UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

(Mark One)					
X	ANNUAL REPORT PURSUAN	T TO SECTION 13 OR 15(d) OF THE	SECURITIES EXCHANGE ACT OF 1934		
		For the fiscal year ended December 31,	2022		
_		OR			
	TRANSITION REPORT PURSUA	ANT TO SECTION 13 OR 15(d) OF TH	IE SECURITIES EXCHANGE ACT OF 1934		
		For the transition period from	0		
		Commission file number 1-1316	55		
		ARTIVION, INC.			
	(I	Exact name of registrant as specified in	n its charter)		
	Delaware		59-2417093		
	(State or other jurisdiction of incorporation or o	organization)	(I.R.S. Employer Identification No.)		
		1655 D. L. (D. L. (D. W.)	CA 20144		
		1655 Roberts Boulevard N.W., Kennesaw			
	Di-t	(Address of principal executive offices)			
	•	rant's telephone number, including area co ecurities registered pursuant to Section 120			
		• •			
	Title of each class	Trading Symbol(s)	Name of each exchange on which registered		
	Common Stock, \$0.01 par value	AORT	New York Stock Exchange		
	Se	ecurities registered pursuant to Section 120 None	(g) of the Act:		
Indicate by ch	neck mark if the registrant is a well-known seaso	ned issuer, as defined in Rule 405 of the S	ecurities Act. Yes □ No ⊠		
Indicate by ch	neck mark if the registrant is not required to file i	reports pursuant to Section 13 or Section 1	5(d) of the Act. Yes \square No \boxtimes		
			or 15(d) of the Securities Exchange Act of 1934 during the preject to such filing requirements for the past 90 days. Yes ⊠ No		
	heck mark whether the registrant has submitted is chapter) during the preceding 12 months (or for		ile required to be submitted pursuant to Rule 405 of Regulati as required to submit such files). Yes \boxtimes No \square	on S-T (
			elerated filer, a smaller reporting company, or emerging growth ging growth company" in Rule 12b-2 of the Exchange Act. (Che		
Large acceler	rated filer		Accelerated filer		
Non-accelera	ted filer		Smaller reporting company		
			Emerging growth company		
	g growth company, indicate by check mark if the andards provided pursuant to Section 13(a) of the		tended transition period for complying with any new or revised	l financia	
-	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 finance reporting under Section 404(b) of the Sarbanes-Oxley Act (15 USC. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.				
correction of Indicate by c registrant's ex	an error to previously issued financial statements	s. \square ons are restatements that required a recoind pursuant to § 240.10D-1(b). \square	e financial statements of the registrant included in the filing a overy analysis of incentive-based compensation received by a large Act.) Yes \(\Pi \) No \(\Pi \)		
As of June 30 of \$18.88 per), 2022 the aggregate market value of the voting	stock of the Registrant held by non-affili ast trading day of the registrant's most rec	ates of the registrant was \$725,381,098 computed using the cloently completed second fiscal quarter, as reported by the New Y		
•	ry 17, 2023 the number of outstanding shares of				
	-	Documents Incorporated By Refe			
	Document	-	Parts Into Which Incorporated		
Proxy Stat	ement for the Annual Meeting of Stockholders to December 31, 2022	o be filed within 120 days after	Part III		

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Forward-Looking Statements

This Form 10-K includes "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. Forward-looking statements give our expectations or forecasts of future events as of the date of this Form 10-K. In some cases, words such as "could," "may," "might," "will," "would," "shall," "should," "pro forma," "potential," "pending," "intend," "believe," "expect," "anticipate," "estimate," "plan," "future," "assume," and variations of these types of words or other similar expressions identify forward-looking statements. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Readers are cautioned not to place undue reliance on these forward-looking statements, which are made as of the date of this Form 10-K.

All statements included herein, other than statements of historical facts, that address activities, events, or developments that we expect or anticipate will or may occur in the future, or that reflect our beliefs about the future and/or expectations, are forward-looking statements, including statements about the following:

- Our belief that new products, new indications, global expansion, and business development are the four growth areas that will drive our business in the future:
- The potential impact the COVID-19 pandemic and the war in Ukraine may have on demand for and sales of our products and services, business operations, manufacturing operations, supply chain, cash flow, workforce, clinical and regulatory timelines, and our research and development projects;
- The potential impact general global, regional, or national economic downturns and macroeconomic trends, including heightened inflation, interest rate and currency fluctuations, as well as general or localized economic slowdowns or recessions may have on demand for and sales of our products and services, including ordering trends for international distributors based on currency fluctuation against the US dollar, and our business operations, manufacturing operations, supply chain, and workforce;
- Our beliefs about the robustness of our global supply chain in light of current global and macroeconomic conditions and about the potential impact of supply chain disruptions, particularly disruptions to single and sole source suppliers and third-party manufacturing partners;
- Our beliefs about our R&D and product pipeline, including our beliefs about the timing of our clinical trials and product launches;
- Our beliefs and anticipation regarding the favorable attributes, benefits, and clinical advantages of our products and services, the basis on which our
 products and services compete, the benefits of our physician education activities, and the advantages of our relationships with organ and tissue
 procurement organizations and tissue banks;
- Our beliefs about the future regulatory classification of our medical devices, our compliance with applicable laws and regulations, and our ability to
 make timely transitions to our Notified Bodies and obtain renewals for our Conformité Européene Mark product certification impacted by Brexit and
 the transition to the Medical Device Regulation in Europe, and the impact these transitions, renewals, and related processes may have on our business,
 including any impact on our customers' ordering patterns and our ability to supply products;
- Our beliefs regarding our global expansion efforts, including the international growth opportunity that would be provided by obtaining regulatory
 approval for BioGlue in China;
- Our beliefs regarding the impact alternative anticoagulation therapy and transcatheter heart valve replacement may have on the number of patients choosing On-X mechanical heart valves;
- Our beliefs about the advantages of our intellectual property and its significance to our segments and our business as a whole, and our beliefs about the present value and potential impairment of our intangible assets and leases;
- Our beliefs about our workforce, including our ability to attract and retain talent at all levels, and about our relationship with our workforce, including our works council in Germany and union in Brazil;
- · Our beliefs about potential information security vulnerabilities, and the associated potential adverse effects on our business;
- The dependencies affecting our ability to realize the anticipated business opportunities, growth prospects, synergies, and other benefits of the agreements with Endospan and Baxter and our acquisition of Ascyrus, and our beliefs about the costs and timelines for certain regulatory approvals and clinical trial milestones related to PerClot and the NEXUS stent graft system in the US and the AMDS globally;
- Our beliefs regarding the fair value of our acquisitions, divestitures, and other business development activities and the estimates and assumptions about the future achievements of milestones and future revenues and cash flows related to those business development activities, including our ability to achieve the milestones in the Baxter Transaction;
- Our beliefs about the anticipated benefits from our corporate reincorporation and rebranding and the risks posed by the same;

- Our belief that revenues for preservation services, particularly revenues for certain high-demand cardiac tissues, can vary from quarter-to-quarter and year-to-year due to a variety of factors including: quantity and type of incoming tissues, yields of tissue through the preservation process, timing of receipt of donor information, staffing levels, timing of the release of tissues to an implantable status, demand for certain tissue types due to the number and type of procedures being performed, and pressures from competing products or services;
- Our beliefs regarding the seasonal nature of the demand for some of our products and services and the reasons for such seasonality, if any, and regarding the impact of consignment inventory on product sales, if any;
- Our belief that our cash from operations and existing cash and cash equivalents will enable us to meet our current operational liquidity needs for at least the next twelve months, our expectations regarding future cash requirements, and the impact that our cash requirements might have on our cash flows for the next twelve months;
- Our expectation regarding the impact on cash flows of undertaking significant business development activities and the potential need to obtain additional debt financing or equity financing;
- Our belief that we will incur expenses for research and development projects, including for clinical research projects to gain regulatory approvals for
 products or indications, including On-X, aortic stent grafts, and BioGlue products, and for research and development for new products despite reduced
 planned spending due to COVID-19 and that our efforts to develop new products and technologies will likely require additional investment, research,
 and new clinical studies or data;
- Our beliefs about pending and potential legal or other governmental or regulatory proceedings;
- Our expectations regarding the timing and impact of clinical research work and regulatory approvals for certain products or indications, including On-X, aortic stent grafts, and BioGlue products, and CryoValve SG pulmonary heart valve if the US Food and Drug Administration reclassifies allograft heart valves as Class III medical devices;
- Our expectations regarding the impact of and costs associated with the conclusion of the PROACT Xa Trial;
- Our beliefs and expectations regarding the utilization of net operating loss carryforwards from our acquisitions of JOTEC, On-X, Hemosphere, Inc., and Cardiogenesis Corporation;
- Our beliefs about our operating results which may fluctuate significantly on a periodic basis as a result of internal and external factors, including reduced demand for our products, availability of products, materials, and supplies, strategic actions we take such as acquisitions or divestitures, unanticipated costs and expenses, market reception of our new or improved product offerings, and interest rate and currency fluctuations; and
- Other statements regarding projections of future financial and business performance; anticipated growth and trends in our business and the markets
 relevant to our business, including as our growth relates to our competitors; the robustness and reliability of our workforce and supply chain; future
 production capacity and product supply; the availability and benefits of our products in the future; and the expected timing and impact of our strategic
 initiatives.

These and other forward-looking statements reflect the views of management at the time such statements are originally made based on certain assumptions and analyses made by us in light of our experience and our perception of historical trends, current conditions, and expected future developments, as well as other factors we believe are appropriate in the circumstances and are subject to a number of risks, uncertainties, estimates, and assumptions. Whether actual results and developments will conform with our expectations and predictions, however, is subject to a number of risks and uncertainties which could cause actual results to differ materially and adversely from our expectations, including, without limitation, in addition to those specified in the text surrounding such statements, the risk factors discussed in Item 1A of this Form 10-K and other factors, many of which are beyond our control. Consequently, all of the forward-looking statements made in this Form 10-K are qualified by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by us will be realized, or even if substantially realized, that they will have the expected consequences to, or effects on, us or our business or operations. Readers are urged to carefully review and consider the various disclosures made in this Form 10-K and in other documents we file from time to time with the SEC that disclose risks and uncertainties that may affect our business. Unless specifically indicated otherwise, the forward-looking statements in this Form 10-K do not reflect the potential impact of any divestitures, mergers, acquisitions, or other business combinations that have not been completed as of the date of this filing. We assume no obligation, and expressly disclaim any duty, to update publicly any such forward-looking statements, whether as a result of new information, future events, or otherwise.

PART I

Item 1. Business.

Overview

Artivion, Inc. ("Artivion," the "Company," "we," or "us"), is a leader in the manufacturing, processing, and distribution of medical devices and implantable human tissues used in cardiac and vascular surgical procedures for patients with aortic disease. We have four major product families: aortic stent grafts, surgical sealants, On-X® mechanical heart valves and related surgical products, and implantable cardiac and vascular human tissues. Aortic stent grafts include aortic arch stent grafts, abdominal stent grafts, and synthetic vascular grafts. Aortic arch stent grafts include our E-vita Open NEO, E-vita Open Plus, the Ascyrus Medical Dissection Stent ("AMDS") hybrid prosthesis, the NEXUS® endovascular stent graft system ("NEXUS"), and E-vita Thoracic 3G products. Abdominal stent grafts include our E-xtra Design Engineering, E-nside, E-tegra, E-ventus BX, and E-liac products. Surgical sealants include BioGlue® Surgical Adhesive ("BioGlue") products. In addition to these four major product families, we sell or distribute PhotoFix® bovine surgical patches, CardioGenesis® cardiac laser therapy, and PerClot® hemostatic powder (prior to the sale to a subsidiary of Baxter International, Inc. ("Baxter")).

On January 1, 2022 we converted our state of incorporation from Florida to Delaware and on January 18, 2022 we changed our name from CryoLife, Inc. to Artivion, Inc. Our common stock is listed on the New York Stock Exchange under the symbol of "AORT" and traded under the symbol "CRY" prior to January 24, 2022.

Corporate Structure

Our main operating subsidiaries include JOTEC GmbH ("JOTEC"), a Hechingen, Germany-based endovascular and surgical products company acquired on December 1, 2017 and On-X Life Technologies, Inc. ("On-X"), an Austin, Texas-based mechanical heart valve company acquired on January 20, 2016, as well as separate country entities to support direct sales operations in Brazil, Canada, Cyprus, France, Greece, Italy, Poland, Spain, Switzerland, and the UK. Additionally, we have entities in Australia, China, Colombia, Hong Kong, Korea, Malaysia, New Zealand, Singapore, Thailand, and Vietnam to provide sales and marketing support for the Asia Pacific ("APAC") and Latin America ("LATAM") regions.

Segments and Geographic Information

We have two reportable segments organized according to our products and services: Medical Devices and Preservation Services. The Medical Devices segment includes revenues from sales of aortic stent grafts, surgical sealants, On-X, and other product revenues. The Preservation Services segment includes services revenues from the preservation of cardiac and vascular implantable human tissues. See Part II, Item 8, Note 16 of the "Notes to Consolidated Financial Statements" for further information on our segments and for our geographic information.

Strategy

Artivion is committed to partnering with surgeons and cardiologists to deliver innovative technologies of unsurpassed quality that restore the health of patients with aortic disease. Our strategic plan is focused on four growth areas that we expect to drive our business in the future. We plan to drive growth through:

- New Products Through product development and commercialization of new and next-generation products and services focused on aortic repair;
- New Indications Through regulatory approvals in new markets and for new products, and through approvals for expanded indications for our existing products and services;
- Global Expansion By entering new international markets, establishing new international direct sales territories, and developing our commercial infrastructure in new markets, including emerging markets, such as China and Brazil; and
- Business Development By pursuing select acquisitions, licensing, and distribution opportunities that are aligned to our objectives and complement our existing products, services, and infrastructure. Examples include our acquisitions of JOTEC, On-X, and Ascyrus Medical LLC ("Ascyrus"), and our distribution agreement and purchase option for NEXUS. To the extent that we identify, develop, or acquire non-core products or applications, we may dispose of these assets or pursue licensing or distribution agreements with third-party partners for development or commercialization such as the sale of the PerClot product line.

Markets, Products, Services, and Competition

Our medical devices and preservation services are primarily used by cardiac and vascular surgeons to treat patients with aortic disease, including heart valve disease, aortic aneurysms and dissections, and, to a lesser extent, other conditions in cardiac and vascular surgery.

