as a fulfillment cost rather than a separate performance obligation. Amounts billed to customers for shipping and handling are included as part of the transaction price and recognized as revenue when control of underlying products is transferred to the customer. The related shipping and freight charges incurred by the Company are included in the cost of goods sold.

Product Warranties

Certain of the Company's medical devices, including monitoring systems and neurosurgical systems, are designed to operate over long periods of time. These products are sold with warranties which may extend for up to two years from the date of purchase. The warranties are not considered a separate performance obligation. The Company estimates its product warranties using the expected value method based on historical trends and other known factors. The Company includes them in accrued expenses and other current liabilities in the consolidated balance sheet.

Taxes Collected from Customers

The Company elected to exclude from the measurement of the transaction price all taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction and collected by the entity from a customer.



Disaggregated Revenue

The following table presents revenues disaggregated by the major sources of revenues for years-ended December 31, 2021, 2020 and 2019 (dollar amounts in thousands):

	Year Ended December 31, 2021	Year Ended December 31, 2020	Year Ended December 31, 2019
Neurosurgery	802,959	716,339	767,793
Instruments	222,273	\$ 178,492	\$ 228,413
Total Codman Specialty Surgical	1,025,232	894,831	996,206
Wound Reconstruction and Care ⁽²⁾	392,463	293,038	322,739
Extremity Orthopedics ⁽¹⁾	—	78,316	90,082
Private Label	124,753	105,683	108,530
Total Tissue Technologies	517,216	477,037	521,351
Total revenue	\$ 1,542,448	\$ 1,371,868	\$ 1,517,557

⁽¹⁾ On January 4, 2021, the Company completed its sale of its Extremity Orthopedics business. In conjunction with the sale of this business, the Company rebranded the Orthopedics and Tissue Technologies segment as Tissue Technologies in the first quarter of 2021. See Note 4. Acquisitions and Divestitures, for details.

⁽²⁾ See Note 4. Acquisitions and Divestitures, for details around the ACell acquisition.

Prior period amounts were reclassified between categories within the Codman Specialty Surgical segment to conform to the current period presentation.

See Note 16, Segment and Geographical Information, for details of revenues based on the location of the customer.

4. ACQUISITIONS AND DIVESTITURES

Sale of Extremity Orthopedics Business

On January 4, 2021, the Company completed the sale of its Extremity Orthopedics business to Smith & Nephew USD Limited ("Smith & Nephew"). The transaction included the sale of the Company's upper and lower Extremity Orthopedics product portfolio, including ankle and shoulder arthroplasty and hand and wrist product lines. The Company received an aggregate purchase price of \$240.0 million from Smith & Nephew and concurrently paid \$41.5 million to the Consortium of Focused Orthopedists, LLC ("CFO") effectively terminating the licensing agreement between Integra and CFO relating to the development of shoulder arthroplasty products.

Assets and liabilities divested consisted of the following as of December 31, 2020 (dollar amounts in thousands):

Prepaid expenses and other current assets	\$ 713
Right of use asset - operating leases and Other assets	3,186
Deferred tax assets	6,589
Intangible assets, net	13,332
Property, plant and equipment, net	37,893
Goodwill	47,546
Inventories	52,845
Total assets held for sale	\$ 162,104
Other liabilities	\$ 336
Current portion of lease liability - operating leases	539
Accrued compensation	1,767
Deferred tax liabilities	3,440
Lease liability - operating leases	5,669
Total liabilities held for sale	\$ 11,751

The divestiture does not represent a strategic shift that will have a major effect on the Company's operations and financial statements. Goodwill was allocated to the assets and liabilities divested using the relative fair value method of the Extremity Orthopedics business to the Company's Tissue Technologies reporting unit. In connection with the sale, the Company recognized a gain of \$41.8 million that is presented in Gain from the sale of business in the consolidated statement of operations for the year ended December 31, 2021. The Company finalized the net working capital and paid an additional \$1.3 million to Smith & Nephew as of December 31, 2021.

The Company also entered into a transition services agreement with Smith & Nephew which requires the Company to provide certain services on behalf of Smith & Nephew for the duration of the period subsequent to the sale of the business as defined in the agreement. The Company recognized a payable due to Smith & Nephew of \$9.1 million as of December 31, 2021, included in the consolidated balance sheet within accrued expenses and other current liabilities.

ACell, Inc. Acquisition

On January 20, 2021, the Company acquired ACell, Inc. (the "ACell Acquisition") for an acquisition purchase price of \$306.9 million plus contingent considerations of up to \$100 million, that may be payable upon achieving certain revenue-based performance milestones in 2022, 2023 and 2025. The final working capital adjustments of \$1.3 million was finalized and paid as of June 30, 2021. ACell was a privately-held company that offered a portfolio of regenerative products for complex wound management, including developing and commercializing products based on MatriStem Urinary Bladder Matrix, a technology platform derived from porcine urinary bladder extracellular matrix.

Assets Acquired and Liabilities Assumed at Fair Value

The ACell Acquisition has been accounted for using the acquisition method of accounting. This method requires that assets acquired and liabilities assumed in a business combination are recognized at their fair values as of the acquisition date.



The following table summarizes the final fair values of the assets acquired and liabilities assumed at the acquisition date:

Dollars in thousands	Final Valuation	Weighted Average Life
Current assets:		
Cash	\$ 2,726	
Trade accounts receivable, net	16,469	
Inventories, net	18,299	
Prepaid expenses and other current assets	1,498	
Total current assets	\$ 38,992	
Property, plant and equipment, net	13,769	
Intangible assets	245,000	13-14 years
Goodwill	94,147	
Right of use asset - operating leases	9,259	
Deferred tax assets	7,465	
Other assets	148	
Total assets acquired	\$ 408,780	
Current liabilities:		
Accounts payable	\$ 718	
Accrued expenses	5,966	
Current portion of lease liability - operating leases	1,673	
Total current liabilities	\$ 8,357	
Other long-term liability	276	
Lease liability - operating leases	7,585	
Deferred tax liability	61,724	
Contingent consideration	 23,900	
Total liabilities assumed	101,842	
Net assets acquired	\$ 306,938	

Intangible Assets

The estimated fair value of the developed technology acquired was determined using the multi-period excess earnings method of the income approach, which estimates value based on the present value of future economic benefits. Some of the more significant assumptions inherent in the development of those asset valuations include the estimated net cash flows for each year for each product including net revenues, cost of sales, R&D costs, selling and marketing costs, the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, and competitive trends impacting the asset and each cash flow stream.

The Company used a discount rate of 8.5% to arrive at the present value for the acquired intangible assets to reflect the rate of return a market participant would expect to earn and incremental commercial uncertainty in the cash flow projections. No assurances can be given that the underlying assumptions used to prepare the discounted cash flow analysis will not change. For these and other reasons, actual results may vary significantly from estimated results.

Goodwill

The Company allocated goodwill related to the ACell acquisition to the Tissue Technologies segment. Goodwill is the excess of the consideration transferred over the net assets recognized and represents the expected synergies of the combined company and assembled workforce. Goodwill recognized as a result of this acquisition is non-deductible for income tax purposes.

Contingent Consideration

As part of the acquisition, the Company is required to make payments to the former shareholders of ACell up to \$100 million based on the achievement of certain revenue-based performance milestones in 2022, 2023, and 2025. The Company used iterations of the Monte Carlo simulation to calculate the fair value of the contingent consideration that considered the possible outcomes of scenarios related to each specific milestone. The Company estimated the fair value of the contingent consideration to be \$23.9 million at the acquisition date. The estimated fair value as of December 31, 2021 was \$21.8 million. This amount is included in other liabilities at December 31, 2021 in the consolidated balance sheets of the Company.

The Company determined the acquisition date fair value of contingent consideration obligations using a Monte Carlo simulation, as well as significant unobservable inputs, reflecting the Company's assessment of the assumptions market participants would use to value these liabilities. The fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement as defined using the fair value concepts in ASC 820. The resultant most likely payouts are discounted using an appropriate effective annual interest rate. At each reporting date, the contingent consideration obligations is revalued to estimated fair value and changes in fair value will be reflected as income or expense in our consolidated statement of operations. Changes in the fair value of the contingent considerations may result from changes in discount periods and rates and changes in the timing and amount of revenue estimates.

Deferred Tax Liabilities

Deferred tax liabilities result from identifiable intangible assets' fair value adjustments. These adjustments create excess book basis over tax basis which is tax-effected by the statutory tax rates of applicable jurisdictions.

Pro Forma Results (unaudited)

Pro forma revenues for the year ended December 31, 2021 and 2020 were \$1,547.0 million and \$1,466.8 million, respectively. Pro forma net income and earnings per share are not presented for this acquisition as they are not material.

Arkis BioSciences Inc.

On July 29, 2019, the Company acquired Arkis BioSciences Inc. ("Arkis") for an acquisition purchase price of \$30.6 million (the "Arkis Acquisition") plus contingent consideration of up to \$25.5 million, that may be payable based on the successful completion of certain development and commercial milestones. The contingent consideration had an acquisition date fair value of \$13.1 million. Arkis was a privately-held company that marketed the CerebroFlo[®] external ventricular drainage (EVD) catheter with Endexo[®] technology, a permanent additive designed to reduce the potential for catheter obstruction due to thrombus formation.

Assets Acquired and Liabilities Assumed at Fair Value

The Arkis Acquisition has been accounted for using the acquisition method of accounting. This method requires that assets acquired and liabilities assumed in a business combination to be recognized at their fair values as of the acquisition date.

The following table summarizes the final fair values of the assets acquired and liabilities assumed at the acquisition date:

Dollars in thousands	Final Valuation	Weighted Average Life
Cash	\$ 90	
Other current assets	751	
Property, plant and equipment	457	
Deferred tax assets	1,697	
Intangible assets:		
CerebroFlo developed technology	20,100 15	years
Enabling technology license	1,980 14	years
Goodwill	27,153	
Total assets acquired	 52,228	
Accounts payable, accrued expenses and other liabilities	2,926	
Contingent consideration	13,100	
Deferred tax liabilities	 5,603	
Net assets acquired	\$ 30,599	

Intangible Assets

The estimated fair value of the intangible assets was determined using the income approach, which is a valuation technique that provides an estimate of the fair value of an asset based on market participant expectations of the cash flows an asset would generate over its remaining useful life. Some of the more significant assumptions inherent in the development of those asset valuations include the estimated net cash flows for each year for each asset (including net revenues, cost of sales, R&D costs, selling and marketing costs, and working capital/contributory asset charges), the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, and competitive trends impacting the asset and each cash flow stream.



The Company used a discount rate of 14.5% to arrive at the present value for the acquired intangible assets to reflect the rate of return a market participant would expect to earn and incremental commercial uncertainty in the cash flow projections. No assurances can be given that the underlying assumptions used to prepare the discounted cash flow analysis will not change. For these and other reasons, actual results may vary significantly from estimated results.

Goodwill

The Company allocated goodwill related to the Arkis Acquisition to the Codman Specialty Surgical segment. Goodwill is the excess of the consideration transferred over the net assets recognized and represents the expected revenue and cost synergies of the combined company and assembled workforce. One of the key factors that contributes to the recognition of goodwill, and a driver for the Company's acquisition of Arkis, is the planned expansion of the Endexo technology with the existing products within the Codman Specialty Surgical segment. Goodwill recognized as a result of this acquisition is non-deductible for income tax purposes.

Contingent Consideration

The Company determined the acquisition date fair value of contingent consideration obligations based on a probability-weighted income approach derived from revenue estimates and a probability assessment with respect to the likelihood of achieving contingent obligations. The fair value measurement is based on significant inputs not observable in the market and thus represents a Level 3 measurement as defined using the fair value concepts in ASC 820. The resultant probability-weighted cash flows are discounted using an appropriate effective annual interest rate. At each reporting date, the contingent consideration obligation is revalued to estimated fair value and changes in fair value will be reflected as income or expense in our consolidated statement of operations. Changes in the fair value of the contingent consideration obligations may result from changes in discount periods and rates, changes in the timing and amount of revenue estimates and changes in probability assumptions with respect to the likelihood of achieving the various contingent payment obligations. Adverse changes in assumptions utilized in the contingent consideration fair value estimates could result in an increase in the contingent consideration obligation and a corresponding charge to operating results.