We face competition from several domestic and international medical device, pharmaceutical, and biopharmaceutical companies and from both for-profit and non-profit tissue processors. Many of our current and potential competitors have greater financial and personnel resources than we have. Some of these competitors might have greater experience in developing products, procuring tissues, conducting clinical trials, and obtaining regulatory approvals, and they might have large contracts with hospitals under which they can obtain purchase requirements that place our products at a disadvantage. Some of these competitors might obtain patent protection or approval or clearance by the US Food and Drug Administration ("FDA") or foreign regulators sooner than we do. Some might have superior manufacturing efficiency, tissue processing capacity, and/or marketing capabilities. We cannot ensure that our current or future competitors will not succeed in developing alternative technologies, products, or services that have advantages over those that have been, or are being, developed by us or that would render our products or technologies obsolete or non-competitive. Any of these competitive disadvantages could materially, adversely affect us.

We discuss the disease states in which we compete and our products, services, and technologies that treat these diseases below.

Aortic Disease

Aortic Valve Disease

Patients with heart disease can experience valve insufficiency, regurgitation, or stenosis that may require heart valve repair or replacement surgery. Patients with congenital cardiac defects such as Tetralogy of Fallot, Truncus Arteriosus, and Pulmonary Atresia can require complex cardiac reconstructive surgery to repair the defect. A variety of tissues and synthetic materials are implanted in these cardiac procedures. Implantable human tissues (allografts) and animal tissues (xenografts) as well as other synthetic materials may be used in cardiac procedures. Implantable devices may be entirely synthetic, such as mechanical heart valves, or contain both synthetic materials and xenograft tissue components, such as bioprosthetic heart valves. These devices may be implanted surgically through open heart surgery, or in some cases, without sternotomy through transcatheter valve replacement.

Mechanical heart valves are durable and often last for the remainder of a patient's life without replacement, even for relatively young patients with long life expectancies. Mechanical prosthetic heart valves are readily available and are a less expensive solution for those requiring a heart valve replacement. Patients who receive mechanical heart valves are required to undergo long-term blood thinning or anticoagulation drug therapy to minimize the risk of thromboembolism, stroke, or other complications from the formation of blood clots.

Bioprosthetic heart valves are readily available and are a relatively inexpensive solution for those requiring a valve replacement. Bioprosthetic heart valves contain bovine, equine, or porcine tissues that are typically processed with glutaraldehyde, which may result in progressive calcification, or hardening of the tissue over time, reducing the lifespan of the device. Bioprosthetic heart valves usually have a life of 7 to 20 years, after which the valve typically must be replaced. These valves typically contain a synthetic sewing ring to facilitate surgical implantation. Patients receiving a bioprosthetic heart valve may not require long-term anticoagulation drug therapy, although some of these patients may require anticoagulation drug therapy for other heart or vascular conditions that are common in this patient population.

Multiple heart valve replacements, each requiring open heart surgery, can be a significant concern for patients, particularly younger patients that tend to choose mechanical heart valves over bioprosthetic heart valves. On the other hand, the requirement that mechanical heart valve recipients undergo long-term anticoagulation drug therapy can be a concern for patients that tends to cause some patients to choose bioprosthetic heart valves over mechanical heart valves.

Both mechanical heart valves and bioprosthetic heart valves contain a synthetic sewing ring to facilitate surgical implantation of the device. The sewing rings of both mechanical and bioprosthetic heart valves are synthetic materials that may harbor bacteria and lead to endocarditis and infection that can be difficult to treat with antibiotics. Patients with an infected mechanical or bioprosthetic heart valve may require valve replacement surgery. The 2013 Society of Thoracic Surgeons Guidelines, as published in the Annals of Thoracic Surgery, have increased the indication (from Class II to Class I) and broadened the scope for using an aortic allograft, or a human heart valve, during aortic valve replacement surgery due to endocarditis. The Class I indication means that an aortic allograft is the recommended course of treatment when endocarditis has functionally destroyed the aortic valve annulus. The previous Class II indication meant that it was an acceptable course of treatment.

Human heart valves are used in valve replacement procedures. Human heart valves allow for more normal blood flow, often provide higher cardiac output than mechanical and bioprosthetic heart valves, and do not require long-term anticoagulation drug therapy. Human tissue responds better to treatment for infections, and consequently, for many physicians, human heart valves are the preferred alternative to animal-derived and mechanical heart valves for patients who have, or are at risk to contract, endocarditis. Human tissue valves are also not as susceptible to progressive calcification as glutaraldehyde-fixed bioprosthetic tissues. A Ross Procedure may be a preferred surgical technique by physicians and patients, particularly for young patients, due to the human heart valve's long-term resistance to calcification and the patient's relative freedom from re-intervention surgery. In a Ross Procedure, a diseased aortic valve is replaced with a patient's own pulmonary valve, which is in turn replaced with a donated human pulmonary valve.

Human tissue patches are used in a variety of cardiac repair procedures. Human vascular tissues are used in cardiac and vascular bypass surgery. The transplant of any human tissue that has not been preserved, however, must be accomplished within extremely short time limits. Cryopreservation, or cooling and storing at extremely cold temperatures, expands the treatment options available by extending these timelines. Cryopreserved human tissue patches and human vascular tissues are available for use in a variety of cardiac and vascular procedures.

We currently market the On-X aortic and mitral mechanical heart valves for valve replacement procedures. We also market our cardiac preservation services, including our CryoValve® and CryoValve SG human tissues, for heart valve replacement surgeries and our CryoPatch® and CryoPatch SG human tissues for cardiac repair procedures. Our PhotoFix product is a bovine patch device used for cardiac and vascular repair.

Aortic Aneurysms

The aorta is the main artery that carries blood out of the heart through the aortic valve to the rest of the body. It extends upwards from the heart through the aortic arch and then down through the chest and into the abdomen, where it divides into arteries that supply each leg. The aorta is comprised of five segments: ascending, arch, thoracic, thoraco-abdominal, and abdominal. In some patients, part of the aorta can become abnormally large or bulge, referred to as an "aneurysm."

An aneurysm results from a weakening in the wall of an aorta, which causes the aorta to progressively "balloon" or expand in size. Although an aneurysm can develop anywhere along the aorta, most occur in the section running through the abdomen (abdominal aortic aneurysms or "AAA"). Others occur in the section that runs through the chest (thoracic aortic aneurysms or "TAA") or the area between the chest and the abdomen (thoraco-abdominal aortic aneurysms or "TAAA"). The precise cause of aortic aneurysms is uncertain, but risk factors include high blood pressure, high cholesterol, smoking, obesity, and being male. As an aneurysm grows, the wall of the aorta is progressively weakened until it can split or tear resulting in a ruptured aorta or an aortic dissection. Left untreated, aortic aneurysms can result in ruptured aorta, leading to death.

There are two types of aortic aneurysm repair: open surgical repair and endovascular repair. Open surgical repair can result in reasonable long-term survival but carries risks especially in older patients and those with other serious medical conditions. During open surgical repair, a vascular graft is implanted from above the aneurysm to below the aneurysm in the aorta. Blood will then flow through the graft. This surgery reinforces the diseased aorta and reduces the chance of vessel rupture.

Endovascular repair is a minimally invasive procedure, during which a stent graft is delivered through the femoral artery to the area in the aorta needing repair. The stent graft expands inside the aorta and becomes the new channel for blood flow. The stent graft shields the aneurysm and helps prevent more pressure from building on it, thus preventing it from rupturing.

Following our acquisition of JOTEC, we began commercialization of a broad portfolio of endovascular products for repair of aortic aneurysms. These include highly differentiated products, such as E-xtra Design Engineering, a portfolio of stent grafts tailor-made for a patient's anatomy for TAAA repair, and the E-liacTM for repair of aneurysms in the iliac arteries, as well as less differentiated products, including the E-vita® Thoracic 3G for TAA repair and the E-tegraTM for AAA repair.

Aortic Dissections

An aortic dissection occurs when the innermost layer of the aorta tears and blood surges through the tear separating the inner layer from the outer layers of the aorta. Younger patients with inherited connective tissue disorders, such as Marfan Syndrome, and patients with bicuspid aortic valves (two leaflets on the valve instead of three) are more likely to develop aortic dissection. In addition, as an aneurysm grows, the wall of the aorta is progressively weakened until it can split or tear, resulting in a ruptured aorta or an aortic dissection. Left untreated, an aortic dissection often results in a ruptured aorta, leading to death.

Aortic dissections often begin in the ascending aorta or aortic arch and may also have an aneurysm or an aortic dissection extending down the descending thoracic aorta. Often, the dissection in the aortic arch and the condition in the descending thoracic aorta are repaired in a two-stage procedure, with one open surgical procedure to repair the arch followed by another procedure to repair the descending thoracic aorta. We sell the E-vita Open Plus, E-vita Open NEO, and AMDS as well as distribute NEXUS to treat these conditions impacting the aortic arch and thoracic aorta.

Other Disease States - Peripheral Vascular Disease and End Stage Renal Disease

Patients with peripheral vascular disease can experience reduced blood flow, usually in the arms and legs. This can result in poor circulation, pain, and sores that do not heal. Failure to achieve revascularization of an obstructed vessel may result in the loss of a limb or even death of the patient. When patients require peripheral bypass surgery, the surgeon's first choice generally is a graft of the patient's own tissue (an autograft). In cases of advanced vascular disease, however, patients may not have suitable vascular tissue for transplantation. Other vascular repair procedures include procedures related to infected abdominal aortic grafts, vascular access for dialysis patients, carotid endarterectomy, and vessel repair. These procedures may include the use of bioprosthetic grafts or patches, synthetic grafts or patches, or donated human vascular tissues. Alternative treatments may include the repair, partial removal, or complete removal of the damaged tissue.

End-stage renal disease ("ESRD") refers to the stage of renal disease when the kidneys do not work well enough for the patient to live without on-going dialysis or kidney transplant. Patients with ESRD often undergo hemodialysis through an access site with an implanted vascular graft. We market our CryoVein® femoral vein and CryoArtery® femoral artery vascular preservation services for vascular access.

Bioprosthetic vascular grafts and patches, including those made of bovine or porcine tissue can be used for a variety of vascular repair procedures. Bioprosthetic grafts are readily available and are a relatively inexpensive solution for those requiring a vascular repair procedure. Bioprosthetic tissues are typically processed with glutaraldehyde, which may result in progressive calcification.

Synthetic vascular grafts and patches can be used for a variety of vascular repair procedures. Synthetic grafts are readily available and are a relatively inexpensive solution for those requiring a vascular repair procedure. Synthetic grafts and patches, however, are generally not suitable for use in infected areas because they may harbor bacteria and are difficult to treat with antibiotics. Synthetic vascular grafts have a tendency to obstruct over time, particularly in below-the-knee surgeries.

Human vascular tissues tend to respond better to treatment for infection and remain open and accessible for longer periods of time and, as such, are used in indications where synthetic grafts typically fail, such as in infected areas and for below-the-knee surgeries. Human vascular and arterial tissues are also used in a variety of other reconstruction procedures such as cardiac bypass surgery and as vascular access grafts for hemodialysis patients. The transplant of human tissue that has not been preserved must be accomplished within extremely short time limits. Cryopreservation expands the treatment options available by extending these timelines.

We market our vascular preservation services, including our CryoVein and CryoArtery tissues, and a synthetic surgical graft portfolio for peripheral vascular reconstruction surgeries.

Product Categories and Products

On-X Mechanical Heart Valves

The On-X product line includes the On-X prosthetic aortic and mitral heart valves and the On-X ascending aortic prosthesis ("AAP"). We also distribute CarbonAid $^{\otimes}$ CO₂ diffusion catheters and sell Chord-X $^{\otimes}$ ePTFE sutures for mitral chordal replacement, and we offer pyrolytic carbon coating services to other medical device manufacturers as part of the On-X family of products.

On-X heart valves are bileaflet mechanical valves composed of a graphite substrate coated with On-X's silicon-free pyrolytic carbon coating that provides a smooth microstructure surface. We believe that the smooth pyrolytic carbon surface and other characteristics of the valve, such as full, 90-degree leaflet opening of the valve and flared valve inlet, contribute to the flow dynamics of the On-X valve. The On-X AAP is an On-X aortic valve combined with a synthetic vascular graft to allow physicians to more conveniently treat patients requiring both an aortic valve replacement and replacement of a portion of the ascending aorta with an aortic graft. Each device is available in a range of valve sizes in a variety of sewing ring options to suit physicians' preferences, along with dedicated instruments to facilitate valve sizing and implantation. On-X heart valves are FDA approved for the replacement of diseased, damaged, or malfunctioning native or prosthetic heart valves in the aortic and mitral positions and are classified as a Class III medical device. We also hold a Conformité Européene Mark product certification ("CE Mark") for On-X heart valves.

All mechanical heart valve patients require long-term anticoagulation drug therapy with a drug called warfarin to reduce the risk of blood clots and stroke. Because warfarin can also cause a risk of harmful bleeding, dosage must be monitored and may require adjustment over time. Certain dietary restrictions may also be imposed on warfarin patients.

In 2015, the FDA approved the On-X aortic valve for use with a lower INR (International Normalized Ratio), which means that patients with On-X heart valves can be managed on lower doses of warfarin for anticoagulation. This new indication was, and still is, unique to the On-X aortic valve and was based on a prospective, randomized, controlled clinical trial called PROACT comparing a reduced versus standard warfarin dose for On-X heart valve recipients. In the aortic valve replacement arm of the trial, the reduced warfarin dose group had 60% fewer bleeding events without an increased risk of stroke. The 2020 American Heart Association / American College of Cardiology guidelines specifically mentioned On-X aortic heart valves as the only mechanical aortic heart valve that can be managed at a low INR of 1.5-2.0. While use of a lower INR has been approved for the On-X aortic heart valve, such use for the On-X mitral heart valve was submitted to the FDA in mid-2021 and is still under FDA review. We currently anticipate receiving FDA approval for mitral valves reflecting a lower INR range in 2023.

On-X heart valves compete primarily with mechanical valves from Abbott Laboratories, Medtronic, plc. ("Medtronic"), and Corcym S.r.l. (who completed acquisition of the LivaNova heart valve business in June 2021) ("Corcym"). On-X heart valves compete with these products based on their features and benefits, such as full, 90-degree leaflet opening, pure pyrolytic carbon, flared inlet, and approved labeling claim for reduced INR for aortic valves.

We began selling On-X heart valves in January 2016 following our acquisition of On-X. We sell On-X heart valves throughout the world including North America, EMEA, APAC, and LATAM.

Aortic Stent Grafts

Hybrid stent grafts, surgical grafts, and endovascular stent grafts can be used in the treatment of complex and thoracic and abdominal aortic disease, such as aortic dissections and aortic aneurysms, as well as in other aortic and peripheral procedures.

Thoracic Stents and Stent Grafts

E-vitaTM Open Plus and E-vita Open NEO

E-vita Open Plus is a hybrid stent graft system used in the treatment of patients with either an aneurysm or dissection in the aortic arch and in the descending thoracic aorta. The E-vita Open Plus stent graft system enables a one-stage treatment to repair this condition through a combined surgical and endovascular treatment, providing a more cost-effective solution for the healthcare system and allowing the patient to avoid an additional operation.

We hold a CE Mark for the E-vita Open Plus and additional marketing approvals have been granted in other countries throughout the world. The E-vita Open Plus competes outside the US with products from Terumo Medical Corporation ("Terumo") and two smaller competitors. We do not currently sell E-vita Open Plus in the US and we believe there are no competitive products currently being commercialized in the US. The E-vita Open Plus competes in Europe primarily on its proven stent graft technology and long-term clinical data.

The E-vita Open NEO is the next generation hybrid stent graft improving on the E-vita Open Plus and having an updated delivery system and improved handling. We obtained a CE Mark for E-vita Open NEO in the first quarter of 2020 and began limited distribution of E-vita Open NEO in the second quarter of 2020 with full product launch in the fourth quarter of 2020.

AMDS

We acquired Ascyrus in September 2020. Ascyrus has developed the AMDS hybrid prosthesis, the world's first aortic arch remodeling device for use in the treatment of acute Type A aortic dissection. Hemi-arch reconstruction is the standard of care for the treatment of acute Type A aortic dissection. AMDS is used as a complement to, and in conjunction with, hemi-arch reconstruction without adding technical complexity to this life-saving procedure. The design of the AMDS allows for rapid deployment of the graft in the aortic arch during a standard replacement of the ascending aorta, adding on average less than five minutes to the procedure time. The deployment of the AMDS preserves the native arch, potentially allowing for minimally invasive re-interventions as needed, including the repair of additional entry tears, rather than an invasive arch repair. In the Dissected Aorta Repair Through Stent ("DARTS") clinical trial supporting its CE Mark and Health Canada approvals, the AMDS was shown to reduce mortality, complications, and reoperations compared to the standard of care, thereby improving the care of patients and offering significant cost savings for the health care system.

AMDS indirectly competes with other manufacturers' standard open surgical repair and hybrid procedures including aortic debranching and frozen elephant trunk technique for total arch replacement. We began selling AMDS in September 2020 following the acquisition of Ascyrus. We sell AMDS outside of the US, including in EMEA, Canada, APAC, and LATAM. We are actively enrolling patients in the PERSEVERE clinical trial to gain US approval and anticipate completing enrollment in 2023.

NEXUS

We acquired the exclusive distribution rights in certain countries in Europe for the NEXUS product line in September 2019 from Endospan Ltd., an Israeli corporation ("Endospan"). Endospan holds a CE Mark for NEXUS which is the only endovascular stent graft system approved for the repair of both aneurysms and dissections in the aortic arch. While open surgical repair remains the standard of care for complete aortic arch replacement, endovascular repair offers an alternative, less invasive procedure to treat the aortic arch with decreased surgical morbidity and mortality. The ability to repair the aortic arch with an endovascular approach is especially advantageous for elderly patients who are not suited for open surgery and for patients who were previously treated for a Type A dissection in an open surgical approach. The addition of NEXUS to our highly differentiated aortic stent graft portfolio further strengthens our position as a leader in the aortic repair market.

Several other manufacturers are introducing competitive products through the custom-made device process in Europe and the early feasibility process within the United States, including Cook, Gore, and Bolton Medical. NEXUS also competes with other manufacturers' standard open repair and hybrid procedures including aortic debranching, frozen elephant trunk, and thoracic endovascular aortic repair ("TEVAR") with chimneys or snorkels.

We began distribution of NEXUS in the fourth quarter of 2019 in EMEA. The first implant of the next generation NEXUS DUO, the dual branch graft system in the NEXUS product line, occurred in the fourth quarter of 2022 as a limited market release. NEXUS DUO is a low profile, custom made aortic arch system designed to treat a range of aortic arch pathologies including chronic dissection, aortic aneurysm, penetrating aortic ulcer, as well as intramural hematoma. Unlike the NEXUS off-the-shelf device, NEXUS DUO includes a secondary branch designed to minimize surgical preparation for patients undergoing endovascular repair of the aortic arch.

We also entered into a securities purchase option agreement with Endospan in September 2019 which provides us the option to purchase all the outstanding securities of Endospan from Endospan's securityholders at the time of acquisition (or the option to acquire all of Endospan's assets) up through a certain period of time after FDA approval of NEXUS. Endospan is currently enrolling patients in their US pivotal trial, TRIOMPHE.

E-vita Thoracic 3G

The E-vita Thoracic 3G is a stent graft system that enables endovascular treatment of TAAs. Its unique spring configuration gives the stent graft flexibility, helping the stent graft adapt to the vessel's shape and ensuring a good seal at the landing zone, even in the case of complex vascular anatomy. Compared to its competing products, its different proximal and distal stent graft configurations, as well as straight and conical designs, enable individual treatment of the diseased aorta. The product line includes a wide portfolio of tapered versions from proximal to distal. The wide variety ensures the possibility of adapting the stent graft to the native course of the descending aorta. The E-vita Thoracic 3G is sometimes used in conjunction with the E-vita Open Plus and E-xtra Design Engineering.

Until 2022 we held a CE Mark for the E-vita Thoracic 3G and additional marketing approvals have been granted in several other countries throughout the world. The E-vita Thoracic 3G competes primarily with products from Medtronic, Gore, Terumo, and Cook.

Abdominal Stents and Stent Grafts

E-xtra Design Engineering

E-xtra Design Engineering is a comprehensive range of stent graft systems for the treatment of aortic vascular diseases that enables surgeons to quickly and efficiently respond to an individual patient's therapeutic requirements. E-xtra Design Engineering stent graft systems are tailor-made for individual patients based on imaging of the patient's own aorta. There are currently only limited off-the-shelf products to treat aneurysms in the thoraco-abdominal aorta due to the many side branches in this anatomy where blood flow to vital organs would be obstructed by unbranched stent grafts. We have pioneered a service whereby we can manufacture a customized thoraco-abdominal stent graft in three weeks or less. E-xtra Design Engineering stent graft systems are often used in conjunction with E-vita Thoracic 3G, as well as the AAA offering, the E-tegra, or in combination with both.

We sell E-xtra Design Engineering stent graft systems in EMEA and in a limited number of other countries around the world. E-xtra Design Engineering competes with customized product offerings from Cook and Terumo.

E-nside TM

The E-nside TAAA multibranch stent graft system is an off-the-shelf stent graft with pre-cannulated inner branches indicated for treatment of patients with thoraco-abdominal disease. The E-nside's pre-cannulated inner branches are designed to reduce the overall procedure time which reduces the patient's exposure to radiation. The vast majority of patients with thoraco-abdominal disease are treated with risky, invasive open surgical procedures, characterized by lengthy hospitalization periods and prolonged recuperation, or with custom-made stent grafts which can take up to 90 days to manufacture. We believe the addition of E-nside positions us well to capture share in the European aortic stent graft market because E-xtra Design Engineering provides patient-specific solutions, and E-nside provides an off-the-shelf solution. Further, there are synergies between E-nside and our portfolio of thoracic and abdominal stent grafts. E-nside competes with products from Cook.

We obtained a CE Mark for E-nside in the fourth quarter of 2019 and began limited selling of E-nside in the second quarter of 2020. We fully launched E-nside in 2021.

E-tegra TM

The E-tegra is a AAA stent graft system with special stent design for secure sealing that makes difficult vascular anatomies treatable, thus expanding endovascular treatment options for infrarenal abdominal aortic aneurysms. The design of the E-tegra enables optimal fixation and sealing. It is a proximal laser cut stent with anchors for suprarenal stent graft fixation. Its asymmetric stent design and seamless cover ensure excellent adaptation to the vessel. The product also features a low-profile delivery system with its unique squeeze-to-release mechanism supporting the user by ensuring excellent control during each phase of the implantation. The E-tegra is often used in combination with E-xtra Design Engineering and the E-liac.

We hold a CE Mark for the E-tegra and additional marketing approvals have been granted in several other countries throughout the world. The E-tegra competes with products from several companies including Medtronic, Gore, Terumo, Endologix, and Cook.

E-ventus TM BX

E-ventus BX is a balloon-expandable peripheral stent graft indicated for the endovascular treatment of renal and pelvic arteries in cases of ruptures, dissections, and aneurysms. The E-ventus BX stent grafts have a combination of high flexibility together with high radial strength through the combination of the microporous single-layer ePTFE cover and the cobalt chromium stent. The E-ventus BX stent grafts feature minimal recoil and foreshortening and enables secure fixation and positioning in the vessel. The E-ventus BX delivery system has a highly flexible catheter that allows easy advancement in the vessel and enables lesions to be reliably reached by the catheter. Radiopaque markers on the delivery system enable secure and accurate positioning of the stent graft. The E-ventus BX is often used in conjunction with E-xtra Design Engineering products, E-nside stent grafts, and the E-liac stent graft.

The E-ventus BX has a CE Mark and additional marketing approvals in several other countries throughout the world. The E-ventus BX competes with products from Maquet, Gore, BD, and Bentley InnoMed.

E-liac TM

The E-liac is a stent graft used to treat aneurysmal iliac arteries as well as aneurysmal iliac side branches. The E-liac is a self-expanding stent graft characterized by easy and safe handling, which makes it possible to safely reach the lesion and accurately position the stent graft in the vessel. We estimate that 20% of patients who have an AAA also have an aneurysmal iliac artery, and as such, the E-liac is often used in conjunction with the E-tegra AAA device as well as one or two E-ventus BX devices.

We hold a CE Mark for the E-liac and additional marketing approvals have been granted in several other countries throughout the world. The E-liac competes with products from Gore and Cook.

Synthetic Vascular Grafts

In addition to our endovascular stent graft offerings, we have a broad line of synthetic vascular grafts that are used in open aortic and peripheral vascular surgical procedures. Our offerings include ePTFE grafts and both woven and knitted polyester grafts. Not only are we able to manufacture and sell a broad line of synthetic vascular graft offerings, but also, we are able to manufacture our own nitinol stents, given our expertise incorporating nitinol in our synthetic graft systems.

Our synthetic surgical vascular grafts have CE Marks and additional marketing approvals have been granted in several other countries throughout the world. Our synthetic grafts compete with products from Bard, a subsidiary of BD, Gore, LeMaitre, Vascutek, and Maquet.

Surgical Sealants

Closing internal wounds effectively following surgical procedures is critical to the restoration of the function of tissue and to the ultimate success of the surgical procedure. Failure to seal surgical wounds effectively can result in leakage of blood in cardiac surgeries, air in lung surgeries, and cerebrospinal fluid in neurosurgeries potentially resulting in prolonged hospitalization, greater post-operative pain, higher costs, and higher mortality rates.

Sutures and staples facilitate healing by joining wound edges to allow the body to heal naturally. Sutures and staples, however, cannot consistently eliminate air and fluid leakage at the wound site, particularly when used to close tissues containing air or fluids under pressure, such as in blood vessels, the lobes of the lung, and the dural membrane surrounding the brain and spinal cord. In some cases, the tissues may be friable, which complicates surgical wound closure. In addition, it can be difficult and time consuming for the physician to apply sutures and staples in minimally invasive surgical procedures where the physician must operate through small access openings. We believe that the use of surgical adhesives and sealants, with or without sutures and staples, in certain areas can enhance the efficacy of these procedures through more effective and rapid wound closure.

Our proprietary BioGlue product is a polymer consisting of bovine blood protein and an agent for cross-linking proteins, which was developed for use in cardiac, vascular, neurologic, and pulmonary procedures. BioGlue is stronger than other cardiovascular sealants with a tensile strength that is four to five times that of fibrin sealants. BioGlue begins to polymerize within 20 to 30 seconds, reaches its bonding strength within two minutes, and it adheres to tissues in a wet field. BioGlue is dispensed through a controlled delivery system that consists of a disposable syringe and various applicator tips. BioGlue syringes are available in pre-filled 2ml, 5ml, and 10ml volumes with applicator tips suitable for various applications.

BioGlue is FDA approved as an adjunct to sutures and staples for use in adult patients in open surgical repair of large vessels. We distribute BioGlue under CE Mark for repair of soft tissues (which include cardiac, vascular, and pulmonary). We also distribute BioGlue in Japan where it is approved for adhesion and support of hemostasis for aortotomy closure sites, suture/anastomosis sites (including aortic dissection and anastomosis sites with use of a prosthetic graft), and suture sites on the heart. Additional marketing approvals have been granted for specified applications in several other countries throughout the world.

BioGlue competes primarily with surgical sealants from Baxter, Ethicon, Grena Ltd, Integra LifeSciences, and Bard, a subsidiary of BD. BioGlue competes with these products based on its features and benefits, such as its strength and ease of use.

We sell BioGlue throughout the world including North America, EMEA, APAC, and LATAM.

Preservation Services

Cardiac Preservation Services

Our proprietary preservation process involves our dissection, processing, preservation, and storage of donated human tissues until they are shipped to a hospital where they are implanted by physicians. The cardiac tissues we currently preserve include aortic and pulmonary heart valves and cardiac patches in three primary pulmonary anatomic configurations: hemi-artery, trunk, and branch. These tissues more closely resemble in structure, and simulate the performance of, the patient's own tissue compared to non-human tissue alternatives. Our cardiac tissues are used in a variety of valve replacement and cardiac reconstruction surgeries. We believe the human tissues we distribute offer specific clinical advantages over mechanical, synthetic, and bioprosthetic alternatives. Depending on the alternative, the clinical advantages of our heart valves include more natural blood flow properties, better results in patients who have endocarditis, no requirement for long-term drug therapy to prevent excessive blood clotting, and a reduced risk of catastrophic failure, thromboembolism, stroke, or deterioration due to calcification.

Our cardiac tissues include the CryoValve® SG pulmonary heart valve ("CryoValve SGPV") and the CryoPatch® SG pulmonary cardiac patch ("CryoPatch SG") which are both processed with our proprietary SynerGraft® decellularization technology. A multi-center study showed that, at 10 years, freedom from conduit dysfunction was significantly better in patients receiving our proprietary SynerGraft SGPV valves (83%) compared with patients receiving standard allografts (58%).