As part of the acquisition, the Company is required to pay the former shareholders of Arkis up to \$25.5 million based on the timing of certain development milestones of \$10 million and commercial sales milestones of \$15.5 million, respectively. The Company used a probability weighted income approach to calculate the fair value of the contingent consideration that considered the possible outcomes of scenarios related to each specified milestone. The Company estimated the fair value of the contingent consideration to be \$13.1 million at the acquisition date. The estimated the fair value as of December 31, 2021 was \$15.1 million. The Company recorded \$3.7 million in accrued expenses and other current liabilities and \$11.4 million in other liabilities at December 31, 2021 in the consolidated balance sheets of the Company.

Deferred Tax Liabilities

Deferred tax liabilities result from identifiable intangible assets' fair value adjustments. These adjustments create excess book basis over tax basis which is tax-effected by the statutory tax rates of applicable jurisdictions.

The pro forma results are not presented for this acquisition as they are not material.

Rebound Therapeutics Corporation

On September 9, 2019, the Company acquired Rebound Therapeutics Corporation ("Rebound"), developers of a single-use medical device known as the Aurora[®] Surgiscope[®] System ("Aurora") which enables minimally invasive access, using optics and illumination, for visualization, diagnostic and therapeutic use in neurosurgery (the "Rebound transaction"). Under the terms of the Rebound transaction, the Company made an upfront payment of \$67.1 million and are committed to pay up to \$35.0 million of contingent development milestones upon achievement of certain regulatory milestones. The acquisition of Rebound was primarily concentrated in one single identifiable asset and thus, for accounting purposes, the Company has concluded that the acquired assets do not meet the accounting definition of a business. The initial payment was allocated primarily to Aurora, resulting in a \$59.9 million IPR&D expense. The balance of approximately \$7.2 million, which included \$2.1 million of cash and cash equivalents and a net deferred tax asset of \$4.2 million, was allocated to the remaining net assets acquired. The deferred tax asset primarily resulted from a federal net operating loss carry forward.

During the fourth quarter of 2019, the Company achieved the first developmental milestone which triggered a \$5.0 million obligation to be paid to former shareholders of Rebound. The Company recorded \$5.0 million as IPR&D expense in the consolidated statements of operations. The obligation was included in accrued expenses and other current liabilities at December 31, 2019 in the consolidated balance sheets. The milestone was paid during the first quarter of 2020.

During the fourth quarter of 2020, the Company achieved another developmental milestone which triggered a \$20.0 million obligation to be paid to the former shareholders of Rebound. The Company recorded \$20.0 million as an intangible asset in the consolidated balance sheet upon achieving the milestone. The milestone was paid during the fourth quarter of 2020.



During the fourth quarter of 2021, the Company achieved its final developmental milestone which triggered a \$5.0 million obligation to be paid to the former shareholders of Rebound. The Company recorded \$5.0 million as an intangible asset in the consolidated balance sheet upon achieving the milestone. The remaining obligation was included in accrued expenses and other current liabilities at December 31, 2021 in the consolidated balance sheets. The milestone is expected to be fully paid during the first quarter of 2022.

Integrated Shoulder Collaboration, Inc.

On January 4, 2019, the Company entered into a licensing agreement with Integrated Shoulder Collaboration, Inc ("ISC"). Under the terms of the agreement, the Company paid ISC \$1.7 million for the exclusive, worldwide license to commercialize its short stem and stemless shoulder system. A patent related to short stem and stemless shoulder systems was issued to ISC during the first quarter of 2019. ISC is eligible to receive royalties on sales of the short stem and stemless shoulder system. The Company has the option to acquire ISC at a date four years subsequent to the first commercial sale, which becomes mandatory upon the achievement of a certain sales thresholds of the short stem and stemless shoulder system, for an amount not to exceed \$80.0 million. The transaction was accounted for as an asset acquisition as the Company concluded that it acquired primarily one asset. The total upfront payment of \$1.7 million was expensed as a component of research and development expense and the future milestone and option payments will be recorded if the corresponding events become probable.

In connection with the sale of the Company's Extremity Orthopedic business, on January 4, 2021 the Company paid \$41.5 million to CFO pursuant to the terms of certain agreements between the Company and CFO relating to the sale of shares of ISC effectively terminating our licensing agreement with ISC.

5. DEBT

Amendment to the Sixth Amended and Restated Senior Credit Agreement

On February 3, 2020, the Company entered into the sixth amendment and restatement (the "February 2020 Amendment") of its Senior Credit Facility (the "Senior Credit Facility") with a syndicate of lending banks with Bank of America, N.A., as Administrative Agent. The February 2020 Amendment extended the maturity date to February 3, 2025. The Company continues to have the aggregate principal amount of up to approximately \$2.2 billion available to it through the following facilities: (i) a \$877.5 million Term Loan facility, and (ii) a \$1.3 billion revolving credit facility, which includes a \$60 million sublimit for the issuance of standby letters of credit and a \$60 million sublimit for swingline loans.

On July 14, 2020, the Company entered into an amendment (the "July 2020 Amendment") to the February 2020 Amendment of the Senior Credit Facility to increase financial flexibility through June 30, 2021, in light of the unprecedented impact and uncertainty of the COVID-19 pandemic on the global economy. The July 2020 amendment did not increase the Company's total indebtedness.

In connection with the July 2020 amendment, the Company's maximum consolidated total leverage ratio in the financial covenants (as defined in the Senior Credit Facility) was modified to the following:

Fiscal Quarter	Maximum Consolidated Total Leverage Ratio
Execution of July 2020 Amendment through June 30, 2021	5.50 to 1.00
September 30, 2021 through June 30, 2022	5.00 to 1.00
September 30, 2022 through June 30, 2023	4.50 to 1.00
September 30, 2023 and the last day of each fiscal quarter thereafter	4.00 to 1.00

Borrowings under the Senior Credit Facility bear interest, at the Company's option, at a rate equal to the following:

- i. the Eurodollar Rate (as defined in the amendment and restatement) in effect from time to time plus the applicable rate (ranging from 1.00% to 2.25%), or
- ii. the highest of:
 - 1. the weighted average overnight Federal funds rate, as published by the Federal Reserve Bank of New York, plus 0.50%
 - 2. the prime lending rate of Bank of America, N.A. or
 - 3. the one-month Eurodollar Rate plus 1.00%

The applicable rates are based on the Company's consolidated total leverage ratio (defined as the ratio of (a) consolidated funded indebtedness as of such date less cash that is not subject to any restriction on the use or investment thereof to



(b) consolidated EBITDA (as defined by the July 2020 amendment), for the period of four consecutive fiscal quarters ending on such date).

The Company will pay an annual commitment fee (ranging from 0.15% to 0.30%), based on the Company's consolidated total leverage ratio, on the amount available for borrowing under the revolving credit facility.

The Senior Credit Facility is collateralized by substantially all of the assets of the Company's U.S. subsidiaries, excluding intangible assets. The Senior Credit Facility is subject to various financial and negative covenants and at December 31, 2021, the Company was in compliance with all such covenants. In connection with the February 2020 Amendment, the Company capitalized \$4.6 million of financing costs in connection with modification of the Senior Credit Facility and wrote off \$1.2 million of previously capitalized financing costs during the first quarter of 2020. In connection with the July 2020 amendment, the Company expensed \$3.3 million of incremental financing costs in connection with the modification of the Senior Credit Facility during the third quarter of 2020.

At December 31, 2021 and 2020, there was \$31.3 million and \$97.5 million, respectively, outstanding under the revolving portion of the Senior Credit Facility at weighted average interest rates of 1.4% and 1.5%, respectively. At December 31, 2021 and 2020, there was \$843.8 million and \$877.5 million, respectively, outstanding, under the Term Loan component of the Senior Credit Facility at weighted average interest rate of 1.4% and 1.5%, respectively. At December 31, 2021 and 2020, there was \$843.8 million and \$877.5 million, respectively, outstanding, under the Term Loan component of the Senior Credit Facility at weighted average interest rate of 1.4% and 1.5%, respectively. At December 31, 2021 and 2020, there was \$45.0 million and \$33.8 million, respectively, of the Term Loan component of the Senior Credit Facility was classified as current on the consolidated balance sheets.

The fair value of outstanding borrowings of the Senior Credit Facility's revolving credit and Term Loan components at December 31, 2021 were \$31.0 million and \$838.4 million, respectively. These fair values were determined by using a discounted cash flow model based on current market interest rates available to the Company. These inputs are corroborated by observable market data for similar liabilities and therefore classified within Level 2 of the fair value hierarchy. Level 2 inputs represent inputs that are observable for the asset or liability, either directly or indirectly, and are other than active market observable inputs that reflect unadjusted quoted prices for identical assets or liabilities

Letters of credit outstanding as of December 31, 2021 and 2020 totaled \$1.6 million. There were no amounts drawn as of December 31, 2021.

Contractual repayments of the Term Loan component of the Senior Credit Facility are due as follows:

Year-ended December 31, 2021		Principal Repayment	
Dollars in thousands			
2022	\$	45,000	
2023	\$	61,875	
2024	\$	67,500	
2025	\$	669,375	
	\$	843,750	

Future interest payments on the term loan component of the Senior Credit Facility based on current interest rates are expected to approximate \$11.0 million in 2022, \$10.3 million in 2023, \$9.4 million in 2024, and \$0.9 million in 2025. Interest is calculated on the term loan portion of the Senior Credit Facility based on LIBOR plus the spread paid by the Company. As the revolving credit facility and Securitization Facility can be repaid at any time, no interest has been included in the calculation.

The outstanding balance of the revolving credit component of the Senior Credit Facility is due on February 3, 2025.

Convertible Senior Notes

On February 4, 2020, the Company issued \$575.0 million aggregate principal amount of its 0.5% Convertible Senior Notes due 2025 (the "2025 Notes"). The 2025 Notes will mature on August 15, 2025 and bear interest at a rate of 0.5% per annum payable semi-annually in arrears, unless earlier converted, repurchased or redeemed in accordance with the terms of the 2025 Notes. The portion of debt proceeds that was classified as equity at the time of the offering was \$104.5 million. The effective interest rate implicit in the liability component was 4.2%. In connection with this offering, the Company capitalized \$13.2 million of financing fees.

The 2025 Notes are senior, unsecured obligations of the Company, and are convertible into cash and shares of its common stock based on initial conversion rate, subject to adjustment of 13.5739 shares per \$1,000 principal amounts of the 2025 Notes (which represents an initial conversion price of \$73.67 per share). The 2025 Notes convert only in the following circumstances: (1) if the closing price of the Company's common stock has been at least 130% of the conversion price during the period; (2) if the average trading price per \$1,000 principal amount of the 2025 Notes is less than or equal to 98% of the average conversion

value of the 2025 Notes during a period as defined in the indenture; (3) at any time on or after February 20, 2023; or (4) if specified corporate transactions occur. As of December 31, 2021, none of these conditions existed with respect to the 2025 Notes and as a result the 2025 Notes are classified as long term.

On December 9, 2020, the Company entered into the First Supplemental Indenture to the original agreement dated as of February 4, 2020 between the Company and Citibank, N.A., as trustee, governing the Company's outstanding 2025 Notes. The Company irrevocably elected (1) to eliminate the Company's option to choose physical settlement on any conversion of the 2025 Notes that occurs on or after the date of the First Supplemental Indenture and (2) with respect to any Combination Settlement for a conversion of the 2025 Notes, the Specified Dollar Amount that will be settled in cash per \$1,000 principal amount of the 2025 Notes shall be no lower than \$1,000.

Holders of the Notes will have the right to require the Company to repurchase for cash all or a portion of their Notes at 100% of their principal amount, plus any accrued and unpaid interest, upon the occurrence of a fundamental change (as defined in the indenture relating to the Notes). The Company will also be required to increase the conversion rate for holders who convert their Notes in connection with certain fundamental changes occurring prior to the maturity date or following delivery by the Company of a notice of redemption.

In connection with the issuance of the 2025 Notes, the Company entered into call transactions and warrant transactions, primarily with affiliates of the initial purchasers of the 2025 Notes (the "hedge participants"). The cost of the call transactions was \$104.2 million for the 2025 Notes. The Company received \$44.5 million of proceeds from the warrant transactions for the 2025 Notes. The call transactions involved purchasing call options from the hedge participants, and the warrant transactions involved selling call options to the hedge participants with a higher strike price than the purchased call options. The initial strike price of the call transactions was \$13.34 for the 2025 Notes, subject to customary anti-dilution adjustments.