We believe that the human heart valves preserved by us compare favorably with bioprosthetic and mechanical valves for certain indications and patient populations, and that the human cardiac patches preserved by us compare favorably with xenograft small intestine submucosa ("SIS") and glutaraldehyde fixed bovine pericardial patches due to the benefits of human tissue discussed above. Human tissue is preferred by many physicians as the replacement alternative with respect to certain medical conditions, such as pediatric cardiac reconstruction, congenital cardiac defect repair, valve replacements for women in their child-bearing years, and valve replacements for patients with endocarditis. In addition, implantation of SynerGraft treated cardiac tissue reduces the risk for induction of Class I and Class II alloantibodies, based on Panel Reactive Antibody ("PRA") measured at up to one year, compared to standard processed cardiac tissues. We believe that this reduced risk may provide a competitive advantage for CryoValve SGPV and CryoPatch SG for patients who later need a whole organ transplant, because an increased PRA can decrease the number of possible donors for subsequent organ transplants and increase time on transplant waiting lists.

Two other domestic tissue processors, LifeNet Health and LeMaitre Vascular, offer preserved human heart valves and patches in competition with us. We believe that we compete favorably on the basis of surgeon preference, documented clinical data, technology, and customer service, particularly with respect to the capabilities of our field representatives. Alternatives to human heart valves processed by us include valve repair and valve replacement with bioprosthetic valves or mechanical valves. We compete with bioprosthetic or mechanical valves from companies including Medtronic, Edwards Lifesciences, Corcym, and Abbott Laboratories. Alternatives to our human cardiac patches include xenograft SIS and glutaraldehyde fixed bovine pericardial patches. We compete with these xenograft products from companies including Aziyo Biologics, Edwards Lifesciences, Anteris Technologies, Abbott Laboratories, and Baxter.

We ship human cardiac tissues to implanting institutions throughout the US. Our CryoValve SGPV and CryoPatch SG are distributed under 510(k) clearance from the FDA. We also ship limited tissues in Canada and other countries under special access programs.

Vascular Preservation Services

Our proprietary preservation process involves our dissection, processing, preservation, and storage of donated human tissues until they are shipped to a hospital for implantation by a physician. The vascular tissues currently preserved by us include saphenous veins, aortoiliac arteries, and femoral veins and arteries. Each of these tissues maintains a structure, which more closely resembles and simulates the performance of the patient's own tissue compared to non-human tissue alternatives. Our vascular tissues are used to treat a variety of vascular reconstructions, such as peripheral bypass, hemodialysis access, and aortic infections, which have saved the lives and limbs of patients. We believe the human tissues we distribute offer specific advantages over synthetic and bioprosthesis alternatives, particularly for the treatment of infection in hemodialysis and peripheral bypass patients. Human tissue is not as susceptible to infection as synthetic alternatives and more closely simulates the performance of the patient's own tissue and vasculature compared to non-human tissue alternatives.

Two other domestic tissue processors, LifeNet and LeMaitre, offer preserved vascular tissue in competition with us. There are also a number of providers of synthetic and bioprosthetic alternatives to vascular tissues preserved by us and those alternatives are available primarily in medium and large diameters. Our vascular tissues compete with products from Gore, BD, LeMaitre, and Maquet.

We believe that we compete favorably with other entities that preserve human vascular tissues on the basis of surgeon preference, documented clinical data, technology, and customer service, particularly with respect to the capabilities of our field representatives.

Other Products

Photo Fix

PhotoFix is a bovine pericardial patch fixated using a dye-mediated photo-oxidation process without the use of glutaraldehyde. We hold FDA 510(k) clearance and previously held a CE Mark for PhotoFix which is indicated for use in intracardiac repair, great vessel repair, suture line buttressing, pericardial closure, and vascular repair and reconstruction (for example: the carotid, iliac, femoral, and tibial blood vessels as well as arteriovenous access revisions). We are currently transitioning our PhotoFix CE Mark to our new Notified Body, DEKRA. See Part I, Item 1A, "Risk Factors—Industry Risks—Our products and tissues are highly regulated and subject to significant quality and regulatory risks," for a discussion of the risks related to our PhotoFix CE Mark.

Our PhotoFix product line competes with bioprosthetic and synthetic cardiac and vascular patch offerings from several other companies, including Baxter, LeMaitre, Aziyo Biologics, and Abbott Laboratories based on PhotoFix's features and benefits, such as the photo-oxidation cross-linking process that does not use glutaraldehyde.

We sell PhotoFix in North America, EMEA, APAC, and LATAM.

CardioGenesis Cardiac Laser Therapy for Angina Treatment

Angina consists of pressure, discomfort, or pain in the chest typically due to narrowed or blocked arteries that are also a cause of ischemic heart disease. Patients with severe angina are often treated with surgical procedures including angioplasty or coronary artery bypass or with medications such as aspirin, nitrates, beta-blockers, statins, or calcium channel blockers. Pain may be chronic or may become pronounced with exercise. Angina can also be treated with Transmyocardial Revascularization ("TMR"), a procedure that can be performed as an open surgical procedure or through a minimally invasive surgery either as a stand-alone procedure or concurrently with coronary artery bypass. During TMR, the surgeon uses a disposable handpiece to deliver precise bursts of laser energy directly to an area of heart muscle that is suffering from ischemic heart disease through a small incision or small ports with the patient under general anesthesia and without stopping the heart. TMR is typically performed with a CO₂ or Holmium: YAG laser. It takes approximately 6 to 10 pulses of the laser to traverse the myocardium and create channels of one millimeter in diameter. During a typical procedure, approximately 20 to 40 channels are made in the heart muscle. The external openings seal with little blood loss. Angina usually subsides with improved oxygen supply to the targeted areas of the damaged heart muscle. We currently sell the CardioGenesis cardiac laser therapy product line to perform TMR.

Our CardioGenesis cardiac laser therapy product line consists of Holmium: YAG laser consoles, related service and maintenance, and single-use, fiber-optic handpieces, which are used in TMR to treat patients with severe angina resulting from diffuse coronary artery disease. Patients undergoing TMR treatment with CardioGenesis products have been shown to have angina reduction, longer event-free survival, reduction in cardiac related hospitalizations, and increased exercise tolerance. Our SolarGen 2100s Console ("console") uses the solid-state technology of the Holmium: YAG laser system to provide a stable and reliable energy platform that is designed to deliver precise energy output. The console has an advanced electronic and cooling system technology, which allows for a smaller and lighter system, while providing 115V power capability. We also provide service plan options to ensure that the console is operating within the critical factory specifications. We sell the SoloGrip® III disposable handpieces ("handpieces"), which consist of multiple, fine fiber-optic strands in a one-millimeter diameter bundle and are designed to work with the console. The handpiece has an ergonomic design and is pre-calibrated in the factory to provide easy and convenient access for treating all regions of the left ventricle. See Part 1, Item I, "Business—Suppliers, Sources, and Availability of Raw Materials and Tissues," for a discussion of the limitations around our supply of handpieces and consoles.

The CardioGenesis cardiac laser therapy product line is FDA approved for treating patients with severe angina that are not responsive to conventional therapy. We began selling the CardioGenesis cardiac laser therapy product line, primarily in the US, in May 2011 when we completed the acquisition of Cardiogenesis Corporation.

Our CardioGenesis cardiac laser therapy competes with other methods for the treatment of coronary artery disease, including drug therapy, percutaneous coronary intervention, coronary artery bypass surgery, and enhanced external counter pulsation. There is currently no directly competitive laser technology for the performance of TMR as Stryker discontinued the directly competitive CO₂ Heart Laser System. Currently, Laser Engineering Inc. services the Stryker laser system, but no more handpieces are being sold. Our CardioGenesis cardiac laser therapy product competes with other methods for the treatment of coronary artery disease on the basis of its ease of use, versatility, size of laser console, and improved access to the treatment area with a smaller fiber-optic system. We did not have a supply of handpieces for cardiac laser therapy while we waited for the FDA to approve our supplier's change in manufacturing location through our Premarket Approval ("PMA")-supplement. In January 2021 we received PMA-S approval for this change in manufacturing site and we resumed limited sales of TMR handpieces in the fourth quarter of 2021. In February 2023 our supplier of TMR handpieces informed us that the sole-source manufacturer of tubing used in the handpiece assembly had gone out of business and, because a new supplier has yet to be identified and qualified, they are exiting the business and will no longer be supplying handpieces effective immediately. We are evaluating the impact of this disruption on our business and possible avenues for resumption of supply including the evaluation of alternate suppliers and handpiece manufacturers.

PerClot

Hemostatic agents are frequently utilized as an adjunct to sutures and staples to control intraoperative bleeding. Hemostatic agents prevent excess blood loss and can help maintain good visibility of the operative site. These products may reduce operating room time and decrease the number of blood transfusions required in surgical procedures. Hemostatic agents are available in various forms including pads, sponges, liquids, and powders.

PerClot is an absorbable powdered hemostat, consisting of plant starch modified into ultra-hydrophilic, adhesive-forming hemostatic polymers. PerClot granules are biocompatible, absorbable polysaccharides containing no animal or human components. PerClot granules have a molecular structure that rapidly absorbs water, forming a gelled adhesive matrix that provides a mechanical barrier to any further bleeding and results in the accumulation of platelets, red blood cells, and coagulation proteins (thrombin, fibrinogen, etc.) at the site of application. PerClot does not require additional operating room preparation or special storage conditions and is easy to apply. PerClot is readily dissolved by saline irrigation and is totally absorbed by the body within several days.

PerClot has a CE Mark and additional marketing approvals have been granted in a number of other countries throughout the world. PerClot is indicated for use in surgical procedures, including cardiac, vascular, orthopaedic, neurological, gynecological, ENT, and trauma surgery as an adjunct hemostat when control of bleeding from capillary, venular, or arteriolar vessels by pressure, ligature, and other conventional means is either ineffective or impractical.

PerClot competes with various topical absorbable hemostats including offerings from Pfizer, Baxter, Ethicon, Bard, and BioCer Entwicklungs. Other competitive products may include topical thrombin and fibrin sealants. A number of companies have surgical hemostat products under development. PerClot competes on the basis of safety, clinical efficacy, absorption rates, and ease of use.

In September 2010 we entered into a distribution agreement and a license and manufacturing agreement with Starch Medical, Inc. ("SMI"), which allowed us to distribute PerClot, a powdered hemostatic agent, worldwide, except a few countries. In July 2021 we entered into an asset purchase agreement and other ancillary agreements related to the sale of PerClot to a subsidiary of Baxter and an agreement to terminate all of our material agreements with SMI related to PerClot (collectively the "Baxter Transaction"). Under the terms of the Baxter Transaction, we will continue to provide to Baxter certain transition, manufacturing, and supply services relating to the sale of SMI PerClot outside of the US and manufacture and supply of PerClot to Baxter post FDA PMA approval.

In January 2019 we completed enrolling patients in a clinical trial for the purpose of obtaining FDA PMA approval. In conjunction with Baxter, we submitted the PMA to the FDA in the third quarter of 2021, as discussed further in "Research and Development and Clinical Research" below.

Marketing and Distribution

In the US and Canada, we market our products and preservation services primarily to physicians and sell our products through our approximately 50-person direct sales team to hospitals and other healthcare facilities. We also have a team of regional managers, a national accounts manager, and sales and marketing management. Through our field representatives and our physician relations and education department, we conduct field training for surgeons regarding the surgical applications of our products and tissues.

In EMEA, we market our products through our European headquarters, based in Hechingen, Germany, as well as through several other subsidiaries based throughout Europe. We employ approximately 90 direct field service representatives and distributor managers across several countries in the EMEA region. We provide customer service, logistics, marketing, and clinical support to cardiac, vascular, thoracic, and general surgeons throughout the EMEA region.

In APAC and LATAM, we commercialize our products through our independent distributors and our subsidiaries through approximately 30 sales and clinical support specialists.

Our physician relations and education staff, clinical research staff, and field representatives assist physicians by providing educational materials, seminars, and clinics on methods for using our products and implanting tissue preserved by us, including virtual and remote programs. We sponsor programs, and work with other companies such as Endospan to sponsor programs, where surgeons train other surgeons in best-practice techniques. In addition, we host several workshops throughout the year that provide didactic and hands-on training to surgeons. We also produce educational videos for physicians and coordinate peer-to-peer training at various medical institutions. We believe that these activities enhance the medical community's understanding of the clinical benefits of the products and tissues offered by us and help to differentiate us from other medical device companies and tissue processors.

Our human tissues are obtained in the US through organ and tissue procurement organizations ("OPOs") and tissue banks. To assist OPOs and tissue banks, we provide educational materials and training on procurement, dissection, packaging, and shipping techniques. We produce educational videos and coordinate laboratory sessions for OPO and tissue bank personnel to improve their recovery techniques and increase the yield of usable tissue. We also maintain staff 24 hours per day, 365 days per year, for OPO and tissue bank support.

Suppliers, Sources, and Availability of Raw Materials and Tissues

We obtain a number of our raw materials and supplies from a global supply base. The materials and supplies used in our product manufacturing and tissue processing are subject to regulatory requirements and oversight. If materials or supplies used in our manufacturing or tissue processing fail to meet these requirements or are subject to regulatory enforcement action, they may have to be scrapped, or our products or tissues could be rejected during or after processing, recalled, or rejected by customers. In these cases, we may have to immediately scrap raw or in-process materials or expense the costs of manufacturing or preservation.

In addition, if these materials or supplies, or changes to them, do not receive regulatory approval or are recalled, if the related suppliers and/or their facilities are shut down temporarily or permanently, for any reason, or if the related suppliers are otherwise unable or unwilling to supply us, we may not have sufficient materials or supplies to manufacture our products or process tissues. In addition, we rely on contract manufacturers to manufacture some of our products or to provide additional manufacturing capacity for some products. If these contract manufacturers fail to meet our quality standards or other requirements or if they are unable or unwilling to supply these products, we may not be able to meet demand for these products. Our ability to fully recover all possible losses from these suppliers and contract manufacturers may have practical limitations imposed by factors like industry standard contractual terms or the financial resources of the adverse party.

Some of the materials, supplies, and services used in our product manufacturing and tissue processing, as well as some of our products, are sourced from single- or sole-source suppliers. As a result, our ability to negotiate favorable terms with those suppliers may be limited, and if those suppliers experience operational, financial, quality, or regulatory difficulties, or if those suppliers and/or their facilities refuse to supply us or cease operations temporarily or permanently, or if those suppliers take unreasonable business positions, we could be forced to cease product manufacturing or tissue processing until the suppliers resume operations, until alternative suppliers could be identified and qualified, or permanently if the suppliers do not resume operations and no alternative suppliers could be identified and qualified. We could also be forced to purchase alternative materials, supplies, or services with unfavorable terms due to diminished bargaining power. Ongoing sustaining efforts are in process to find alternative suppliers for single- or sole-source raw materials, supplies, and services wherever feasible. The process of qualifying alternative suppliers and manufacturers could result in additional costs or lengthy delays or may not be possible.