At December 31, 2020, the carrying amount of the liability component was \$485.9 million, the remaining unamortized discount was \$89.1 million, and the principal amount outstanding was \$575.0 million. On January 1, 2021, the Company adopted ASU 2020-06 using the modified retrospective method. See Note 2, *Summary of Significant Accounting Policies*, for further details. At December 31, 2021, the carrying amount of the liability was \$575.0 million. The fair value of the 2025 Notes at December 31, 2021 was \$640.5 million. Factors that the Company considered when estimating the fair value of the 2025 Notes included recent quoted market prices or dealer quote. The level of the 2025 Notes is considered as Level 1.

As a result of the adoption of ASU 2020-06, the Company recognized only cash interest related to the contractual interest coupon of \$2.9 million on the 2025 Notes for the year ended December 31, 2021. Prior to the adoption, during the year ended December 31, 2020, the Company recognized cash interest of \$2.6 million and amortization of the discount on the liability component of \$15.4 million for a total interest charge of \$18.0 million on the 2025 Notes.

Securitization Facility

During the fourth quarter of 2018, the Company entered into an accounts receivable securitization facility (the "Securitization Facility") under which accounts receivable of certain domestic subsidiaries are sold on a non-recourse basis to a special purpose entity ("SPE"), which is a bankruptcy-remote, consolidated subsidiary of the Company. Accordingly, the assets of the SPE are not available to satisfy the obligations of the Company or any of its subsidiaries. From time to time, the SPE may finance such accounts receivable with a revolving loan facility secured by a pledge of such accounts receivable. The amount of outstanding borrowings on the Securitization Facility at any one time is limited to \$150.0 million. The Securitization Facility Agreement ("Securitization Agreement") governing the Securitization Facility contains certain covenants and termination events. An occurrence of an event of default or a termination event under this Securitization Agreement may give rise to the right of its counterparty to terminate this facility. As of December 31, 2021, the Company was in compliance with the covenants and none of the termination events had occurred.

On May 28, 2021, the Company entered into an amendment (the "May 2021 Amendment") of the Securitization Facility which extended the maturity date from December 21, 2021 to May 28, 2024. The May 2021 Amendment does not increase the Company's total indebtedness.

At both December 31, 2021 and 2020, the Company had \$112.5 million, of outstanding borrowings under its Securitization Facility at a weighted average interest rate of 1.1% and 1.3%, respectively. The fair value of the outstanding borrowing of the Securitization Facility at December 31, 2021 was \$111.8 million. These fair values were determined by using a discounted cash flow model based on current market interest rates available to the Company. These inputs are corroborated by observable market data for similar liabilities and therefore classified within Level 2 of the fair value hierarchy. Level 2 inputs represent inputs that are observable for the asset or liability, either directly or indirectly, and are other than active market observable inputs that reflect unadjusted quoted prices for identical assets or liabilities.

6. DERIVATIVE INSTRUMENTS

Interest Rate Hedging

The Company's interest rate risk relates to U.S. dollar denominated variable interest rate borrowings. The Company uses interest rate swap derivative instruments to manage earnings and cash flow exposure resulting from changes in interest rates. These interest rate swaps apply a fixed interest rate on a portion of the Company's expected LIBOR-indexed floating-rate borrowings.

The Company held the following interest rate swaps as of December 31, 2021 and 2020 (dollar amounts in thousands):

	December 31, 2021	December 31, 2020					December 31, 2021	December 31, 2020
Hedged Item	Notional	Amount	Designation Date	Effective Date	Termination Date	Fixed Interest Rate	Estimated	Fair Value
							Asset (I	Liability)
1-month USD LIBOR Loan	—	100,000	March 27, 2017	December 31, 2017	June 30, 2021	1.971 %	\$ —	\$ (929)
1-month USD LIBOR Loan	300,000	300,000	December 13, 2017	January 1, 2018	December 31, 2022	2.201 %	(5,268)	(12,557)
1-month USD LIBOR Loan	150,000	150,000	December 13, 2017	July 1, 2019	June 30, 2024	2.423 %	(5,520)	(11,502)
1-month USD LIBOR Loan	200,000	200,000	December 13, 2017	January 1, 2018	December 31, 2024	2.313 %	(7,421)	(16,243)
1-month USD LIBOR Loan	75,000	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.220 %	(5,512)	(9,836)
1-month USD LIBOR Loan	75,000	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.199 %	(5,464)	(9,826)
1-month USD LIBOR Loan	75,000	75,000	October 10, 2018	July 1, 2020	June 30, 2025	3.209 %	(5,494)	(9,783)
1-month USD LIBOR Loan	100,000	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.885 %	(6,886)	(10,407)
1-month USD LIBOR Loan	100,000	100,000	December 18, 2018	December 30, 2022	December 31, 2027	2.867 %	(6,764)	(10,431)
1-month USD LIBOR Loan	575,000	575,000	December 15, 2020	July 31, 2025	December 31, 2027	1.415 %	3,552	(1,907)
1-month USD LIBOR Loan	125,000	125,000	December 15, 2020	July 1, 2025	December 31, 2027	1.404 %	821	(348)
	\$ 1,775,000	\$ 1,875,000					\$ (43,957)	\$ (93,769)

The Company has designated these derivative instruments as cash flow hedges. The Company assesses the effectiveness of these derivative instruments and has recorded the changes in the fair value of the derivative instrument designated as a cash flow hedge as unrealized gains or losses in accumulated other comprehensive loss ("AOCL"), net of tax, until the hedged item affected earnings, at which point any gain or loss was reclassified to earnings. If the hedged cash flow does not occur, or if it becomes probable that it will not occur, the Company will reclassify the remaining amount of any gain or loss on the related cash flow hedge recorded in AOCL to interest expense at that time.

Foreign Currency Hedging

From time to time, the Company enters into foreign currency hedge contracts intended to protect the U.S. dollar value of certain forecasted foreign currency denominated transactions. The Company assesses the effectiveness of the contracts that are designated as hedging instruments. The changes in fair value of foreign currency cash flow hedges are recorded in AOCL, net of tax. Those amounts are subsequently reclassified to earnings from AOCL as impacted by the hedged item when the hedged item affects earnings. If the hedged forecasted transaction does not occur, or if it becomes probable that it will not occur, the Company will reclassify the amount of any gain or loss on the related cash flow hedge to earnings at that time. For contracts not designated as hedging instruments, the changes in fair value of the contracts are recognized in other income, net in the consolidated statements of operation, along with the offsetting foreign currency gain or loss on the underlying assets or liabilities.

During the fourth quarter of 2020, the Company entered into foreign currency forward contracts, with a notional amount of \$9.7 million, to mitigate the foreign exchange risk related to certain intercompany loans denominated in Canadian Dollar ("CAD") and intercompany receivables denominated in Japanese Yen ("JPY"). The contracts are not designated as hedging instruments. The Company subsequently settled its foreign currency forward contracts associated with the intercompany receivables denominated in JPY during the first quarter of 2021. The Company recognized a \$0.2 million loss from the change in fair value of the contracts, which was included in other income, net in the consolidated statement of operations as of December 31, 2021 and 2020, respectively. The fair value of the foreign currency forward contracts denominated in CAD was \$0.2 million as of December 31, 2021. The fair value of the foreign currency forward contracts denominated in CAD was \$0.2 million as of December 31, 2021.

During the second quarter of 2021, the Company entered into a foreign currency swap, with a notional of \$7.3 million to mitigate the risk from fluctuations in foreign currency exchange rates associated with certain intercompany loan denominated in

Japanese Yen ("JPY"). In a foreign currency swap transaction, the Company agrees with another party to exchange, at specified intervals, the difference between one currency and another currency at a fixed exchange rate, generally set at inception, calculated by reference to an agreed upon notional amount. The notional amount of each currency is exchanged at the inception and termination of the currency swap by each party. The change in fair value of the foreign currency swap was \$0.6 million as of December 31, 2021.

The success of the Company's hedging program depends, in part, on forecasts of certain activity denominated in foreign currency. The Company may experience unanticipated currency exchange gains or losses to the extent that there are differences between forecasted and actual activities during periods of currency volatility. In addition, changes in currency exchange rates related to any unhedged transactions may affect earnings and cash flows.

Cross-Currency Rate Swaps

On October 2, 2017, the Company entered into cross currency swap agreements to convert a notional amount of \$300.0 million equivalent to 291.2 million of Swiss Francs ("CHF") denominated intercompany loans into U.S. dollars. The CHF- denominated intercompany loans were the result of the purchase of intellectual property by a subsidiary in Switzerland as part of an acquisition.

On December 21, 2020, the Company entered into cross-currency swap agreements to convert a notional amount of \$471.6 million equivalent to 420.1 million of a CHF-denominated intercompany loan into U.S. dollars. The CHF-denominated intercompany loan was the result of an intra-entity transfer of certain intellectual property rights to a subsidiary in Switzerland completed during the fourth quarter of 2020. The intercompany loan requires quarterly payments of CHF 5.8 million plus accrued interest. As a result, the aggregate notional amount of the related cross-currency swaps will decrease by a corresponding amount.

The objective of these cross-currency swaps is to reduce volatility of earnings and cash flows associated with changes in the foreign currency exchange rate. Under the terms of these contracts, which have been designated as cash flow hedges, the Company will make interest payments in Swiss Francs and receive interest in U.S. dollars. Upon the maturity of these contracts, the Company will pay the principal amount of the loans in Swiss Francs and receive U.S. dollars from the counterparties.

The Company held the following cross-currency rate swaps as of December 31, 2021 and 2020 (dollar amounts in thousands):

				December 31, 2021 December 31, 2020			December 31, 2021	December 31, 2020
	Effective Date	Termination Date	Fixed Rate	Aggregate Notional Amount			Fair Value As	set (Liability)
Pay CHF	October 2, 2017	October 4,	1.85%	CHF	_	48,533		(4 335)
Receive U.S.\$	October 2, 2017	2021	4.46%	\$	_	50,000		(4,335)
Pay CHF	October 2, 2017	October 2,	1.95%	CHF	145,598	145,598	(8,283)	(11,262)
Receive U.S.\$	October 2, 2017	2022	4.52%	\$	150,000	150,000	(0,203)	(11,202)
Pay CHF	December 21,	December 22,	3.00%	CHF	397,137	420,137	41	(7.9.42)
Receive U.S.\$	2020	2025	3.98%	\$	445,821	471,640	41	(7,843)
Total							\$ (8,242)	\$ (23,441)

On October 4, 2021 in accordance with the termination date, the Company settled a cross-currency swap designated as a cash flow hedge of an intercompany loan with an aggregate notional amount of \$50.0 million. The gain recorded by the Company upon the settlement of the swap was not material for the period.

On October 2, 2020 in accordance with the termination date, the Company settled a cross-currency swap designated as a cash flow hedge of an intercompany loan with an aggregate notional amount of \$33.3 million. As a result of the settlement, the Company recorded a loss of \$0.3 million in other income, net in the consolidated statement of operations.

The cross-currency swaps are carried on the consolidated balance sheet at fair value, and changes in the fair values are recorded as unrealized gains or losses in AOCL. For the years ended December 31, 2021 and 2020, the Company recorded a gain of \$23.8 million and loss of \$21.7 million, respectively, in other income, net related to change in fair value related to the foreign currency rate translation to offset the gains or losses recognized on the intercompany loans.



For the years ended December 31, 2021 and 2020, the Company recorded a gain of \$24.3 million and a loss of \$17.1 million, respectively, in AOCL related to change in fair value of the cross-currency swaps.

For the years ended December 31, 2021 and 2020, the Company recorded gains of \$9.1 million and \$5.8 million, respectively, in other income, net included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps.

The estimated loss that is expected to be reclassified to other income, net from AOCL as of December 31, 2021 within the next twelve months is \$3.4 million. As of December 31, 2021, the Company does not expect any gains or losses will be reclassified into earnings as a result of the discontinuance of these cash flow hedges because the original forecasted transaction will not occur.

Net Investment Hedges

The Company manages certain foreign exchange risks through a variety of strategies, including hedging. The Company is exposed to foreign exchange risk from its international operations through foreign currency purchases, net investments in foreign subsidiaries, and foreign currency assets and liabilities created in the normal course of business. On October 1, 2018 and December 16, 2020, the Company entered into cross-currency swap agreements designated as net investment hedges to partially offset the effects of foreign currency on foreign subsidiaries.

The Company held the following cross-currency rate swaps designated as net investment hedges as of December 31, 2021 and 2020 (dollar amounts in thousands):

						Decer	nber 31, 2021	December 31, 2020
	Effective Date	Termination Date	Fixed Rate	Aggrega An	te Notional Iount		Fair V Asset (Lia	
Pay EUR	October 3, 2018	September 30, 2021	<u> </u> %	EUR	44,859	\$	— \$	(1,884)
Receive U.S.\$			3.01%	\$	52,000			
Pay EUR Receive U.S.\$	October 3, 2018	September 30, 2023	—% 2.57%	EUR \$	51,760 60,000		2,503	(450)
Pay EUR Receive U.S.\$	October 3, 2018	September 30, 2025	—% 2.19%	EUR \$	38,820 45,000		2,147	92
Pay CHF Receive USD	December 16, 2020	December 16, 2027	—% 1.10%	CHF \$	222,300 250,000		(792)	(3,794)
Total						\$	3,858 \$	(6,036)

On September 30, 2021, in accordance with the termination date, the Company settled cross-currency swaps designated as net investment hedge with an aggregate notional amount of \$52 million equivalent to 44.9 million Euros. As a result of the settlement, the Company recorded a gain of \$0.1 million in AOCL.

During the year ended December 31, 2020, the Company settled cross-currency swaps designated as net investment hedge with an aggregate notional amount of \$167.5 million and 128.3 million Pound Sterling respectively as a result of an intra-entity transfer of certain intellectual property rights to a subsidiary. The original settlement date was September 30, 2025. As a result of the settlement, the Company recorded a loss of \$7.8 million in AOCL.

The cross-currency swaps were carried on the consolidated balance sheet at fair value and changes in the fair values were recorded as unrealized gains or losses in AOCL. For the year ended December 31, 2021 and 2020, the Company recorded a gain of \$16.5 million and a loss of \$14.9 million, respectively, in AOCL related to the change in fair value of the cross-currency swaps.

For the years ended December 31, 2021 and 2020, the Company recorded a gain of \$6.5 million and \$7.6 million, respectively, in interest income included in the consolidated statements of operations related to the interest rate differential of the cross-currency swaps.



The estimated gain that is expected to be reclassified to interest income from AOCL as of December 31, 2021 within the next twelve months is \$5.1 million.

Counterparty Credit Risk

The Company manages its concentration of counterparty credit risk on its derivative instruments by limiting acceptable counterparties to a group of major financial institutions with investment grade credit ratings, and by actively monitoring their credit ratings and outstanding positions on an ongoing basis. Therefore, the Company considers the credit risk of the counterparties to be low. Furthermore, none of the Company's derivative transactions are subject to collateral or other security arrangements, and none contain provisions that depend upon the Company's credit ratings from any credit rating agency.

Fair Value of Derivative Instruments

The Company has classified all of its derivative instruments within Level 2 of the fair value hierarchy because observable inputs are available for substantially the full term of the derivative instruments. The fair values of the interest rate swaps and cross-currency swaps were developed using a market approach based on publicly available market yield curves and the terms of the swap. The Company performs ongoing assessments of counterparty credit risk.

The following table summarizes the fair value for derivatives designated as hedging instruments in the consolidated balance sheets as of December 31, 2021 and 2020:

	Fair Value as	of December 31,	
Dollars in thousands	 2021	2020	
Location on Balance Sheet ⁽¹⁾ :			
Derivatives designated as hedges — Assets:			
Prepaid expenses and other current assets			
Cash Flow Hedges			
Cross-currency swap	4,900	7,6	623
<u>Net Investment Hedges</u>			
Cross-currency swap	5,120	5,2	297
Other assets			
Cash Flow Hedges			
Interest rate swap ⁽²⁾	4,373		—
<u>Net Investment Hedges</u>			
Cross-currency swap	2,104		—
Total derivatives designated as hedges — Assets	\$ 16,497	\$ 12,9) 20
Derivatives designated as hedges — Liabilities			
Accrued expenses and other current liabilities			
Cash Flow Hedges			
Interest rate swap ⁽²⁾	\$ 18,187	\$ 22,0)33
Cross-currency swap	8,283	4,3	335
Net Investment Hedges			
Cross-currency swap		1,8	884
Other liabilities			
Cash Flow Hedges			
Interest rate swap ⁽²⁾	30,143	71,7	736
Cross-currency swap	4,859	26,7	728
Net Investment Hedges			
Cross-currency swap	3,366	9,4	449

Total derivatives designated as hedges — Liabilities

⁽¹⁾ The Company classifies derivative assets and liabilities as current based on the cash flows expected to be incurred within the following 12 months.

⁽²⁾ At December 31, 2021 and 2020, the total notional amounts related to the Company's interest rate swaps were \$1.8 billion and \$1.9 billion, respectively.

64,838

136,165

The following presents the effect of derivative instruments designated as cash flow hedges and net investment hedges on the accompanying consolidated statement of operations during the years ended December 31, 2021 and 2020:

Dollars in thousands	lance in AOCL Beginning of Year	Amount of Gain (Loss) Recognized in AOCL	Amount of Gain (Loss) Reclassified from AOCL into Earnings	Balance in AOCL End of Year	Location in Statements of Operations
Year Ended December 31, 2021	 				-
Cash Flow Hedges					
Interest rate swap	\$ (93,769)	\$ 27,402	\$ (22,411)	\$ (43,956)	Interest expense
Cross-currency swap	(1,073)	24,275	32,890	(9,688)	Other income, net
Net Investment Hedges					
Cross-currency swap	(12,291)	16,515	6,545	(2,321)	Interest income
	\$ (107,133)	\$ 68,192	\$ 17,024	\$ (55,965)	
Year Ended December 31, 2020					
Cash Flow Hedges					
Interest rate swap	\$ (45,145)	\$ (64,778)	\$ (16,154)	\$ (93,769)	Interest expense
Cross-currency swap	177	(17,147)	(15,897)	(1,073)	Other income, net
Net Investment Hedges					
Cross-currency swap	10,229	(14,911)	7,609	(12,291)	Interest income
	\$ (34,739)	\$ (96,836)	\$ (24,442)	\$ (107,133)	

7. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

The Company tests goodwill for impairment by either performing a qualitative evaluation or a quantitative test.

The qualitative evaluation is an assessment of factors including reporting unit specific operating results as well as industry, market and general economic conditions, to determine whether it is more likely than not that the fair values of a reporting unit is less than its carrying amount, including goodwill. The Company may elect to bypass the qualitative assessment for its three reporting units and perform a quantitative test. The assumptions used in evaluating goodwill for impairment are subject to change and are tracked against historical results by management.

The quantitative test estimates the fair value of the three reporting units using a discounted cash flow model, which incorporates significant estimates and assumptions made by management which, by their nature, are characterized by uncertainty. Inputs used to fair value the Company's reporting units are considered inputs of the fair value hierarchy. For Level 3 measurements, significant increases or decreases in long-term growth rates or discount rates in isolation or in combination could result in a significantly lower or higher fair value measurement. The key assumptions impacting the valuation included the following:

- The reporting unit's financial projections, which are based on management's assessment of regional and macroeconomic variables, industry trends and market opportunities, and the Company's strategic objectives and future growth plans.
- The projected terminal value for the reporting unit, which represents the present value of projected cash flows beyond the last period in the discounted cash flow analysis. The terminal value reflects the Company's assumptions related to long-term growth rates and profitability, which are based on several factors, including local and macroeconomic variables, market opportunities, and future growth plans.
- The discount rate used to measure the present value of the projected future cash flows is set using a weighted-average cost of capital method that
 considers market and industry data as well as the Company's specific risk factors that are likely to be considered by a market participant. The
 weighted-average cost of capital is the Company's estimate of the overall after-tax rate of return required by equity and debt holders of a business
 enterprise.



During the third quarter of 2021, the Company elected to perform a qualitative analysis for its three reporting units. The Company determined, after performing the qualitative analysis, that there was no evidence that it is more likely than not that the fair value was less that the carrying amounts, therefore, it was not necessary to perform a quantitative impairment test.

Changes in the carrying amount of goodwill in 2021 and 2020 were as follows:

Dollars in thousands	Codman Specialty Surgical		Tissue Technologies		Total
Goodwill at January 1, 2020	\$	653,500	\$	300,780	\$ 954,280
Transfer to assets held for sale		_		(47,546)	 (47,546)
Foreign currency translation		18,475		7,158	 25,633
Goodwill at December 31, 2020	\$	671,975	\$	260,392	\$ 932,367
ACell Acquisition		_		94,147	94,147
Foreign currency translation		(8,547)		(4,509)	(13,056)
Goodwill at December 31, 2021	\$	663,428	\$	350,030	\$ 1,013,458

On January 4, 2021, the Company completed its sale of its Extremity Orthopedics business. In conjunction with the sale of this business, the Company rebranded the Orthopedics and Tissue Technologies segment as Tissue Technologies in the first quarter of 2021. See Note 4. *Acquisitions and Divestitures*, for details.

Other Intangible Assets

The components of the Company's identifiable intangible assets were as follows:

	December 31, 2021						
Dollars in thousands	Weighted Average Life	Cost	Accumulated Amortization	Net			
Completed technology	18 years \$	1,132,954	\$ (307,013)	\$ 825,941			
Customer relationships	12 years	211,344	(142,755)	68,589			
Trademarks/brand names	28 years	98,367	(31,468)	66,899			
Codman trade name	Indefinite	167,758	_	167,758			
Supplier relationships	30 years	30,211	(16,192)	14,019			
All other	11 years	6,258	(3,891)	2,367			
	\$	1,646,892	\$ (501,319)	\$ 1,145,573			

	December 31, 2020						
Dollars in thousands	Weighted Average Life		Cost		Accumulated tization		Net
Completed technology	19 years	\$	896,478	\$	(248,088)	\$	648,39
Customer relationships	12 years		213,270		(132,838)		80,43
Trademarks/brand names	28 years		104,209		(31,767)		72,44
Codman trade name	Indefinite		170,226				170,22
Supplier relationships	27 years		30,211		(15,203)		15,00
All other ⁽¹⁾	4 years		6,693		(3,755)		2,93
		\$	1,421,087	\$	(431,651)	\$	989,43

⁽¹⁾ Prior period amounts were reclassified as it relates to All Other within this table to conform to the current period presentation

At December 31, 2020, \$13.3 million of Intangible assets, net were presented separately as "Assets held for sale" in conjunction with the sale of the Extremity Orthopedics business.

The increase in the Company's identifiable intangible assets at December 31, 2021 as compared to the year ended December 31, 2020, was primarily driven from intangible assets acquired in conjunction with the ACell Acquisition. See Note 4, *Acquisitions and Divestitures*, for details.

Intangible Assets with Indefinite Lives

The Company tests intangible assets with indefinite lives for impairment annually in the third quarter in accordance with ASC Topic 350. Additionally, the Company may perform interim tests if an event occurs or circumstances change that could potentially reduce the fair value of a indefinite lived intangible asset below its carrying amount. The Company tests for impairment by either performing a qualitative evaluation or a quantitative test. The qualitative evaluation is an assessment of factors, including specific operating results as well as industry, market and general economic conditions, to determine whether it is more likely than not that the fair values of the intangible asset is less than its carrying amount. The Company may elect to bypass this qualitative evaluation and perform a quantitative test.

During the third quarter of 2021, the Company elected to perform a qualitative analysis for its intangible asset with indefinite lives. The Company determined, after performing the qualitative analysis, that there was no evidence that it is more likely than not that the fair value was less that the carrying amounts, therefore, it was not necessary to perform a quantitative impairment test.

Product rights and other definite-lived intangible assets are tested periodically for impairment in accordance with ASC Topic 360 when events or changes in circumstances indicate that an asset's carrying value may not be recoverable. The impairment testing involves comparing the carrying amount of the asset or asset group to the forecasted undiscounted future cash flows. In the event the carrying value of the asset exceeds the undiscounted future cash flows, the carrying value is considered not recoverable and impairment exists. An impairment loss is measured as the excess of the asset's carrying value over its fair value, calculated using discounted future cash flows. The computed impairment loss is recognized in the period that the impairment occurs.

Amortization expense (including amounts reported in cost of product revenues) for the years ended December 31, 2021, 2020 and 2019 was \$83.3 million, \$74.5 million and \$72.8 million, respectively.

Annual amortization expense is expected to approximate \$79.1 million in 2022, \$78.4 million in 2023, \$77.7 million in 2024, \$77.7 million in 2025, \$77.6 million in 2026 and \$585.8 million thereafter. Amortization of product technology based intangible assets totaled \$66.5 million, \$46.7 million and \$45.8 million for the years ended December 31, 2021, 2020 and 2019, respectively, and is presented by the Company within cost of goods sold.