Finally, the global COVID-19 pandemic, the war in Ukraine, and other macroeconomic factors are impacting the global supply chain; their impact on workforces, global mobility, material availability, demand, shipping, reorder time, and reliability has reportedly continued or worsened in many cases. Any of these adverse outcomes could have a material, adverse effect on our revenues or profitability.

We have established operating mechanisms in place to manage this increased risk and we will continue to adjust as necessary into the future. See also Part I, Item 1A, "Risk Factors – Operational Risks" for our disclosures of risks related to suppliers, sources, and availability of raw materials and tissues.

Operations, Manufacturing, and Tissue Preservation

We conduct our internal manufacturing operations at three facilities: Austin, Texas for On-X products, Hechingen, Germany for internally manufactured aortic stent grafts, and Kennesaw, Georgia for all other products and services. Certain aortic stent graft assemblies are manufactured for us by a contract manufacturer in Slovakia. The AMDS product is solely manufactured by a supplier in Charlotte, North Carolina, and the NEXUS product is solely manufactured by Endospan in Herzliya, Israel.

We maintain a facility—which contains our corporate headquarters, manufacturing and laboratory space—and an additional off-site warehouse, in Kennesaw, Georgia. We manufacture BioGlue and PhotoFix and process human tissues at this facility. Our headquarters also includes a CardioGenesis cardiac laser therapy console maintenance and evaluation laboratory space.

Our On-X facility consists of combined manufacturing, warehouse, and office space in Austin, Texas, where our On-X products, including On-X heart valves and AAPs, are manufactured.

Our aortic stent graft facility consists of combined manufacturing, warehousing, and office space in Hechingen, Germany and is our EMEA headquarters.

We also maintain sales offices, some of which have distribution operations, in Brazil, Greece, Italy, Poland, Singapore, Spain, Switzerland, and the UK. See also Part I, Item 2, "Properties."

In all of our facilities, we are subject to regulatory standards for good manufacturing practices, including current Quality System Regulations, which are the FDA regulatory requirements for medical device manufacturers, and current Good Tissue Practices ("cGTPs"), which are the FDA regulatory requirements for the processing of human tissue. We also operate according to International Organization for Standardization ("ISO") 13485 Quality System Requirements, an internationally recognized voluntary system of quality management for companies that design, develop, manufacture, distribute, and service medical devices. We maintain a Certification of Approval to ISO 13485.

The Medical Device Directive ("MDD") was the governing document for the European Economic Area ("EEA") that detailed requirements for safety and risk of devices. The Medical Device Regulation ("MDR") replaced MDD on May 26, 2021 and imposes more stringent requirements on manufacturers and European Notified Bodies, who have already begun the transition to these new requirements. The transition from the MDD to the MDR is ongoing. See Part I, Item 1A, "Risk Factors—Industry Risks—Our products and tissues are highly regulated and subject to significant quality and regulatory risks," for a discussion of risks related to the transition to MDR and "Government Regulation – International Approval Requirements" below for additional discussion about the MDR transition.

We employ a comprehensive quality assurance program in our product manufacturing and tissue preservation activities. Raw materials, solutions, and other components utilized in our manufacturing and tissue processing operations as well as certain subassemblies and finished goods manufactured by third parties are received and inspected by trained quality control personnel according to written specifications and standard operating procedures. Those items found to comply with our standards are utilized in our operations. Raw materials, solution, components, subassemblies, and tissues are documented throughout manufacturing or processing to ensure traceability.

We evaluate and inspect both our manufactured and distributed products to ensure conformity to product specifications. Processes are validated to review whether products manufactured meet our specifications. Each process is documented along with inspection results, including final finished product inspection and acceptance. Records are maintained as to the consignees of products to track product performance and to facilitate product removals or corrections, if necessary.

We maintain controls over our tissue processing to ensure conformity with our procedures. OPOs and tissue banks must follow our procedures related to tissue recovery practices and are subject to periodic audits to confirm compliance. Samples are taken from donated tissue for microbiological testing, and tissue must be shown to be free of certain detectable microbial contaminants before being released for distribution. Tissue processing records and donor information are reviewed to identify characteristics that would disqualify the tissue for processing or implantation. Once tissue is released for distribution, it is moved from quarantine to an implantable status. Tissue is stored by us until it is shipped to a hospital, where the tissue is thawed and implanted immediately or held in a liquid nitrogen freezer pending implantation.

Backlog

As of December 31, 2022 we did not have a significant backlog of orders related to our medical devices. The limited supply of certain types or sizes of preserved tissue can result in a backlog of orders for these tissues. The amount of backlog fluctuates based on the tissues available for shipment and the surgical needs of specific cases. Our backlog of human tissue consists mostly of pediatric tissues that have limited availability. Our backlog is generally not considered firm and must be confirmed with the customer before shipment. Certain aortic stent grafts products are specifically designed to meet specifications of a particular patient which can result in a limited backlog of these products.

Government Regulation

Medical devices and human tissues are subject to a number of regulations from various government bodies including US federal, state, and local governments, as well as various international governments and regulatory bodies. Government regulations are continually evolving, and requirements may change with or without notice. Changes in government regulations or changes in the enforcement of existing government regulations could have a material, adverse impact on us. See also Part I, Item 1A, "Risk Factors" for a discussion of risks related to government regulations.

US Federal Regulation of Medical Devices

The Federal Food, Drug, and Cosmetic Act ("FDCA") provides that, unless exempted by regulation, medical devices may not be distributed in the US unless they have been approved or cleared by the FDA. Medical devices may receive clearance through either a pre-market notification (also known as the 510(k) process) or a pre-market authorization (a PMA). Prior to approval, investigational device exemptions ("IDE") allow investigational devices to be used in clinical studies in order to collect safety and effectiveness data.

Under a 510(k) process, a medical device manufacturer provides the FDA with premarket notification that it intends to begin commercializing a product and demonstrates to the FDA that the product is substantially equivalent to another legally marketed predicate device. To be found substantially equivalent to a predicate device, the device must be for the same intended use and have either the same technological characteristics as the predicate or different technological characteristics that do not raise different questions of safety or effectiveness. In some cases, the submission must include data from clinical studies in order to demonstrate substantial equivalency to a predicate device. Commercialization may commence when the FDA issues a clearance letter finding such substantial equivalence.

FDA regulations require approval through the IDE/PMA process for all Class III medical devices and for medical devices not deemed substantially equivalent to a predicate device. An IDE authorizes distribution of devices that lack PMA or 510(k) clearance for clinical evaluation purposes. After a product is subjected to clinical testing under an IDE, we may file a PMA application. Once a PMA application has been submitted, the FDA's review may be lengthy and may include requests for additional data, which may require us to undertake additional human clinical studies. Commercialization of the device may begin when the FDA approves the PMA.

The FDCA requires all medical device manufacturers and distributors to register with the FDA annually and to provide the FDA with a list of those medical devices they distribute commercially. The FDCA also requires manufacturers of medical devices to comply with labeling requirements and to manufacture devices in accordance with Quality System Regulations, which require that companies manufacture their products and maintain their documents in compliance with good manufacturing practices, including design, document production, process, labeling and packaging controls, process validation, and other applicable quality control activities. The FDA's medical device reporting regulation requires that a device manufacturer provide information to the FDA on death or serious injuries alleged to have been associated with the use of its products, as well as product malfunctions that would likely cause or contribute to death or serious injury if the malfunction were to recur. The FDA further requires that certain medical devices that may not be sold in the US follow certain procedures before they are exported. The FDA periodically inspects our facilities to review our compliance with these and other regulations and has authority to seize non-complying medical devices, enjoin and/or impose civil penalties on manufacturers and distributors marketing non-complying medical devices, criminally prosecute violators, and order recalls in certain instances.

The following products are, or we believe would be, upon approval, classified as Class III medical devices: BioGlue, On-X heart valves, On-X AAP, PerClot, CardioGenesis cardiac laser therapy, E-vita Open Plus, E-vita Open NEO, E-vita Thoracic 3G, E-tegra, E-liac, E-nside, NEXUS, and AMDS. CryoPatch SG is classified as a Class II medical device. We obtained 510(k) clearance from the FDA to commercialize the CryoValve SGPV; however, these tissues are not officially classified as Class II or III medical devices.

In December 2019 we learned that the FDA is preparing to issue a proposed rule for reclassification of more than minimally manipulated ("MMM") allograft heart valves, which could include our CryoValve SGPV, from unclassified medical devices to Class III medical devices. Following a comment period and subsequent publication of a final rule, should the CryoValve SGPV be determined to be MMM, we expect to have approximately thirty months to submit a PMA application, after which the FDA will determine if, and for how long, we may continue to provide these tissues to customers during review of the PMA application. To date, the FDA has not issued a final rule. See also Part I, Item 1A, "Risk Factors—Industry Risks— Reclassification by the FDA of CryoValve SGPV may make it commercially infeasible to continue processing the CryoValve SGPV".

US Federal Regulation of Human Tissue

The FDA regulates human tissues pursuant to Section 361 of the Public Health Services Act, which in turn provides the regulatory framework for regulation of human cellular and tissue products. The FDA regulations focus on donor screening and testing to prevent the introduction, transmission, and spread of HIV-1 and -2, Hepatitis B and C, and other communicable diseases and disease agents. The regulations set minimum requirements to prevent the transmission of communicable diseases from human tissue used for transplantation. The regulations define human tissue as any tissue derived from a human body which is (i) intended for administration to another human for the diagnosis, cure, mitigation, treatment, or prevention of any condition or disease and (ii) recovered, preserved, stored, or distributed by methods not intended to change tissue function or characteristics. The FDA definition excludes, among other things, tissue that currently is regulated as a human drug, biological product, or medical device, and it also excludes kidney, liver, heart, lung, pancreas, or any other vascularized human organ. The current regulations applicable to human tissues include requirements for donor suitability, processing standards, establishment registration, product listing, testing, and screening for risks of communicable diseases. The FDA periodically audits our tissue preservation facilities for compliance with its requirements and has the authority to enjoin the distribution, force a recall, or require the destruction of tissues that do not meet its requirements.

NOTA Regulation

Our activities in preserving and transporting human hearts and certain other organs are also subject to federal regulation under the National Organ Transplant Act ("NOTA"), which makes it unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation if the transfer affects interstate commerce. NOTA excludes from the definition of "valuable consideration" reasonable payments associated with the removal, transportation, implantation, processing, preservation, quality control, and storage of a human organ. The purpose of this statutory provision is to allow for compensation for legitimate services. We believe that, to the extent our activities are subject to NOTA, we meet this statutory provision relating to the reasonableness of our charges.

State Licensing Requirements

Some states have enacted statutes and regulations governing the manufacture, sale, marketing or distribution of medical devices, and we believe we are in compliance with such applicable state laws and regulations.

Some states have enacted statutes and regulations governing the preservation, transportation, and storage of human organs and tissues. The activities we engage in require us to be either licensed or registered as a clinical laboratory or tissue bank under California, Delaware, Florida, Georgia, Illinois, Maryland, New York, and Oregon law. We have such licenses or registrations, and we believe we are in compliance with applicable state laws and regulations relating to clinical laboratories and tissue banks that store, preserve, and distribute donated human tissue designed to be used for medical purposes in human beings.

Some of our employees have obtained other required state licenses. The regulatory bodies of states may perform inspections of our facilities as required to ensure compliance with state laws and regulations.

International Approval Requirements

Sales of medical devices and shipments of human tissues outside the US are subject to international regulatory requirements that vary widely from country to country. Approval of a product by comparable regulatory authorities of other countries must be obtained and compliance with applicable regulations for tissues must be met prior to commercial distribution of the products or human tissues in those countries. The time required to obtain these approvals may be longer or shorter than that required for FDA approval. Countries in which we distribute products and tissue may perform inspections of our facilities to ensure compliance with local country regulations.

The EEA recognizes a single medical device approval (the CE Mark) which allows for distribution of an approved product throughout the EEA without additional general applications in each country. Individual EEA members, however, reserve the right to require additional labeling or information to address particular patient safety issues prior to allowing marketing. Third parties called "Notified Bodies" award the CE Mark. These Notified Bodies are approved and subject to review by the "Competent Authorities" of their respective countries. Our Notified Bodies perform periodic on-site inspections to independently review our compliance with systems and regulatory requirements. A number of countries outside of the EEA accept the CE Mark in lieu of marketing submissions as an addendum to that country's application process. We have CE Marks for On-X heart valves, On-X AAP, On-X Chord-X sutures, E-vita Open Plus, E-vita Open NEO, E-tegra, E-liac, E-nside, AMDS, and other devices. In addition, E-ventus and NEXUS, which we distribute, have CE Marks.

We work with a number of organizations officially designated as Notified Bodies by European Union Member States to perform assessments of compliance to the MDD and MDR for our various product lines. These organizations include Deutscher Kraftfahrzeug-Überwachungs-Verein ("DEKRA"), the British Standards Institute ("BSI"), and DQS Holding GmbH ("DQS"). These organizations as well as Lloyd's Register Quality Assurance Limited ("LRQA") also perform assessments and issue certifications affirming compliance to quality system standard ISO 13485:2016. In addition, we work with auditing organizations BSI and DEKRA to perform assessments affirming compliance to the Medical Device Single Audit Program ("MDSAP"), which certifies conformance to the regulations of five key jurisdictions: the US, Japan, Australia, Canada, and Brazil. DQS also performs assessments affirming compliance to MDSAP for certain products in Canada.

As a result of the UK's exit from the European Union, or "Brexit," the UK Medicines and Healthcare Products Regulatory Agency ("MHRA") has announced that CE Marking will continue to be recognized in the UK and certificates issued by EU-recognized Notified Bodies will continue to be valid in the UK market until June 30, 2023. Going forward, all devices marketed in the UK will require UK Conformity Assessed ("UKCA") Marks certified by a UK Approved Body (the re-designation of the UK Notified Body). During the fourth quarter of 2022 the UKCA transition was further extended, prolonging the recognition of CE markings through at least December 31, 2024.