8. TREASURY STOCK

As of December 31, 2021 and 2020, there were 4.9 million shares of treasury stock outstanding with a cost of \$234.4 million and \$235.1 million, respectively, at a weighted average cost per share of \$47.86.

On December 7, 2020, the Board of Directors authorized the Company to repurchase up to \$225 million of the Company's common stock. The program allows the Company to repurchase its shares opportunistically from time to time. The repurchase authorization expires in December 2022. The price and timing of any future purchases under the share repurchase program will depend on factors such as levels of cash generation from operations, the volume of stock option exercises by employees, cash requirements for acquisitions, dividends, economic and market conditions and stock price, and such repurchases may be discontinued at any time.

For the year ended December 31, 2021, there were no repurchases of the Company's common stock as part of the share repurchase authorization.

On January 12, 2022, the Company entered into a \$125.0 million accelerated share repurchase ("2022 ASR") and received 1.5 million shares of Company common stock at inception of the 2022 ASR, which represented approximately 80% of the expected total shares under the 2022 ASR. The remaining 20% of the expected total shares is expected to settle in the first half of 2022, upon which additional shares of common stock may be delivered to the Company or, under certain circumstances, the Company may be required to make a cash payment or may elect to deliver shares of our common stock to the 2022 ASR counterparty in each case pursuant to the terms of the 2022 ASR agreement between the Company and the 2022 ASR counterparty. The total number of shares to be delivered or the amount of such payment, as well as the final average price per share, will be based on the volume-weighted average price, less a discount, of the Company's common stock during the term of the transaction. As a result of this transaction, \$100 million remains available under the \$225 million stock repurchase authorization.

During the twelve months ended December 31, 2020, the Company repurchased 2.1 million shares of Integra's common stock as part of the previous share repurchase authorization. The Company utilized \$100.0 million of net proceeds from the offering of the Convertible Senior Notes to execute the share repurchase transactions. This included \$7.6 million from certain purchasers of the convertible notes in conjunction with the closing of the offering. On February 5, 2020, the Company entered into a \$92.4 million accelerated share repurchase ("2020 ASR") to complete the remaining \$100.0 million of share repurchase. The Company received 1.3 million shares at inception of the 2020 ASR, which represented approximately 80% of the expected total shares. Upon settlement of the 2020 ASR in June 2020, the Company received an additional 0.6 million shares determined using the volume-weighted average price of the Company's common stock during the term of the transaction.

9. STOCK-BASED COMPENSATION

Stock-based compensation expense - all related to employees and members of the Board of Directors - recognized under the authoritative guidance was as follows:

	Years Ended December 31,				
Dollars in thousands	2021		2020		2019
Cost of goods sold	 470		344		317
Research and development	1,644		1,471		1,785
Selling, general and administrative	\$ 34,096	\$	17,776	\$	19,153
Total stock-based compensation expense	 36,210		19,591		21,255
Total estimated tax benefit related to stock-based compensation expense	13,804		6,221		9,420
Net effect on net income	\$ 22,406	\$	13,370	\$	11,835

EMPLOYEE STOCK PURCHASE PLAN

The purpose of the Employee Stock Purchase Plan (the "ESPP") is to provide eligible employees of the Company with the opportunity to acquire shares of common stock at periodic intervals by means of accumulated payroll deductions. The ESPP is a non-compensatory plan. Under the ESPP, a total of 3.0 million shares of common stock are reserved for issuance. These shares will be made available either from the Company's authorized but unissued shares of common stock or from shares of common stock reacquired by the Company as treasury stock. At December 31, 2021, 2.0 million shares remain available for purchase under the ESPP. During the years ended December 31, 2021, 2020 and 2019, the Company issued 16,948 shares, 18,284 shares and 12,531 shares under the ESPP for \$1.1 million, \$1.1 million and \$0.7 million, respectively.

EQUITY AWARD PLANS

As of December 31, 2021, the Company had stock options, restricted stock awards, performance stock awards, contract stock awards and restricted stock unit awards outstanding under the Integra LifeSciences Holdings Corporation Fifth Amended and Restated 2003 Equity Incentive Plan (the "2003 Plan"). The 2000 and 2001 Equity Incentive Plans were terminated as of February 19, 2021, and no further awards may be issued under the plans.

In May 2010 and May 2017, the stockholders of the Company approved amendments to the 2003 Plan to increase by 3.5 million and 1.7 million, respectively, the number of shares of common stock that may be issued under the 2003 Plan. The Company has reserved 4.0 million shares under each of the 2000 Plan and the 2001 Plan, and 14.7 million shares under the 2003 Plan. The Plans permit the Company to grant incentive and non-qualified stock options, stock appreciation rights,



restricted stock, contract stock, performance stock, or dividend equivalent rights to designated directors, officers, employees and associates of the Company.

Stock options issued under the 2003 Plan became exercisable over specified periods, generally within four years from the date of grant for officers and employees, and within one year from the date of the grant for members of the Board of Directors. The awards generally expire eight years from the grant date for employees and from six to ten years for directors and certain executive officers, except in certain instances that result in accelerated vesting due to death, disability, retirement age or change in control provisions within their grant agreements. Restricted stock issued under the 2003 Plan vests ratably over specified periods, generally three years after the date of grant. The vesting of performance stock issued under the 2003 Plan is subject to service and performance conditions.

Stock Options

The Company values stock option grants using the binomial distribution model. Management believes that the binomial distribution model is preferable to the Black-Scholes model because it is a more flexible model that gives consideration to the impact of non-transferability and vesting provisions in valuing employee stock options.

In determining the value of stock options granted, the Company considered that it has never paid cash dividends and does not currently intend to pay cash dividends, and thus has assumed a 0% dividend yield. Expected volatilities are based on the historical volatility of the Company's stock price. The expected life of stock options is estimated based on historical data on exercise of stock options, post-vesting forfeitures and other factors to estimate the expected term of the stock options granted. The risk-free interest rates are derived from the U.S. Treasury yield curve in effect on the date of grant for instruments with a remaining term similar to the expected life of the options. The Company accounts for forfeitures as they occur.

The following weighted-average assumptions were used in the calculation of fair value:

		Years Ended December 31,				
	2021	2020	2019			
Dividend yield	0%	0%	0%			
Expected volatility	29%	27%	28%			
Risk free interest rate	1.30%	0.89%	2.51%			
Expected life of option from grant date	7 years	7 years	7 years			
Weighted average grant date fair value of options granted	\$22.59	\$13.03	\$18.74			

The following table summarizes the Company's stock option activity.

	Shares	V	Weighted Average Exercise Price	Weighted Average Contractual Term in Years	Ag	gregate Intrinsic Value
Stock Options	(In thousands)					(In thousands)
Outstanding at January 1, 2021	1,346	\$	39.25	4.41		\$34,560
Granted	150		68.10	—		
Exercised	(230)		24.74	_		
Forfeited or Expired	(41)		51.20	—		
Outstanding at December 31, 2021	1,225	\$	45.11	4.30	\$	26,970
Exercisable at December 31, 2021	858	\$	41.07	3.38	\$	22,242

The Company recognized \$5.0 million, \$3.2 million and \$3.0 million in expense related to stock options during the years ended December 31, 2021, 2020 and 2019, respectively. The intrinsic value of options exercised for the years ended December 31, 2021, 2020 and 2019 were \$11.1 million, \$8.7 million and \$14.6 million, respectively. Cash received from option exercises and employee stock purchase plan was \$6.8 million, \$5.2 million and \$6.9 million, for the years ended December 31, 2021, 2020 and 2019, respectively. The realized tax benefit from options exercised were \$2.2 million, \$1.7 million and \$3.0 million for the years ended December 31, 2021, 2020 and 2019, respectively.

As of December 31, 2021, there was approximately \$2.9 million of total unrecognized compensation costs related to unvested stock options. These costs are expected to be recognized over a weighted-average period of approximately two years.



Awards of Restricted Stock, Performance Stock and Contract Stock

The following table summarizes the Company's awards of restricted stock, performance stock and contract stock for the year ended December 31, 2021.

	Restricted S	tock Awards	Performance Stock and Contract Stock Awa			
	Shares	Weighted Average Grant Date Fair Value Per Share	Shares	Weighted Average Grant Date Fair Value Per Share		
	(In thousands)		(In thousands)			
Unvested, January 1, 2021	472	\$ 50.02	197	47.66		
Granted	242	68.31	223	67.91		
Adjustments for performance achievement related to award target		_	96	58.18		
Cancellations	(78)	54.94	(152)	_		
Released	(214)	51.63	(20)	67.84		
Vested but not released	_	_	(289)	58.06		
Unvested, December 31, 2021	422	\$ 58.78	55	70.74		

The Company recognized \$31.2 million, \$16.4 million and \$18.1 million in expense related to such awards during the years ended December 31, 2021, 2020 and 2019, respectively. The total fair market value of shares vested and released in 2021, 2020 and 2019 was \$15.7 million, \$17.3 million and \$21.1 million, respectively. Vested awards include shares that have been fully earned but had not been delivered as of December 31, 2021.

Performance stock awards have performance features associated with them. Performance stock, restricted stock and contract stock awards generally have requisite service periods of three years. The fair value of these awards is being expensed on a straight-line basis over the vesting period.

As of December 31, 2021, there was approximately \$21.1 million of total unrecognized compensation costs related to unvested restricted stock, performance stock and contract stock awards. These costs are expected to be recognized over a weighted-average period of approximately two years.

As of December 31, 2021, there were approximately 0.5 million vested Restricted Units and 0.1 million vested performance share units held by various employees for which the related shares have not yet been issued. The final determination of the number of shares to be issued is made by the Company's Compensation Committee of the Board of Directors which is contingent upon achieving certain revenue and organic revenue growth performance metric.

At December 31, 2021, there were approximately 3.5 million shares available for grant under the 2003 Plan.

The Company capitalized into inventory, share based compensation costs of \$0.5 million, \$0.4 million and \$0.3 million for the years ended December 31, 2021, 2020 and 2019, respectively. Such share-based compensation was recognized as cost of goods sold when related inventory was sold.

10. RETIREMENT BENEFIT PLANS

DEFINED BENEFIT PLANS

The Company has various defined benefit plans which covers certain employees in France, Japan, Germany and Switzerland.

Net periodic benefit costs for the Company's defined benefit pension plans for the years ended December 31, 2021 and 2020 included the following (amounts in thousands):

	Year ended December 31,				
	 2021		2020		
Service cost	\$ 2,741	\$	4,029		
Interest cost	100		219		
Expected return on plan assets	(893)		(652)		
Amortization of prior service cost (credit)	(281)		(274)		
Recognized actuarial losses	186		787		
Settlements	51		(102)		
Net period benefit cost	\$ 1,904	\$	4,007		

The following weighted average assumptions were used to develop net periodic pension benefit costs and the actuarial present values of projected pension benefit obligations for the years ended December 31, 2021 and 2020, respectively:

	As of December	r 31,
	2021	2020
Discount rate	0.37 %	0.34 %
Expected return on plan assets	3.59 %	2.04 %
Rate of compensation increase	2.10 %	2.14 %
Interest crediting rate for cash balance plans	1.00 %	1.00 %

The Company's discount rates are determined by considering current yield curves representing high quality, long-term fixed income instruments. The resulting discount rates are consistent with the duration of plan liabilities. In 2021 and 2020, the discount rates were prescribed as the current yield on corporate bonds with an average rating of AA or AAA of equivalent currency and term to the liabilities. The expected returns on plan assets represent the average rate of return expected to be earned on plan assets over the period the benefits included in the benefit obligation are to be paid. In developing the expected rates of return, the Company considers returns of historical market data as well as actual returns on the plan assets. Using this reference information, the long-term return expectations for each asset category are developed according to the allocation among those investment categories.

The assessment is determined using projections from external financial sources, long-term historical averages, actual returns by asset class and the various asset class allocations by market.



The following sets forth the change in projected benefit obligations and the change in plan assets for the years ended December 31, 2021 and 2020 and a reconciliation of the funded status at December 31, 2021 and 2020, respectively (amounts in thousands):

	Year ended December 31,		
	 2021		2020
Change In Projected Benefit Obligations			
Projected benefit obligations, beginning of year	\$ 72,869	\$	66,972
Interest cost	100		219
Service cost	2,741		4,029
Actuarial (gain) loss	(5,044)		(3,347)
Plan amendments	(586)		_
Plan settlements	(655)		(77)
Employee contribution	917		883
Premiums paid	(373)		(388)
Benefit payment	(2,128)		(1,537)
Plans transferred in	_		
Effect of foreign currency exchange rates	(2,657)		6,115
Projected benefit obligations, end of year	\$ 65,184	\$	72,869

	Year ended December 31,			
	 2021		2020	
Change In Plan Assets				
Plan assets at fair value, beginning of year	\$ 37,825	\$	30,770	
Actual return on plan assets	3,371		2,882	
Employer contributions	2,254		2,274	
Employee contributions	917		883	
Plan settlements	(633)		(56)	
Benefits paid	(2,128)		(1,537)	
Premiums paid	(373)		(388)	
Effect of foreign currency exchange rates	(1,319)		2,997	
Plan assets at fair value, end of year	\$ 39,914	\$	37,825	

		Year ended December 31,					
	_	2021		2020			
Reconciliation Of Funded Status	_						
Fair value of plan assets	\$	39,914	\$	37,825			
Benefit obligations		65,184		72,869			
Unfunded benefit obligations	\$	25,270	\$	35,044			

The unfunded benefit obligations are included in other liabilities in the consolidated balance sheets at December 31, 2021 and 2020, respectively.

During the periods ended December 31, 2021 and 2020, the Company had a net gain of \$7.0 million and \$4.6 million, respectively, recognized within accumulated other comprehensive loss that has not been recognized as a component of net periodic benefit cost. The gain recognized during the period ended December 31, 2021, is primarily attributed to a change in the discount rate used to estimate the projected benefit obligation for defined benefit plans which cover certain employees in Switzerland. The combined accumulated benefit obligations for the defined benefit plans was \$60.3 million and \$61.5 million as of December 31, 2021 and 2020, respectively.

Unrecognized gains and losses are amortized over the average remaining future service for each plan. For plans with no active employees, they are amortized over the average life expectancy. The amortization of gains and losses is determined by using a 10% corridor of the greater of the market value of assets or the accumulated benefit obligation. Total unamortized gains and losses in excess of the corridor are amortized over the average remaining future service.



Prior service costs/benefits for the pension plans are amortized over the average remaining future service of plan participants at the time of the plan amendment.

The net plan assets of the pension plans are invested in common trusts. Common trusts are classified as Level 2 in fair value hierarchy. The fair value of common trusts is valued at net asset value based on the fair values of the underlying investments of the trusts as determined by the sponsor of the trusts. The investment strategy of the Company's defined benefit plans is both to meet the liabilities of the plans as they fall due and to maximize the return on invested assets within appropriate risk profile.

The benefit plans in France and Germany had no assets at December 31, 2021.

As of December 31, 2021, no plan assets are expected to be returned to the Company in the next twelve months.

The following table is the summary of expected future benefit payments (in thousands):

2022	\$ 1,934
2023	\$ 1,796
2024	\$ 1,831
2025	\$ 2,073
2026	\$ 2,003
Next five years	\$ 10,395

As of December 31, 2021, contributions expected to be paid to the plan in 2022 is \$2.3 million.

DEFINED CONTRIBUTION PLANS

The Company also has various defined contribution savings plans that cover substantially all employees in the United States, Belgium, Canada, France, Japan, Netherlands, the U.K. and Puerto Rico. The Company matches a certain percentage of each employee's contributions as per the provisions of the plans. Total contributions by the Company to the plans were \$8.8 million, \$6.7 million and \$8.6 million for the years ended December 31, 2021, 2020 and 2019, respectively.

DEFERRED COMPENSATION PLAN

The Company maintains a Deferred Compensation Plan in which certain employees of the Company may defer the payment and taxation of up to 75% of their base salary and up to 100% of bonus amounts and other eligible cash compensation.

During the first quarter of 2020, employees participating in the Company's deferred compensation plan began to defer their compensation. This deferred compensation is invested in funds offered under this plan and is valued based on Level 1 measurements in the fair value hierarchy. Assets of the Company's deferred compensation plan are included in Other current assets and recorded at fair value based on their quoted market prices. The fair value of these assets at December 31, 2021 and 2020 was \$3.8 million and \$2.0 million. Offsetting liabilities relating to the deferred compensation plan are included in Other liabilities.

11. LEASES AND RELATED PARTY LEASES

The Company leases administrative, manufacturing, research and distribution facilities and vehicles through operating lease agreements. The Company has no finance leases as of December 31, 2021. Many of the Company's leases include both lease (e.g., fixed payments including rent) and non-lease components (e.g., common-area or other maintenance costs). For vehicles, the Company has elected the practical expedient to group lease and non-lease components.

Most facility leases include one or more options to renew. The exercise of lease renewal options is typically at the Company's sole discretion, therefore, the majority of renewals to extend the lease terms are not included in the ROU assets and lease liabilities as they are not reasonably certain of exercise. The Company regularly evaluates renewal options and when they are reasonably certain of exercise, the renewal period is included in the lease term.

As most of the Company's leases do not provide an implicit rate, the Company uses a collateralized incremental borrowing rate based on the information available at the lease commencement date in determining the present value of the lease payments.

Total operating lease expense for the year ended December 31, 2021 and December 31, 2020, was \$20.3 million and \$19.7 million, respectively, which includes \$0.3 million, in related party operating lease expense.



Supplemental balance sheet information related to operating leases at December 31, 2021 were as follows:

De	ember 31, 2021		December 31, 2020
	(In thousands, except lea	ase term a	nd discount rate)
\$	84,543	\$	83,635
	14,775		12,818
	90,329		88,118
\$	105,104	\$	100,936
	10.4 years		11.6 years
	2.1 years	;	2.3 years
	5.1 %)	4.6 %
	2.6 %)	2.3 %
		\$ 84,543 14,775 90,329 \$ 105,104 10.4 years 2.1 years 5.1 %	(In thousands, except lease term a \$ 84,543 \$ 14,775 90,329

Supplemental cash flow information related to leases was as follows:

	De	ecember 31, 2021	December 31, 2	2020
		(In the	ousands)	
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	\$	15,077	\$	15,226
ROU assets obtained in exchange for lease liabilities:				
Operating leases		12,610		6,027

Future minimum lease payments under operating leases at December 31, 2021 were as follows:

	Related Parties Third Parties		Total
2022	296	17,678	17,974
2023	296	14,611	14,907
2024	296	12,784	13,080
2025	296	11,289	11,585
2026	296	9,889	10,185
Thereafter	838	67,992	68,830
Total minimum lease payments	\$ 2,318	\$ 134,243	\$ 136,561
Less: Imputed interest			\$ 31,457
Total lease liabilities			105,104
Less: Current lease liabilities			14,775
Long-term lease liabilities			90,329

There were no future minimum lease payments under finance leases at December 31, 2021.

Related Party Leases

The Company leases its manufacturing facility in Plainsboro, New Jersey, from a general partnership that is 50% owned by a corporation whose stockholders are trusts, whose beneficiaries include family members of the Company's principal stockholder and former director. The term of the current lease agreement is through October 31, 2029 at an annual rate of approximately \$0.3 million per year. The current lease agreement also provides (i) a 5-year renewal option for the Company to extend the lease from November 1, 2029 through October 31, 2034 at the fair market rental rate of the premises, and (ii) another 5-year renewal option to extend the lease from November 1, 2034 through October 31, 2039 at the fair market rental rate of the premises.

12. INCOME TAXES

Income (Loss) before income taxes consisted of the following:

	Years Ended December 31,						
Dollars in thousands		2021 2020			2019		
United States operations	\$	91,150	\$	15,082	\$	(38,359)	
Foreign operations		123,527		78,438		98,463	
Total	\$	214,677	\$	93,520	\$	60,104	

A reconciliation of the U.S. Federal statutory rate to the Company's effective tax rate is as follows:

	Year	Years Ended December 31,					
	2021	2020	2019				
Federal statutory rate	21.0 %	21.0 %	21.0 %				
Increase (decrease) in income taxes resulting from:							
State income taxes, net of federal tax benefit	1.9 %	1.2 %	1.0 %				
Foreign operations	(4.0)%	(7.9)%	(20.0)%				
Excess tax benefits from stock compensation	(1.2)%	(1.0)%	(5.6)%				
Nondeductible meals and entertainment	0.1 %	0.4 %	1.5 %				
Intercompany profit in inventory	(0.2)%	1.2 %	1.2 %				
Nondeductible facilitative costs	0.2 %	1.4 %	0.8 %				
Research and development credit	(1.2)%	(1.6)%	(2.9)%				
Return to provision	(0.7)%	(2.3)%	1.7 %				
Global intangible low-taxed income ("GILTI")	0.7 %	2.5 %	7.6 %				
Nondeductible executive compensation	0.9 %	2.4 %	3.0 %				
Fair market value step up on intra-entity transfer of intellectual property	— %	(63.3)%	— %				
Gain from sale of business - book to tax differences	3.9 %	2.8 %	— %				
Swiss tax holiday	— %	— %	(15.7)%				
Nondeductible R&D expense	— %	— %	22.7 %				
Other	(0.2)%	— %	0.2 %				
Effective tax rate	21.2 %	(43.2)%	16.5 %				

Our effective tax rate was 21.2% and (43.2)% of income before income taxes for the years ended December 31, 2021 and December 31, 2020, respectively. In 2021, the Company's higher effective tax rate was driven in part by an \$8.5 million income tax expense for nondeductible goodwill related to the sale of the Extremity Orthopedics business, offset by a \$3.1 million income tax benefit related to excess tax benefits from stock compensation. In 2020, the Company's lower worldwide effective tax rate was primarily driven by an \$59.2 million income tax benefit on an intra-entity transfer of certain intellectual property, substantially completed during the fourth quarter in 2020. Excluding this transaction, the effective worldwide tax rate for 2020 was 20.2%.

In December 2020, the Company completed an intra-entity transfer of certain intellectual property rights to one of its subsidiaries in Switzerland. While the transfer did not result in a taxable gain, the Company's Swiss subsidiary received a step-up in tax basis based on the fair value of the transferred intellectual property rights. The Company determined the fair value using a discounted cash flow model based on expectations of revenue growth rates, royalty rates, discount rates, and useful lives of the intellectual property. The Company recorded a \$59.2 million deferred tax benefit in Switzerland related to the amortizable tax basis in the transferred intellectual property.

During 2021, the Company's foreign operations generated a \$63.6 million increase in income tax expense when compared to the same period in 2020, because of the intra-entity transfer of certain intellectual property in 2020, geographic and business mix of taxable earnings and losses, among other factors. The 2021 foreign effective tax rate is 15.2%, compared to (57.1)% in 2020. The Company's foreign tax rate is primarily based upon statutory rates and is also impacted by the intra-entity transfer of certain intellectual property as described above for 2020.

During 2020, the Company's foreign operations generated a \$48.2 million decrease in income tax expense when compared to the same period in 2019 due to the intra-entity transfer of certain intellectual property, geographic and business mix of taxable earnings and losses, among other factors. The 2020 foreign effective tax rate is (57.1)%, compared to 3.5% in 2019. The Company's foreign tax rate is primarily based upon statutory rates and is also impacted by the intra-entity transfer of certain intellectual property as described above for 2020. During 2019, the Company finalized negotiations related to tax holidays in Switzerland, on a federal, cantonal, and communal level. The Company received a federal tax credit in Switzerland of \$12.1 million (\$0.14 per share), which may be used over a seven-year period, ending in 2024. The Company also received a reduction in its rate for the cantonal and communal level taxes during the third quarter of 2019, pursuant to tax reform in Switzerland.

Changes to income tax laws and regulations, in any of the tax jurisdictions in which the Company operates, could impact the effective tax rate. Various governments, both U.S. and non-U.S., are increasingly focused on tax reform and revenue-raising legislation. The current U.S. administration has proposed tax reform which, if enacted, may increase the Company's U.S. federal income tax liability. Further, legislation in foreign jurisdictions may be enacted, in response to the base erosion and profit-sharing (BEPS) project begun by the Organization for Economic Cooperation and Development (OECD). The OECD recently finalized major reform of the international tax system with respect to implementing a global minimum tax rate. Such changes in U.S. and Non-U.S. jurisdictions could have an adverse effect on the Company's effective tax rate.