On June 13, 2019 LRQA informed us that it would no longer provide Notified Body services for medical devices effective September 2019. The governing German competent authority, the Regierungspräsidium T bingen, granted us an extended grace period until December 31, 2021 to transfer LRQA-issued certifications for BioGlue and PhotoFix to a new Notified Body. Although our BioGlue CE Mark has been successfully transferred to our new Notified Body, we are still in the process of transferring PhotoFix to DEKRA. While progress has been made, failure to timely complete the transfer or any other delays in the MDR transition, may have a material, adverse effect on our ability to supply PhotoFix in affected jurisdictions and have a material, adverse impact on our business. See also Part I, Item 1A, "Risk Factors—Industry Risks—Our products and tissues are highly regulated and subject to significant quality and regulatory risks," for a discussion of the risks related to LRQA's decision, the MDR transition, and Brexit.

Environmental Matters

Our tissue preservation activities generate some biomedical wastes, consisting primarily of human and animal pathological and biological wastes, including human and animal tissue and body fluids removed during laboratory procedures. The biomedical wastes generated by us are placed in appropriately constructed and labeled containers and are segregated from other wastes generated by us. We contract with third parties for transport, treatment, and disposal of biomedical waste. Some of our products, including our On-X products, are sterilized using ethylene oxide ("EtO"). Although we have a small-scale EtO facility in Austin, Texas, we rely primarily on large-scale EtO facilities to sterilize our products. In addition, some of our suppliers use, or rely upon third parties to use, EtO to sterilize some of our product components. Concerns about the release of EtO into the environment at unsafe levels have led to various regulatory enforcement activities against EtO facilities, including closures and temporary closures, as well as proposals increasing regulations related to EtO. Although we believe we are in compliance with applicable laws and regulations, regarding the disposal of our waste resulting from tissue preservation activities, as well as in our other production and sterilization activities, the failure by us, or the companies with which we contract, to comply fully with any such regulations could result in an imposition of penalties, fines, or sanctions, which could materially, adversely affect our business. See also, Part I, Item 1A, "Risk Factors—Industry Risks—Regulatory enforcement activities or private litigation regarding the use of ethylene oxide ("EtO"), which is used to sterilize some of our products and components, could have a material, adverse impact on us," for additional discussion of risks related to our use of EtO sterilization. We do not currently anticipate compliance with these laws and regulations relating to our waste disposal and sterilization activities will require any material capit

Research and Development and Clinical Research

We use our technical and scientific expertise to identify market opportunities for new products and services, and to expand the use of our current products and services through expanded indications and product and tissue enhancements. Our research and development strategy is to allocate most of our available resources among our core market areas based on the potential market size, estimated development time and cost, and the expected efficacy for any potential product or service offering. To the extent we identify new non-core products or additional non-core applications for our core products, we may attempt to license these products to corporate partners for further development or seek funding from outside sources to continue commercial development. We may also attempt to acquire or license additional strategically complementary products or technologies from third-parties to supplement our product lines.

Research on these and other projects is conducted in our research and development department and at universities and clinics where we sponsor research projects. We also conduct preclinical and clinical studies at universities, medical centers, hospitals, and other third-party locations under contract with us. Research is inherently risky, and any potential products or services under development ultimately may not be deemed safe or effective or worth commercializing for other reasons and, therefore, may not generate a return on investment for us. Our clinical research department also collects and maintains clinical data on the use and effectiveness of our products and services. We use this data to gain regulatory approvals to market the products and services, to inform third parties on the benefits of our products and services, and to help direct our continuing improvement efforts.

In 2022, 2021, and 2020 we spent approximately \$38.9 million, \$35.5 million, and \$24.2 million, respectively, on research and development activities on new and existing products. These amounts accounted for approximately 12%, 12%, and 10% of our revenues for each of 2022, 2021, and 2020, respectively.

We are in the process of developing and investigating several new products and technologies, as well as changes and enhancements to our existing products and services. Our strategies for driving growth include new product approvals and indications, global expansion, and business development. These activities will likely require additional research, new clinical studies, and/or compilation of clinical data.

We are currently seeking regulatory approval for BioGlue in China. Enrollment was completed in the third quarter of 2018 and the submission for market approval was filed in March 2019 with Chinese regulatory authorities who have made additional requests, and expressed several concerns, related to the application. If we cannot satisfy the regulator's requests and concerns and obtain approval in first half of 2024, the pending application will expire and no longer be eligible for allowance, requiring the Company to restart or decide to abandon the approval process.

We are currently conducting a clinical trial to assess reduced levels of required anticoagulation or warfarin for the On-X mitral heart valve. Trial results were submitted for regulatory review in 2021 and, although we remain optimistic we will obtain approval as a result, the PROACT Mitral study results are still under review with the FDA. We anticipate hearing about FDA and CE Mark approvals by late 2023.

At the FDA's request, we are conducting a post-approval study to collect long-term clinical data for the On-X aortic heart valve managed with reduced warfarin therapy. This study is ongoing and data collection is expected to continue in 2023. We were conducting the PROACT Xa clinical trial to determine if patients with an On-X aortic heart valve can be maintained safely and effectively on apixaban rather than on warfarin. On September 23, 2022 we stopped the PROACT Xa clinical trial as recommended by the trial's independent Data and Safety Monitoring Board. It is difficult to predict if stopping the trial will have any impact on the On-X market, and any impact that may be experienced may be obscured by other macroeconomic factors making it difficult to quantify.

We completed our pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the US. Enrollment was completed in January 2019 and, in conjunction with Baxter, we submitted the PMA to the FDA during the third quarter of 2021.

The FDA granted Breakthrough Device Designation in the third quarter of 2019 for the AMDS hybrid prosthesis. The Breakthrough Device Designation program is designed to provide timely access to medical devices that potentially provide a more effective treatment for life-threatening conditions by prioritizing review of its regulatory submissions, thereby expediting the device development process. We are conducting a pivotal clinical trial to gain approval to commercialize the AMDS hybrid prosthesis in the US for treatment of acute DeBakey type I aortic dissections. We received IDE approval in the fourth quarter of 2021 and enrolled the first patient in the first quarter of 2022, and anticipate completing enrollment in 2023.

The FDA granted Breakthrough Device Designation in the second quarter of 2020 for E-vita Open NEO, our next-generation hybrid stent graft system used in the treatment of patients with either an aneurysm or dissection in the aortic arch and in the descending thoracic aorta. The FDA granted Breakthrough Device Designation in the third quarter of 2019 for the E-nside and E-xtra Design Multibranch TAAA devices.

Patents, Licenses, and Other Proprietary Rights

We rely on a combination of patents, trademarks, confidentiality agreements, and security procedures to protect our proprietary products, preservation technology, trade secrets, and know-how. We believe that our patents, trade secrets, trademarks, and licensing rights provide us with important competitive advantages. We currently own rights to numerous US and foreign patents and pending patent applications relating to our technology for various product lines. There can be no assurance that any pending applications will ultimately be issued as patents. We have also obtained rights through license and distribution agreements for additional products and technologies, including NEXUS. In the aggregate, these intellectual property assets and licenses are of material importance to our businesses; however, with the exception of BioGlue as discussed below, we believe that no single intellectual property asset or license is material in relation to any segment of our business or to our business as a whole.

The main patent for BioGlue expired in mid-2012 in the US and expired in mid-2013 in the majority of the rest of the world. Although the patents for BioGlue have expired, this technology is still protected by trade secrets and manufacturing know-how, as well as the time and expense to obtain regulatory approvals.

We have confidentiality agreements with our employees, our consultants, and our third-party vendors to maintain the confidentiality of trade secrets and proprietary information. There can be no assurance that the obligations of our employees, consultants, and third parties with whom we have entered into confidentiality agreements, will effectively prevent disclosure of our confidential information or provide meaningful protection for our confidential information if there is unauthorized use or disclosure, or that our trade secrets or proprietary information will not be independently developed by our competitors.

See Part I, Item 1A, "Risk Factors—Legal, Quality, and Regulatory Risks—Some of our products and technologies are subject to significant intellectual property risks and uncertainty," for a discussion of risks related to our patents, licenses, and other proprietary rights.

Seasonality

See Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Seasonality," regarding seasonality of our products and services.

Human Capital

Overview

As of December 31, 2022 we had approximately 1,300 employees. Most of our employees are located in Kennesaw, Georgia; Austin, Texas; and Hechingen, Germany. We have never experienced a work stoppage or interruption due to labor disputes. Our employees located in Hechingen, Germany have a Works Council, and our employees in Brazil are affiliated with a union in connection with compensation-related collective bargaining. We believe our relations with our employees worldwide and with the Works Council in Germany and union in Brazil are good.

Employee Talent and Retention

Our business and future operating results depend in significant part upon the continued contributions of our key personnel, including qualified personnel with medical device and tissue processing experience, and senior management with experience in the medical device or tissue processing space, many of whom would be difficult to replace. Our business and future operating results, including production at our manufacturing and tissue processing facilities, also depend in significant part on our ability to attract and retain qualified management, operations, processing, marketing, sales, and support personnel for our operations.

Our main facilities are in Kennesaw, Georgia; Austin, Texas; and Hechingen, Germany, where the local supply of qualified personnel in the medical device and tissue processing industries is limited and competition for such personnel is intense and has become increasingly more so over the past year. We have programs and processes in place to help ensure that our compensation, benefits programs, and work environment attract and retain such personnel, and we strive to enhance those programs and processes to respond to the increasingly competitive market for talent. We also strive to offer competitive equitable pay, comprehensive benefits, and services that retain and meet the varying needs of our employees. The principal purposes of our equity and cash incentive plans and non-officer incentive plans are to attract, retain, motivate, and reward our employees.

Culture

Fostering and maintaining a strong and collaborative culture is a key strategic focus, as evidenced by our core values of collaboration, results driven, and customer focus. We also have ethics and compliance policies that instill a commitment to ethical behavior and legal compliance across our Company. Employees are encouraged to approach their supervisors if they believe violations of policies have occurred. Employees are also able to confidentially and anonymously report any such violations through an online form or telephone hotline hosted by a third-party provider.

Diversity and Inclusion

We believe that a culture of diversity and inclusion enables us to create, develop, and fully leverage the strengths of our workforce to achieve our business objectives. Approximately 59% of our global employees are female, and approximately 35% of our US based employees are from an underrepresented ethnic community. The Company strives to provide equal opportunity to all applicants and employees, including those from diverse backgrounds.

We believe that bringing together different perspectives and experiences is fundamental to innovation. In early 2022 we appointed a Chief Diversity Officer to manage and oversee the Company's diversity and inclusion efforts and goals.

Training and Development

We provide internal training and development programs to employees globally. Such programs include leadership development, office safety, ethics, and various skill-based training programs.

Health and Safety

Protecting the health, safety, and well-being of our employees around the world is a priority. Throughout the COVID-19 pandemic, we enhanced our focus on the health and safety of our employees by implementing and enforcing certain COVID-related safety protocols. We provided employees with protective equipment, required the wearing of masks, increased cleaning procedures, provided cleaning supplies, implemented remote work where possible, enhanced our IT systems to facilitate remote work, and improved our cybersecurity protocols. While a number of these protocols were lessened or eliminated upon the waning of the COVID-19 pandemic, we continue to look for opportunities to provide a safer, healthier, work environment for our employees.

Employee Engagement

We solicit employee feedback to assess employee satisfaction and engagement and to identify opportunities for development. Employee feedback is also gathered through onboarding surveys, the employee review process, spot surveys, and exit surveys.

See also Part II, Item 7, "Effects of COVID-19" for discussion about COVID-19's impact on our employees, and Part I, Item 1A, "Risk Factors—Operational Risks—We are dependent on our specialized workforce" for discussion about Human Capital risks.

Risk Factors

Our business is subject to a number of risks. See Part I, Item 1A, "Risk Factors" below for a discussion of these and other risk factors.

Available Information

It is our policy to make all our filings with the Securities and Exchange Commission, including, without limitation, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, available free of charge on our website, *www.Artivion.com*, on the day of filing. All such filings made on or after November 15, 2002 have been made available on our website.

We also make available on the Corporate Governance portion of our website: (i) our Code of Conduct; (ii) our Corporate Governance Guidelines; (iii) the charter of each active committee of our Board of Directors; (iv) our Code of Ethics for Senior Financial Officers; (v) our Insider Trading Policy; (vi) our Corporate Responsibility Report (ESG); and (vii) our Foreign Corrupt Practices Act ("FCPA") Policy. We also intend to disclose any amendments to our Codes of Conduct, or waivers of our Codes of Conduct on behalf of our Chief Executive Officer, Chief Financial Officer, or Chief Accounting Officer, on the Corporate Governance portion of our website. All of these corporate governance materials are also available free of charge in print to shareholders who request them in writing to: Jean F. Holloway, General Counsel, Chief Compliance Officer, and Corporate Secretary, 1655 Roberts Blvd NW, Kennesaw, GA 30144.

Item 1A. Risk Factors.

Risks Relating to Our Business

Our business involves a variety of risks and uncertainties, known and unknown, including, among others, the risks discussed below. These risks should be carefully considered together with the other information provided in this Annual Report on Form 10-K and in our other filings with the SEC. Our failure to adequately anticipate or address these risks and uncertainties may have a material, adverse impact on our business, reputation, revenues, financial condition, profitability, and cash flows. Additional risks and uncertainties not presently known or knowable to us, or that we currently believe to be immaterial, may also adversely affect our business.

Business and Economic Risks

COVID-19, and similar public health crises, could have a material, adverse impact on us.

Since early 2020, businesses, communities, and governments worldwide have taken, and continue to take, a wide range of actions to mitigate the spread and impact of COVID-19, leading to an unprecedented impact on the global economy. We continue to be subject to risks related to the COVID-19 pandemic, and risks that may result from future pandemics, epidemics, or other public health crises. The nature and extent of these risks are highly uncertain and unpredictable and may vary greatly by region. Although many countries and hospitals have seen a decline in cases, and thus, many countries, businesses, and hospitals, including ourselves, have begun to remove or reduce COVID-19 related restrictions, the potential for additional or renewed impact or related fallout from new variants or local outbreaks of COVID-19 remains, particularly in light of the enhanced exposure risks faced by our customers and their workforces. Risks related to COVID-19 and other public health crises have and could continue to impact our activities in a number of ways, including by impacting:

- Our product sales. Local lockdowns, capacity constraints on healthcare systems, residual shortages in hospital staffing, and other factors resulting
 from COVID-19 and similar public health crises have and could impact our revenue. These crises can cause a reduction in demand for certain
 products and services due to factors such as reduced elective and non-emergency procedure volumes, healthcare worker shortages, changes in hospital
 utilization rates, reduced sales force access to hospitals, and reduced customer spending. In addition to COVID-19's impact on demand and procedure
 volumes, we have observed downstream financial effects from the pandemic, including an increase in delays or difficulty in collecting outstanding
 receivables, particularly with governmental payors in regions heavily impacted by COVID-19 and the related macroeconomic fallout.
- Our business operations. COVID-19 and similar public health crises present the potential to impact our workforce availability and that of our business
 partners. We have observed this risk with our customers and suppliers, which can impact operations, and also with certain regulators and Notified
 Bodies that we rely on, which in turn increases the risks we face with respect to timely review and approval of new and renewal regulatory approvals
 for our products.
- Our manufacturing operations. The COVID-19 pandemic and the related macroeconomic fallout has continued to impact the global supply chain; the impact on workforces, material availability, demand, and costs has reportedly continued or worsened in many cases. Although we have yet to experience any material effects on our supply chain, we have faced increasing costs and face an increasing risk that upstream disruptions may occur. Risks relating to the lingering effects of global supply chain disruptions may continue even after COVID-19's risk as a global pandemic has subsided.