The provision for income taxes consisted of the following:

	Years Ended December 31,					
Dollars in thousands		2021	2020			2019
Current:						
Federal	\$	31,938	\$	6,184	\$	14,597
State		11,377		5,029		3,447
Foreign		5,042		12,553		10,905
Total current	\$	48,357	\$	23,766	\$	28,949
Deferred:						
Federal		(12,830)		(5,079)		(10,889)
State		(3,688)		(1,760)		(666)
Foreign		13,763		(57,299)		(7,491)
Total deferred	\$	(2,755)	\$	(64,138)	\$	(19,046)
Provision for income taxes	\$	45,602	\$	(40,372)	\$	9,903

The income tax effects of significant temporary differences that give rise to deferred tax assets and liabilities, shown before jurisdictional netting, are presented below:

				,
Dollars in thousands		2021		2020
Assets:				
Doubtful accounts	\$	2,029	\$	2,207
Inventory related items		31,841		47,034
Tax credits		13,319		18,319
Accrued vacation		3,042		3,403
Accrued bonus		7,415		4,883
Stock compensation		13,955		6,160
Deferred revenue		1,742		1,665
Net operating loss carryforwards		26,198		29,335
Capitalization of research and development expenses		36,770		13,044
Unrealized foreign exchange loss		12,849		23,798
Charitable contributions carryforward		206		203
Leases and Other		41,371		23,205
Total deferred tax assets		190,737		173,256
Less valuation allowance		(9,767)		(9,897)
Deferred tax assets after valuation allowance	\$	180,970	\$	163,359
Liabilities:				
Intangible and fixed assets		(152,150)		(90,274)
Leases and Other		(17,658)		(15,585)
Total deferred tax liabilities	\$	(169,808)	\$	(105,859)
Total net deferred tax assets (liabilities)	\$	11,162	\$	57,500

At December 31, 2021, the Company had net operating loss carryforwards of \$71.7 million for federal income tax purposes, \$26.6 million for foreign income tax purposes and \$39.0 million for state income tax purposes to offset future taxable income. The majority of the federal net operating loss carryforwards expire through 2037, while \$4.1 million have an indefinite carry forward period. For foreign net operating loss carryforwards, the remaining \$26.6 million have an indefinite carry forward sexpire through 2036.

The valuation allowance relates to deferred tax assets for certain items that will be deductible for income tax purposes under very limited circumstances and for which the Company believes it will not satisfy the more likely than not threshold for realization of the associated tax benefit. In the event that the Company determines that it would be able to realize more or less than the recorded amount of net deferred tax assets, an adjustment to the deferred tax asset valuation allowance would be recorded in the period such a determination is made.

The Company's valuation allowance decreased by less than \$0.1 million, increased by less than \$0.1 million and increased by \$2.9 million at December 31, 2021, 2020 and 2019, respectively. The 2021 and 2020 valuation allowance primarily remained unchanged from the prior period.

As of December 31, 2021, the Company has not provided deferred income taxes on unrepatriated earnings from foreign subsidiaries as they are deemed to be indefinitely reinvested unless there is a manner under which to remit the earnings with no material tax cost. Material taxes would primarily be attributable to foreign withholding taxes and local income taxes when such earnings are distributed. The Company will repatriate foreign earnings when there is no need for reinvestment overseas and no material tax cost to bring the earnings back to the United States. Reinvestment considerations would include future acquisitions, transactions, and capital expenditure plans. As such, the Company has determined the tax impact of repatriating these earnings would not be material as of December 31, 2021. The Company does not anticipate the need to repatriate earnings from foreign subsidiaries as a result of the impact of the COVID-19 pandemic.

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

	Years Ended December 31,						
Dollars in thousands		2021		2020		2019	
			(Iı	n thousands)			
Balance, beginning of year	\$	702	\$	676	\$	676	
Gross increases:							
Current year tax positions						53	
Prior years' tax positions				26		_	
Other		(26)		_		(53)	
Balance, end of year	\$	676	\$	702	\$	676	

Approximately \$0.7 million of the balance at December 31, 2021 relates to uncertain tax positions that, if recognized, would affect the annual effective tax rate. There are no amounts within the balance of uncertain tax positions at December 31, 2021 related to tax positions for which it is reasonably possible that the amounts could be reduced during the twelve months following December 31, 2021.

The Company recognizes interest and penalties relating to uncertain tax positions in income tax expense. The Company recognized a minimal benefit for the years ended December 31, 2021, 2020 and 2019. The Company had minimal interest and penalties accrued for the years ended December 31, 2021 and 2020 and 2019.

The Company files Federal income tax returns, as well as multiple state, local and foreign jurisdiction tax returns. The Company is no longer subject to examinations of its U.S. consolidated Federal income tax returns by the IRS through fiscal year 2017. All significant state and local matters have been concluded through fiscal 2015. All significant foreign matters have been settled through fiscal 2012.

13. NET INCOME PER SHARE

Basic and diluted net income per share was as follows:

	Years Ended December 31,					
Dollars in thousands, except per share amounts		2021		2020		2019
Basic net income per share:						
Net income	\$	169,075	\$	133,892	\$	50,201
Weighted average common shares outstanding		84,698		84,650		85,637
Basic net income per common share	\$	2.00	\$	1.58	\$	0.59
Diluted net income per share:						
Net income	\$	169,075	\$	133,892	\$	50,201
Weighted average common shares outstanding — Basic		84,698		84,650		85,637
Effect of dilutive securities:						
Stock options and restricted stock		787		577		857
Weighted average common shares for diluted earnings per share		85,485		85,228		86,494
Diluted net income per common share	\$	1.98	\$	1.57	\$	0.58

Common stock of approximately 0.1 million and 0.3 million shares at December 31, 2021, and 2020 that are issuable through exercise of dilutive securities, respectively, and were not included in the computation of diluted net income per share because their effect would have been anti-dilutive.

Performance Shares and Restricted Units that entitle the holders to approximately 0.5 million shares of common stock are included in the basic and diluted weighted average shares outstanding calculation from their date of issuance because no further consideration is due related to the issuance of the underlying common shares.

14. ACCUMULATED OTHER COMPREHENSIVE LOSS

Changes in accumulated other comprehensive loss by component between December 31, 2021 and 2020 are presented in the table below, net of tax:

Dollars in thousands	ıs and Losses on Derivatives	Def	ined Benefit Pension Items	Foreigr	n Currency Items	Total
Balance at December 31, 2020	\$ (82,249)	\$	(5,105)	\$	13,295	\$ (74,059)
Other comprehensive gain (loss)	52,359		6,998		(17,362)	41,995
Less: Amounts reclassified from accumulated other comprehensive income, net	 13,091		_		_	13,091
Net current-period other comprehensive gain (loss)	 39,268		6,998		(17,362)	 28,904
Balance at December 31, 2021	\$ (42,981)	\$	1,893	\$	(4,067)	\$ (45,155)

For the year ended December 31, 2021, the Company reclassified a gain of \$25.3 million and a loss of \$12.2 million from accumulated other comprehensive loss to other income, net and interest income, respectively.

15. COMMITMENTS AND CONTINGENCIES

In consideration for certain technology, manufacturing, distribution, and selling rights and licenses granted to the Company, the Company has agreed to pay royalties on sales of certain products that it sells. The royalty payments that the Company made under these agreements were not significant for any of the periods presented.

The Company is subject to various claims, lawsuits and proceedings in the ordinary course of the Company's business, including claims by current or former employees, distributors and competitors and with respect to its products and product liability claims, lawsuits and proceedings, some of which have been settled by the Company. In the opinion of management, such claims are either adequately covered by insurance or otherwise indemnified, or are not expected, individually or in the aggregate, to result in a material, adverse effect on the Company's financial condition. However, it is possible that the Company's results of operations, financial position and cash flows in a particular period could be materially affected by these contingencies.

The Company accrues for loss contingencies when it is deemed probable that a loss has been incurred and that loss is estimable. The amounts accrued are based on the full amount of the estimated loss before considering insurance proceeds and do not include an estimate for legal fees expected to be incurred in connection with the loss contingency. The Company consistently accrues legal fees expected to be incurred in connection with loss contingencies as those fees are incurred by outside counsel as a period cost.

Contingent Consideration

The Company determined the fair value of contingent consideration during the twelve-month period ended December 31, 2021 and 2020 to reflect the change in estimate, additions, payments, transfers and the time value of money during the period.

A reconciliation of the opening balances to the closing balances of these Level 3 measurements for the years ended December 31, 2021 and 2020 is as follows (in thousands):

Contingent Consideration Liability Related to Acquisition of:										
	Arkis (See Note 4)		Location in Financial Statements	Derma Sciences			ACell Inc. (See Note 4)	Location in Financial Statements		
Sho	ort-term	I	Long-term		Lo	ong-term		Long-term		
\$	3,415	\$	11,746		\$	230	\$	_		
			—			—		23,900		
	276		(276)			—				
	_	\$	(62)	Research and development		_		(2,100)	Selling, general and administrative	
\$	3,691	\$	11,408		\$	230	\$	21,800		
	<u>Sho</u> \$ \$	(See N Short-term \$ 3,415 276 	Arkis (See Note 4 5 3,415 276 	Short-term Long-term \$ 3,415 \$ 11,746 - - 276 (276) - \$ (62)	Arkis (See Note 4) Location in Financial Statements Short-term Long-term \$ 3,415 \$ 11,746 276 (276) \$ (62)	Arkis (See Note 4) Location in Financial Statements Derm Short-term Long-term Loc \$ 3,415 \$ 11,746 \$	Arkis (See Note 4) Location in Financial Statements Derma Sciences Short-term Long-term Long-term \$ 3,415 \$ 11,746 \$ 230 276 (276) \$ (62) Research and development	Arkis (See Note 4) Location in Financial Statements Derma Sciences Short-term Long-term Long-term \$ 3,415 \$ 11,746 \$ 230 276 (276) \$ (62) Research and development	Arkis (See Note 4) Location in Financial Statements Derma Sciences ACell Inc. (See Note 4) Short-term Long-term Long-term Long-term \$ 3,415 \$ 11,746 \$ 230 \$ 23,900 276 (276) \$ (62) Research and development (2,100)	

Contingent Consideration Liability Related to Acquisition of:

Year Ended December 31, 2020	Arkis (See Note	4)		Derma Sciences	Location in Financial Statements
	 Short-term		Long-term	 Long-term	
Balance as of January 1, 2020	\$ —	\$	14,210	\$ 230	
Transfers from long-term to current portion	3,415		(3,415)	_	
Loss from change in fair value of contingent consideration liabilities	—		951		Research and development
Balance as of December 31, 2020	\$ 3,415	\$	11,746	\$ 230	

Derma Sciences

The Company assumed contingent consideration incurred by Derma Sciences, Inc. ("Derma Sciences") related to its acquisitions of BioD and the intellectual property related to Medihoney products. The Company accounted for the contingent liabilities by recording their fair value on the date of the acquisition based on a probability weighted income approach. The Company has already paid \$33.3 million related to the aforementioned contingent liabilities. One contingent milestone remains which relates to net sales of Medihoney[™] products exceeding certain amounts defined in the agreement between the Company and Derma Sciences. The potential maximum undiscounted payment amounts to \$3.0 million. The estimated fair value as of December 31, 2021 and 2020 was \$0.2 million.

16. SEGMENT AND GEOGRAPHIC INFORMATION

The Company internally manages two global reportable segments and reports the results of its businesses to its chief operating decision maker. The two reportable segments and their activities are described below.

- The Codman Specialty Surgical segment includes (i) the Neurosurgery business, which sells a full line of products for neurosurgery and neuro critical care such as tissue ablation equipment, dural repair products, cerebral spinal fluid management devices, intracranial monitoring equipment, and cranial stabilization equipment and (ii) the Instruments business, which sells more than 40,000 instrument patterns and surgical and lighting products to hospitals, surgery centers, dental, podiatry, and veterinary offices.
- The Tissue Technologies segment includes such offerings as skin and wound repair, plastics & surgical reconstruction products, bone grafts, and
 nerve and tendon repair products. In conjunction with the sale of the Extremity Orthopedics business, the Company rebranded the Orthopedics and
 Tissue Technologies segment as Tissue Technologies in the first quarter of 2021.

The Corporate and other category includes (i) various executive, finance, human resource, information systems and legal functions, (ii) brand management, and (iii) share-based compensation costs.

The operating results of the various reportable segments as presented are not comparable to one another because (i) certain operating segments are more dependent than others on corporate functions for unallocated general and administrative and/or operational manufacturing functions, and (ii) the Company does not allocate certain manufacturing costs and general and administrative costs to the operating segment results. Net sales and profit by reportable segment for the years ended December 31, 2021, 2020 and 2019 are as follows:

	Years Ended December 31,					
Dollars in thousands		2021		2020		2019
Segment Net Sales						
Codman Specialty Surgical	\$	1,025,232	\$	894,831	\$	996,206
Tissue Technologies		517,216		477,037		521,351
Total revenues	\$	1,542,448	\$	1,371,868	\$	1,517,557
Segment Profit						
Codman Specialty Surgical	\$	439,471	\$	356,657	\$	395,019
Tissue Technologies		228,199		159,630		144,638
Segment profit		667,670		516,287		539,657
Amortization		(16,914)		(27,757)		(27,028)
Corporate and other		(453,526)		(337,160)		(418,869)
Operating income	\$	197,230	\$	151,370	\$	93,760

The Company does not allocate any assets to the reportable segments. No asset information is reported to the chief operating decision maker and disclosed in the financial information for each segment. The Company attributes revenue to geographic areas based on the location of the customer. Total revenue, net and long-lived assets (tangible) by major geographic area are summarized below:

Dollars in thousands	United States ⁽¹⁾		Europe	Asia Pacific	Rest of the World			Consolidated		
Total revenue, net:										
2021	\$	1,089,526	\$ 191,327	\$ 182,034	\$	79,561	\$	1,542,448		
2020		971,975	172,689	157,174		70,030		1,371,868		
2019		1,077,379	197,468	157,391		85,319		1,517,557		
Total long-lived assets:										
2021	\$	339,535	\$ 55,026	\$ 11,289	\$	6,836	\$	412,686		
2020		324,893	38,812	13,121		5,577		382,403		

⁽¹⁾ Includes long-lived assets in Puerto Rico.

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

Description	Be	alance at ginning of Period	0	harged to Costs and Expenses	Other	D	eductions	ance at End of Period
Dollars in thousands								
Year ended December 31, 2021								
Allowance for doubtful accounts	\$	6,439	\$	(1,059) ⁽⁴⁾	\$ 341 ⁽³⁾	\$	(986) ⁽¹⁾	\$ 4,735
Deferred tax assets valuation allowance		13,825		1,444	89		(100)	15,258
Year ended December 31, 2020								
Allowance for doubtful accounts	\$	4,303	\$	3,635	\$ —	\$	(1,499) ⁽¹⁾	\$ 6,439
Deferred tax assets valuation allowance		12,069		1,617	\$ 		139	13,825
Year ended December 31, 2019								
Allowance for doubtful accounts	\$	3,719	\$	2,126	\$ 	\$	(1,542) (1)	\$ 4,303
Deferred tax assets valuation allowance		6,973		3,848	1,291 ⁽²⁾		(43)	12,069

⁽¹⁾ Deductions primarily relates to allowance for doubtful accounts written off during the year, net of recoveries and other adjustments.

⁽²⁾ The above amount primarily relates to amounts acquired through the acquisition of Arkis and a charge recorded in 2019 to valuation allowance related to the non-deductibility of executive compensation.

⁽³⁾ The above amount primarily relates to amounts acquired through the acquisition of ACell.

(4) Deduction primarily relates to a decrease to the allowance for doubtful accounts as a result of collections in the period and accounts written off during the year, net of recoveries.

Description of the Company's Common Stock Registered Under Section 12 of the Exchange Act

The following is a description of the common stock of Integra LifeSciences Holdings Corporation (the "Company"). The description does not purport to be complete and is subject to and qualified in its entirety by reference to the Company's amended and restated certificate of incorporation and its amended and restated by-laws, each of which are filed as exhibits to this Annual Report on Form 10-K, and to the provisions of the Delaware General Corporation Law ("DGCL").

General Matters

Authorized Shares

The Company's authorized capital stock consists of 255,000,000 shares of stock, of which 240,000,000 shares are designated as common stock, par value \$0.01 per share, and 15,000,000 shares are designated as preferred stock, no par value. As of December 31, 2021, we had 89,599,803 shares of common stock outstanding, 4,898,914 shares were designated as treasury stock, and no shares of preferred stock outstanding.

Dividends

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive dividends out of assets legally available therefor at such times and in such amounts as the board of directors may from time to time determine. However, our senior credit facility limits the amount of dividends that we may pay. Any future determinations to pay cash dividends on our common stock will be at the discretion of our board of directors and will depend upon our financial condition, results of operations, cash flows and other factors that our board of directors deems relevant.

Voting Rights

Each stockholder is entitled to one vote in person or by proxy for each share of the capital stock having voting power held by such stockholder. Stockholders do not have cumulative voting rights. The Company's board of directors is not classified and each director is elected annually. The voting standard for the election of directors is a majority of votes cast in uncontested elections. In contested elections where the number of nominees exceeds the number of directors to be elected, the vote standard is a plurality of the votes cast. Holders of a majority of the outstanding shares of common stock entitled to vote in any election of directors may elect all of the directors standing for election.

Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion or redemption.

Right to Receive Liquidation Distributions

Upon the occurrence of a liquidation, dissolution or winding-up, the holders of shares of common stock would be entitled to share ratably in the distribution of all of our assets remaining available for distribution after satisfaction of all its liabilities and the payment of the liquidation preference of any outstanding preferred stock.

Stock Exchange

Our common stock is traded on the Nasdaq Global Select Market under the symbol "IART".

Preferred Stock

The Company's Board of Directors has the authority to issue up to 15,000,000 shares of Preferred Stock from time to time in one or more series and with such rights and preferences as determined by the Board with respect to each series. The issuance of

preferred stock could have the effect of decreasing the market price of our common stock and could adversely affect the voting and other rights of holders of common stock.

Anti-Takeover Effects of Delaware Law

We are subject to the provisions of Section 203 of the DGCL. Under Section 203, we would generally be prohibited from engaging in any business combination with any interested stockholder for a period of three years following the time that this stockholder became an interested stockholder unless:

- prior to this time, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder's becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares owned by persons who are directors and also officers, and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 23% of the outstanding voting stock that is not owned by the interested stockholder.

Under Section 203, a "business combination" includes:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder, subject to limited exceptions;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation

In general, Section 203 defines an interested stockholder as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

Subsidiaries of Integra LifeSciences Holdings Corporation

Name of Coloridation	State on Compton of Incompanying on Ourseningtion
Name of Subsidiary	State or Country of Incorporation or Organization
ACell, Inc.	Delaware
Arkis Biosciences Inc.	Delaware
Ascension Orthopedics Limited	United Kingdom
BIMECO, Inc.	Florida
BioD, LLC	Delaware
BioDlogics, LLC	Delaware
BioRecovery, LLC	Delaware
CardioDyne, Inc.	Massachusetts
Cathtec Incorporated	Massachusetts
Caveangle Limited	United Kingdom
Confluent Surgical, Inc.	Delaware
Derma First Aid Products, Inc.	Pennsylvania
Derma Sciences Canada, Inc.	Canada
Derma Sciences Europe Limited	United Kingdom
Derma Sciences, Inc.	 Delaware
EndoSolutions, Inc.	 Delaware
Fiber Imaging Technologies, Inc.	 Massachusetts
GMS, Gesellschaft für medizinische Sondentechnik mbH	Germany
ILS Financing (Ireland) Limited	Ireland
ILS Financing Corporation	Delaware
ILS Services Switzerland Ltd.	Switzerland
ILS Surgical Investments, LLC	Delaware
INS Sweden AB	Sweden
Integra Burlington MA, Inc. (formerly known as Integra Radionics, Inc.)	Delaware
Integra Canada ULC (formerly known as Canada Microsurgical ULC)	Canada
Integra CI, Inc.	Cayman Islands
Integra Euro Holdings, Inc.	Delaware
Integra France Holdings SAS	France
Integra German Holdings GmbH	Germany
Integra GmbH	Germany
Integra Japan K.K.	Japan
Integra LifeSciences (Canada) Holdings, Inc.	Delaware
Integra LifeSciences (Ireland) Limited	Ireland
Integra LifeSciences (Shanghai) Co., Ltd.	China
Integra LifeSciences Austria GmbH	Austria
Integra LifeSciences Brazil Ltda.	Brazil
Integra LifeSciences Corporation	Delaware
Integra LifeSciences Enterprises, LLLP	Delaware
Integra LifeSciences Financing (Cyprus) Limited	Cyprus
Integra LifeSciences I faircing (Cyprus) Ennited	 Italy
Integra LifeSciences Middle East FZ-LLC	 Dubai
Integra LifeSciences Production Corporation	Delaware
Integra LifeSciences Flodecion Colpitation Integra LifeSciences Sales LLC (f/k/a Integra Healthcare Products LLC)	 Delaware
Integra LifeSciences Saies LEC (INA Integra Treanicale Floundis LEC)	France
Integra LifeSciences Services (Ireland) Limited	 Ireland
5 × 7	
Integra LifeSciences Singapore Pte. Ltd. Integra LifeSciences Spain, S.L.	Singapore Ensin
	Spain Spain
Integra LifeSciences Switzerland Sárl	 Switzerland
Integra LS (Benelux) NV	Belgium
Integra LS Mexico, S. DE R. L. DE C.V.	Mexico

Integra Luxtec, Inc.	Massachusetts
Integra ME GmbH	Germany
Integra MicroFrance SAS	France
Integra NeuroSciences (International), Inc.	Delaware
Integra NeuroSciences Holdings (UK) Limited	United Kingdom
Integra NeuroSciences Holdings B.V.	Netherlands
Integra NeuroSciences Implants (France) SAS	France
Integra NeuroSciences Limited	United Kingdom
Integra Neurosciences Pty Ltd. (AUS)	Australia
Integra Neurosciences Pty Ltd. (NZ)	New Zealand
Integra Receivables LLC	Delaware
Integra Sales, Inc.	Delaware
Integra Selector LLC	Delaware
Integra Switzerland Holdings Sarl	Switzerland
Integra York PA, Inc. (formerly known as Miltex, Inc.)	Delaware
IsoTis NV	Netherlands
IsoTis T.E. Facility B.V.	Netherlands
J. Jamner Surgical Instruments, Inc.	Delaware
Jarit GmbH	Germany
LXU Healthcare, Inc Medical Specialty Products	Delaware
MedEfficiency, Inc.	Delaware
Minnesota Scientific, Inc.	Minnesota
Nantong Derma Medical Products Co., Ltd.	China
Newdeal SAS	France
Newdeal, Inc.	Texas
Precise Dental Holding Corp.	New Jersey
Precise Dental Internacional, S.A. de C.V.	Mexico
Precise Dental Products, Ltd.	California
Precision Dental International, Inc.	California
Rebound Therapeutics Corporation	Delaware
Spembly Cryosurgery Limited	United Kingdom
Spembly Medical Limited	United Kingdom
Tarsus Medical Inc.	Delaware
TEI Biosciences (UK) Limited	United Kingdom
TEI Biosciences Inc.	Delaware
TEI Medical Inc.	Delaware
TGX Medical Systems, LLC	Delaware

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-231709, 333-221210, 333-216212, 333-170210, 333-155263, 333-127488, 333-109042, 333-73512, 333-46024, 333-82233, 333-58235, 333-06577, and 333-261744) of Integra LifeSciences Holdings Corporation of our report dated February 24, 2022 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP Florham Park, New Jersey February 24, 2022

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

I, Jan De Witte, certify that:

- 1. I have reviewed this annual report on Form 10-K of Integra LifeSciences Holdings Corporation;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13 a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2022

/s/ Jan De Witte

Jan De Witte President and Chief Executive Officer

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

I, Carrie L. Anderson, certify that:

- 1. I have reviewed this annual report on Form 10-K of Integra LifeSciences Holdings Corporation;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13 a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and we have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 24, 2022

/s/ Carrie L. Anderson

Carrie L. Anderson Executive Vice President and Chief Financial Officer

Certification of Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Jan De Witte, President and Chief Executive Officer of Integra LifeSciences Holdings Corporation (the "Company"), hereby certify that, to my knowledge:

- 1. The Annual Report on Form 10-K of the Company for the year ended December 31, 2021 (the "Report") fully complies with the requirement of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 24, 2022

/s/ Jan De Witte

Jan De Witte President and Chief Executive Officer

Certification of Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Carrie L. Anderson, Executive Vice President and Chief Financial Officer of Integra LifeSciences Holdings Corporation (the "Company"), hereby certify that, to my knowledge:

- 1. The Annual Report on Form 10-K of the Company for the year ended December 31, 2021 (the "Report") fully complies with the requirement of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 24, 2022

/s/ Carrie L. Anderson

Carrie L. Anderson Executive Vice President and Chief Financial Officer