- Our workforce. As some global economies have begun to emerge from the COVID-19 downturn, increased opportunities for remote work, the Great Resignation, and increasing compensation pressure have resulted in a competition for talent at all levels and an unprecedented number of career changes. The resulting worker shortages and increased labor costs have impacted supply chains, distribution channels, and employers' ability to adequately staff their operations. While the effect appears to be waning somewhat, this has impacted not only our own ability to attract and retain employees, but also the ability of our customers who face increasing staffing pressures throughout their healthcare organizations.
- Our research and development projects. COVID-19 and similar public crises have impacted and can impact our R&D projects, including by impacting the timelines for our clinical research projects and the timing of and need for spending. Enrollment and timelines for our clinical trials have been, and might continue to be, impacted as healthcare providers re-prioritize resources, address staffing shortages, and limit access to healthcare facilities.

The extent to which COVID-19, its variants, or any future public health crises impact our operations or our recovery from the impact of COVID-19, will depend largely on future developments that are highly uncertain and unpredictable and may vary greatly by region. This impact and any such adverse developments or prolonged periods of uncertainty could adversely affect our financial performance.

We are subject to a variety of risks due to our international operations and continued global expansion.

Our international operations subject us to a number of risks, which may vary significantly from the risks we face in our US operations, including:

- Greater difficulties and costs associated with staffing (at all levels), establishing and maintaining internal controls, managing foreign operations and distributor relationships, and selling directly to customers;
- Broader exposure to corruption and expanded compliance obligations, including under the Foreign Corrupt Practices Act, the UK Bribery Law, local anti-corruption laws, Office of Foreign Asset Control administered sanction programs, the European Union's General Data Protection Regulation, and other emerging corruption and data privacy regulations;
- Overlapping and potentially conflicting, or unexpected changes in, international legal and regulatory requirements or reimbursement policies and programs;
- Longer and more expensive collection cycles in certain countries, particularly those in which our primary customers are government-funded hospitals;
- Changes in currency exchange rates, particularly fluctuations in the Euro as compared to the US Dollar and inflationary pressures in Latin America;
- Potential adverse financial impact and negative erosion of our operating profit margin over time due to increasing inflationary pressures, particularly impacting our Latin American business as well as impact felt through our supply chain; our exposure may be increased through our limited ability to raise prices and through global expansion where business occurs with, or pricing is set directly by, government entities, or we are party to long term pricing agreements with governments or local distributors, impacting our ability to pass on rising costs;
- Potential adverse tax consequences of overlapping tax structures or potential changes in domestic and international tax policy, laws, and treaties; and
- Potential adverse financial and regulatory consequences resulting from Brexit.

Our operations and performance have been and may continue to be impacted by regional and global geopolitical conditions, domestic and foreign trade and monetary policies, and other factors beyond our control. As an example of these risks, Russia's military attacks on Ukraine have triggered significant sanctions from the US and foreign governments and retaliatory actions from Russia, resulting in significant banking and trade disruptions. The war has also resulted in significant devastation to the people and infrastructure in the region, significantly impacting trade and transportation which may impact our global supply chain, increase prices, and limit our ability to continue to do business in affected regions.

To date, sanctions and other disruptions in the region have not materially impacted our business or ability to supply products to Russia, Belarus, Ukraine, and the region generally; however, continuation or escalation of the war or increased export controls or additional sanctions imposed on or by Russia, its allies, or related entities could adversely affect our financial performance. Although we do not have any direct operations in Russia or Ukraine, it is difficult to predict the ultimate course of the war and we may face business operations and supply chain disruptions as a result, including disruptions related to shortages of materials, higher costs of materials and freight, freight delays, increased energy costs or energy shortages, travel disruptions, currency fluctuation, and disruptions to banking systems or capital markets.

We operate in highly competitive market segments, face competition from large, well-established medical device companies and tissue service providers with greater resources and we may not be able to compete effectively.

The market for our products and services is competitive and affected by new product introductions and activities of other industry participants. We face intense competition in virtually all of our product lines. A significant percentage of market revenues from competitive products are generated by Baxter, Ethicon (a Johnson & Johnson Company), Medtronic, plc, Abbott Laboratories, Edwards Lifesciences Corp., C.R. Bard, Inc., a subsidiary of Becton, Dickinson and Company, Integra Life Sciences Holdings, LifeNet, Corcym, Anteris Technologies, Inc., Aziyo Biologics, Cook Medical, Gore & Associates, Terumo, LeMaitre Vascular, Inc., Maquet, Inc., Pfizer, Inc., and BioCer Entwicklungs-GmbH. Several of our competitors enjoy competitive advantages over us, including:

- Greater financial and other resources for research and development, commercialization, acquisitions, and litigation and to weather the impacts of COVID-19 and increased workforce competition;
- · Greater name recognition as well as more recognizable trademarks for products similar to products that we sell;
- More established record of obtaining and maintaining regulatory product clearances or approvals;
- · More established relationships with healthcare providers and payors;
- · Lower cost of goods sold or preservation costs; and
- Larger direct sales forces and more established distribution networks.

We are significantly dependent on our revenues from tissue preservation services and are subject to a variety of risks affecting them.

Tissue preservation services are a significant source of our revenues, and as such, we face risks if we are unable to:

- Source sufficient quantities of some human tissue or address potential excess supply of others. We rely primarily upon the efforts of third parties to educate the public and foster a willingness to donate tissue. Factors beyond our control such as supply, regulatory changes, negative publicity concerning methods of tissue recovery or disease transmission from donated tissue, or public opinion of the donor process as well as our own reputation in the industry can negatively impact the supply of tissue;
- Compete effectively, as we may be unable to capitalize on our clinical advantages or our competitors may have advantages over us in terms of cost structure, pricing, back-office automation, marketing, and sourcing; or
- Mitigate sufficiently the risk that tissue can become contaminated during processing; that processed tissue cannot be end-sterilized and hence carries
 an inherent risk of infection or disease transmission or that our quality controls can eliminate that risk.

As an example of these risks, in the fourth quarter of 2020 we became aware that a supplier shipped to us a lot of saline solution that we use in our tissue processing that contained some contamination. The contamination was identified by our routine quality controls. While we were able to mitigate the impact of this contamination through our own efforts and additional testing that was reviewed with the FDA, the contaminated solution impacted a small percentage of the tissue processed with this lot of solution, requiring us to write-off approximately \$826,000 in contaminated tissues in the fourth quarter of 2020. The written off and temporarily quarantined tissue impacted our ability to fully meet demand for certain tissues and sizes in the fourth quarter of 2020, the first quarter of 2021, and to a lesser extent the second quarter of 2021. See also, Part I, Item 1A, "Risk Factors—Operational Risks— We are dependent on our specialized workforce."

In addition, US and foreign governmental authorities have adopted laws and regulations that restrict tissue preservation services. Any of these laws or regulations could change, including becoming more restrictive or our interpretation of them could be challenged by governmental authorities.

We are significantly dependent on our revenues from BioGlue and are subject to a variety of related risks.

BioGlue is a significant source of our revenues, and as such, any risk adversely affecting our BioGlue products or business would likely be material to our financial results. We face the following risks related to BioGlue:

- Competing effectively with our major and start up competitors, as they may have advantages over us in terms of cost structure, supply chain, pricing, sales force footprint, and brand recognition;
- We may be unable to obtain approval to commercialize BioGlue in certain non-US countries as fast as our competitors do of their products or at all. We also may not be able to capitalize on new BioGlue approvals, including for new indications, in non-US countries; and

• BioGlue contains a bovine blood protein. Animal-based products are subject to increased scrutiny from the public and regulators, who may seek to impose additional regulations, regulatory hurdles or product bans in certain countries on such products; BioGlue is a mature product and other companies may use the inventions disclosed in expired BioGlue patents to develop and make competing products.

We are significantly dependent on our revenues from aortic stent grafts and are subject to a variety of related risks.

Aortic stent grafts are a significant source of our revenues, and as such, any risk adversely affecting aortic stent grafts would likely be material to our financial results. We face risks related to aortic stent grafts based on our ability to:

- Compete effectively with some of our major competitors, as they may have advantages over us in terms of cost structure, supply chain, pricing, sales force footprint, and brand recognition;
- Develop innovative, high quality, and in-demand aortic repair products;
- Respond adequately to enhanced regulatory requirements and enforcement activities, and particularly, our ability to obtain regulatory approvals and renewals globally;
- · Meet demand for aortic stent grafts as we seek to expand our business globally; and
- Maintain a productive working relationship with our Works Council in Germany.

We are significantly dependent on our revenues from On-X products and are subject to a variety of related risks.

On-X products are a significant source of our revenues, and as such, any risk adversely affecting our On-X products or business would likely be material to our financial results. We face risks based on our ability to:

- Compete effectively with some of our major competitors, as they may have advantages over us in terms of cost structure, supply chain, pricing, sales force footprint, and brand recognition;
- Take market share in the mechanical heart valve market based on the FDA's approved lower INR indication for the On-X aortic heart valve or complete the associated FDA mandated post-approval studies;
- Address clinical trial data or changes in technology that may reduce the demand for mechanical heart valves, such as data regarding transcatheter aortic valve replacement, or "TAVR" devices;
- Manage risks associated with less favorable contract terms for On-X products on consignment at hospitals;
- · Respond adequately to enhanced international regulatory requirements or enforcement activities; and
- Receive timely renewal certifications in certain markets.

Continued fluctuation of foreign currencies relative to the US Dollar could materially, adversely affect our business.

The majority of our foreign product revenues are denominated in Euros and, as such, are sensitive to changes in exchange rates. In addition, a portion of our dollar-denominated and euro-denominated product sales are made to customers in other countries who must convert local currencies into US Dollars or Euros in order to purchase these products. We also have balances, such as cash, accounts receivable, accounts payable, and accruals that are denominated in foreign currencies. These foreign currency transactions and balances are sensitive to changes in exchange rates. Additionally, as a result of global inflationary pressures, and in some cases, currency crises, it is possible that foreign currency controls, the development of parallel exchange rates, or highly inflationary economies could arise in certain countries. Fluctuations in exchange rates of Euros or other local currencies in relation to the US Dollar could materially reduce our future revenues as compared to the comparable prior periods. Should this occur, it could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

Our charges resulting from acquisitions, restructurings, and integrations may materially, adversely affect the market value of our common stock.

We account for the completion of acquisitions using the purchase method of accounting. Our financial results could be adversely affected by a number of financial adjustments required by purchase accounting such as:

- We may incur added amortization expense over the estimated useful lives of some acquired intangible assets;
- We may incur additional depreciation expense as a result of recording purchased tangible assets;
- We may be required to incur material charges relating to any impairment of goodwill and intangible assets;
- Cost of sales may increase temporarily if acquired inventory is recorded at fair market value;

- If acquisition consideration consists of earn-outs, our earnings may be affected by changes in estimates of future contingent consideration; or
- Earnings may be affected by transaction and integration costs, which are expensed immediately.

As an example of this risk, in the fourth quarter of 2021, we fully impaired the value of a securities purchase option agreement with Endospan ("Endospan Option") and fully wrote-down the value of an agreement for a secured loan from Artivion to Endospan ("Endospan Loan"), primarily driven by a decrease in forecasted operating results. This impairment, and other potential risks like those mentioned above, may adversely affect the market value of our common stock

Operational Risks

We are heavily dependent on our suppliers and contract manufacturers to provide quality products.

The materials and supplies used in our product manufacturing and tissue processing are subject to regulatory requirements and oversight. If materials or supplies used in our processes fail to meet these requirements or are subject to regulatory enforcement action, they may have to be scrapped, or our products or tissues could be rejected during or after processing, recalled, or rejected by customers. In these cases, we may have to immediately scrap raw or in-process materials or expense the costs of manufacturing or preservation.

As an example of this risk, in the fourth quarter of 2020 we became aware that a supplier shipped to us a lot of saline solution that we use in our tissue processing that contained some contamination. The contamination was identified by our routine quality controls. While we were able to mitigate the impact of this contamination through our own efforts and additional testing that was reviewed with the FDA, the contaminated solution impacted a small percentage of the tissue processed with this lot of solution, requiring us to write-off those contaminated tissues in the fourth quarter of 2020 and impacting our ability to fully meet demand for certain tissues and sizes in the fourth quarter of 2020, the first quarter of 2021, and to a lesser extent the second quarter of 2021.

In addition, if these materials or supplies, or changes to them, do not receive regulatory approval or are recalled, if the related suppliers and/or their facilities are shut down temporarily or permanently, for any reason, or if the related suppliers are otherwise unable or unwilling to supply us, we may not have sufficient materials or supplies to manufacture our products or process tissues. In addition, we rely on contract manufacturers to manufacture some of our products or to provide additional manufacturing capacity for some products. If these contract manufacturers fail to meet our quality standards or other requirements or if they are unable or unwilling to supply the products, we may not be able to meet demand for these products. Our ability to fully recover all possible losses from these suppliers and contract manufacturers may have practical limitations imposed by factors like industry standard contractual terms or the financial resources of the adverse party. As a further example of this risk, our supplier of TMR handpieces was informed in the fourth quarter of 2021 that the sole-source manufacturer of tubing used in the handpiece assembly had gone out of business, requiring us to work with our supplier to identify and qualify a new supplier before a disruption in handpiece availability occurs. In February 2023 we were notified that the sole-source manufacturer had gone out of business and, because a new supplier has yet to be identified and qualified, our handpiece supply would cease, effective immediately, and be disrupted in 2023 and potentially beyond.

Finally, the COVID-19 pandemic, the war in Ukraine, work force shortages, exchange rates, and inflation continue to impact the global supply chain; their impact on workforces, global mobility, material availability, demand, and shipping and reorder times and reliability has reportedly continued or worsened in many cases. The ongoing war in Ukraine may add to or exacerbate challenges faced by the global supply chain. See Part I, Item 1A, "Risk Factors – Business and Economic Risks - We are subject to a variety of risks due to our international operations and continued global expansion." Although we have yet to experience any material effects of this impact on our supply chain or operations, we face an increasing risk that upstream disruptions may occur. Risks relating to the lingering effects of global supply chain disruptions may even continue after COVID-19's risk as a global pandemic and the war in Ukraine have subsided.

We are dependent on single and sole-source suppliers and single facilities.

Some of the materials, supplies, and services used in our product manufacturing and tissue processing, as well as some of our products, are sourced from single- or sole-source suppliers. As a result, our ability to negotiate favorable terms with those suppliers may be limited, and if those suppliers experience operational, financial, quality, or regulatory difficulties, or if those suppliers and/or their facilities refuse to supply us or cease operations temporarily or permanently, or if those suppliers take unreasonable business positions, we could be forced to cease product manufacturing or tissue processing until the suppliers resume operations, until alternative suppliers could be identified and qualified, or permanently if the suppliers do not resume operations and no alternative suppliers could be identified and qualified. We could also be forced to purchase alternative materials, supplies, or services with unfavorable terms due to diminished bargaining power.

As an example of these risks, in 2019 we lost our supply of handpieces for cardiac laser therapy resulting from a manufacturing location change at our supplier that ultimately required a PMA supplement and FDA approval before handpiece manufacturing and distribution could resume. Even though the FDA approved the PMA-S, our supplier was unable to fully resume production due to factors outside of our control. Due to these and other supplier issues, we had virtually no supply of handpieces during the first three quarters of 2021. Although handpiece supply resumed on a limited basis since the last quarter of 2021, we remain dependent on a sole-source manufacturer for these handpieces.

By way of additional non-limiting examples, our BioGlue product has three main product components: bovine protein, a cross linker, and a molded plastic resin delivery device. The bovine protein and cross linker are obtained from a small number of qualified suppliers. The delivery devices are manufactured by a single supplier, using resin supplied by a single supplier. We purchase grafts for our On-X AAP from a single supplier and various other components for our On-X valves come from single-source suppliers.

Our preservation services business and our ability to supply needed tissues is dependent upon donation of tissues from human donors by donor families. Donated human tissue is procured from deceased human donors by OPOs and tissue banks. We must rely on the OPOs and tissue banks that we work with to educate the public on the need for donation, to foster a willingness to donate tissue, to follow our donor screening and procurement procedures, and to send donated tissue to us. We have active relationships with approximately 60 OPOs and tissue banks throughout the US. As with any vendor, we believe these relationships with our OPOs are critical in the preservation services industry and that the breadth of these existing relationships provides us with a significant advantage over potential new entrants to this market. We also use various raw materials, including medicines and solutions, in our tissue processing. Some of these raw materials are manufactured by single suppliers or by a small group of suppliers.

Our aortic stent graft systems consist of two main product components: the stent graft and the delivery system. The stent graft is manufactured from several different raw materials that are manufactured internally or at various external suppliers, including single suppliers. The delivery systems we manufacture are comprised of several different raw materials and subassemblies. Our internal manufacturing processes include injection molding and machining of plastic parts, suturing of stent grafts, processing of Nitinol, and weaving of textiles. Our conventional polyester grafts consist of two main product components: polyester fabric and collagen coating. The polyester fabric is woven from a few different yarns that are supplied by an external supplier. The collagen suspension we manufacture is comprised of a collagenous tissue that is supplied by a single supplier. The conventional ePTFE grafts we manufacture are comprised of various raw materials supplied by several suppliers. For some products the ePTFE grafts are heparin coated. For these products, the heparin suspension we manufacture is comprised of a heparin solution that is also supplied by an external supplier. Our E-ventus BX bridging stent is supplied by an external supplier and our supply agreement expired at the end of 2022.

We have three internal manufacturing facilities: Austin, Texas for On-X products, Hechingen, Germany for internally manufactured aortic stent grafts, and Kennesaw, Georgia for all other products and services. Certain aortic stent graft assemblies are manufactured for us by a contract manufacturer in Slovakia. The AMDS product is solely manufactured by a supplier in Charlotte, North Carolina, the CardioGensis handpieces are solely manufactured by a supplier in Merrillville, Indiana, and the NEXUS product is solely manufactured by Endospan in Herzliya, Israel. If one of these suppliers or facilities ceases operations temporarily or permanently, for any reason including a pandemic or climate change related event, our business could be substantially disrupted.

Although we work diligently to maintain adequate inventories of raw materials, components, supplies, subassemblies, and finished goods, there can be no assurance that we will be able to avoid all disruptions to our global supply chain, or disruptions to our sterilization or distribution networks. Any of these disruptions could have a material, adverse effect on our revenues, reputation, or profitability.

We are dependent on our specialized workforce.

Our business and future operating results depend in significant part upon the continued contributions of our specialized workforce, including key personnel, qualified personnel with medical device and tissue processing experience, and senior management with experience in the medical device or tissue processing space, some of whom would be difficult to replace. Our business and future operating results, including production at our manufacturing and tissue processing facilities, also depend in significant part on our ability to attract and retain qualified management, operations, processing, marketing, sales, and support personnel. Our primary facilities are in Kennesaw, Georgia; Austin, Texas; and Hechingen, Germany, where the supply of qualified medical device and tissue processing and other personnel is limited, competition for such personnel is significant, and we cannot ensure that we will be successful in attracting or retaining them. We face risks if we lose any key employees to other employers or due to severe illness, death, or retirement, if any of our key employees fail to perform adequately, or if we are unable to attract and retain skilled employees. This risk was exacerbated by the pandemic, and is expected to continue, as the competition for talent in the medical device industry and in the workforce generally has intensified substantially. As global economies have begun to emerge from the COVID-19 downturn, the expiration of COVID-19 related hiring freezes, the Great Resignation, increased opportunities for remote work, and increasing compensation pressure have resulted in a competition channels and our ability to attract and retain the specialized workforce necessary for our business and operations.

We continue to evaluate expansion through acquisitions of, or licenses with, investments in, and distribution arrangements with, other companies or technologies, which may carry significant risks.

One of our growth strategies is to pursue select acquisitions, licensing, or distribution rights with companies or technologies that complement our existing products, services, and infrastructure. In connection with one or more of these transactions, we may:

- Issue additional equity securities that would dilute our stockholders' ownership interest;
- Use cash we may need in the future to operate our business;
- Incur debt, including on terms that could be unfavorable to us or debt we might be unable to repay;
- Structure the transaction resulting in unfavorable tax consequences, such as a stock purchase that does not permit a step-up in basis for the assets acquired:
- Be unable to realize the anticipated benefits of the transaction; or
- Assume material unknown liabilities associated with the acquired business.

We may not realize all the anticipated benefits of our business development activities.

As part of our efforts to drive growth by pursuing select acquisition, license, and distribution opportunities that are aligned to our objectives and complement our existing products, services, and infrastructure or to divest non-core product lines, we have completed several transactions in recent years and may pursue similar additional transactions in the future. Examples of these activities include the following:

- On December 1, 2017 we acquired JOTEC AG, a Swiss entity that we converted to JOTEC GmbH and subsequently merged with our Swiss acquisition entity, Jolly Buyer Acquisition GmbH and its subsidiaries;
- On September 11, 2019 we entered into various agreements with Endospan, an Israeli medical device manufacturer (the "Endospan Transaction"). The Endospan Transaction included an exclusive distribution agreement for NEXUS in Europe, the Endospan Loan, and a security purchase option agreement for Artivion to purchase all the outstanding Endospan securities from Endospan's existing security holders upon FDA approval of NEXUS;
- On September 2, 2020 we acquired 100% of the outstanding shares of Ascyrus, the developer of AMDS; and
- On July 28, 2021 we entered into various agreements with Baxter and SMI related to the sale of our PerClot assets to Baxter and the termination of our existing material agreements with SMI.

Our ability to realize the anticipated business opportunities, growth prospects, cost savings, synergies, and other benefits of these transactions depends on a number of factors including our ability to:

- Leverage our global infrastructure to sell and cross-market the acquired products;
- Drive adoption of NEXUS and AMDS in the European and other markets, including our ability to manage the substantial product training, implant support, and proctoring requirements for NEXUS procedures;
- Bring acquired products to the US market, including our acquired aortic stent grafts;
- Harness the aortic stent graft product pipeline and our research and development capabilities;
- Obtain regulatory approvals in relevant markets, including our ability to timely obtain FDA PMA for PerClot under the terms of the Baxter Transaction and to obtain or maintain CE Mark product certifications for pipeline and current products;
- Execute on development and clinical trial timelines for acquired products;
- Manage global inventories, including our ability to manage inventories for product lines with large numbers of product configurations and manage manufacturing and demand cycles to avoid excess inventory obsolescence due to shelf life expiration, particularly for processed tissues and aortic stent grafts;
- · Carry, service, and manage significant debt and repayment obligations; and
- · Manage the unforeseen risks and uncertainties related to these transactions, including any related to intellectual property rights.

Additionally, our ability to realize the anticipated business opportunities, growth prospects, synergies, and other benefits of the Endospan Transaction depends on a number of additional factors including Endospan's ability to: (a) comply with the Endospan Loan and other debt obligations, and avoid an event of default; (b) successfully commercialize NEXUS, raise capital and drive adoption in markets in and outside of Europe; (c) meet demand for NEXUS; (d) meet quality and regulatory requirements for NEXUS; (e) manage any intellectual property risks and uncertainties associated with NEXUS; (f) obtain FDA approval of NEXUS; (g) remain a going concern; and (h) develop NEXUS product improvements to meet competitive threats and physician demand. As an example of this risk, the forecasted operating results related to NEXUS decreased in the fourth quarter of 2021, resulting in an impairment in the value of the Endospan Option, and a full write-down of the value of the Endospan Loan, reflecting decreased expectations with respect to the anticipated benefits of the Endospan Transaction.

Many of these factors are outside of our control and any one of them could result in increased costs, decreased revenues, and diversion of management's time and energy. The benefits of these transactions may not be achieved within the anticipated time frame or at all. Any of these factors could negatively impact our earnings per share, decrease or delay the expected accretive effect of the transaction, and negatively impact the price of our common stock. In addition, if we fail to realize the anticipated benefits of a transaction, we could experience an interruption or loss of momentum in our existing business activities.

We may not realize all the anticipated benefits of our corporate rebranding and it may result in unanticipated disruptions to our on-going business.

In order to reflect our evolution to focus on providing innovative technologies to surgeons who treat patients with aortic disease, we changed our name to Artivion, Inc., effective January 18, 2022 (the "Corporate Rebrand"). The Corporate Rebrand also involved the adoption of a new ticker symbol on the New York Stock Exchange, "AORT." We may face unanticipated disruptions to our business arising from the Corporate Rebrand, and it may expose us to additional risks, including:

- Disruptions to our day-to-day business operations including disruptions to our ability to receive or our customers' ability to make timely payments;
- Disruptions to access certain markets or segments due to delays or other issues with regulatory approvals or updates arising from the Corporate Rebrand:
- Unanticipated delays or other impact on our pending regulatory applications or clinical trials arising from the Corporate Rebrand;
- Confusion within the marketplace, particularly with multiple points of contact in our downstream product flow involving purchasing and accounts
 payable departments and end users;
- · Intellectual property risks associated with the adoption of a new corporate identity and trade dress; and
- · Loss of brand equity associated with our legacy brands, including our CryoLife and JOTEC brands that will become less prominent over time.

The Corporate Rebrand involved significant financial and resource investment and will continue to do so as we complete our global brand transitions over the coming years. The anticipated benefits of the Corporate Rebrand may not be achieved within the anticipated timeframe, without additional near or long-term investment, or at all. Any of these factors could negatively impact our revenues, earnings per share, decrease or delay the expected accretive effect of the Corporate Rebrand, and negatively impact the price of our common stock.

Significant disruptions of information technology systems or breaches of information security systems could adversely affect our business.

We rely upon a combination of sophisticated information technology systems as well as traditional recordkeeping to operate our business. In the ordinary course of business, we collect, store, and transmit confidential information (including, but not limited to, information about our business, financial information, personal data, intellectual property, and, in some instances, patient data). Our information technology and information security systems and records are potentially vulnerable to security breaches, service interruptions, data loss, or malicious attacks resulting from inadvertent or intentional actions by our employees, vendors, or other third parties. In addition, due to the COVID-19 pandemic, we have implemented remote work arrangements for some employees, and those employees may use outside technology and systems that are vulnerable to security breaches, service interruptions, data loss or malicious attacks, including by third parties.

While we have invested, and continue to invest, in our information technology and information security systems and employee information security training, there can be no assurance that our efforts will prevent all security breaches, service interruptions, or data losses. We have limited cyber-insurance coverage that may not cover all possible events, and this insurance is subject to deductibles and coverage limitations. Any security breaches, service interruptions, or data losses could adversely affect our business operations or result in the loss of critical or sensitive confidential information or intellectual property, or in financial, legal, business, and reputational harm to us or allow third parties to gain material, inside information that they may use to trade in our securities.

Industry Risks

Our products and tissues are highly regulated and subject to significant quality and regulatory risks.

The commercialization of medical devices and processing and distribution of human tissues are highly complex and subject to significant global quality and regulatory risks and as such, we face the following risks:

- Our products and tissues allegedly have caused, and may in the future cause, patient injury, which has exposed, and could in the future expose, us to liability claims that could lead to additional regulatory scrutiny;
- Our manufacturing and tissue processing operations are subject to regulatory scrutiny, inspections and enforcement actions, and regulatory agencies
 could require us to change or modify our operations or take other action, such as issuing product recalls or holds;
- Regulatory agencies could reclassify, re-evaluate, or suspend our clearances or approvals, or fail, or decline to, issue or reissue our clearances or approvals that are necessary to sell our products and distribute tissues;
- Regulatory and quality requirements are subject to change, which could adversely affect our ability to sell our products or distribute tissues; and
- Adverse publicity associated with our products, processed tissues, or our industry could lead to a decreased use of our products or tissues, increased regulatory scrutiny, or product or tissue processing liability claims.

As an example of these risks, on May 25, 2017 the European Union adopted a new MDR, which was fully implemented on May 26, 2021. The MDR places stricter requirements on manufacturers and European Notified Bodies regarding, among other things, product classifications and pre- and post-market clinical studies for product clearances and approvals which could result in product reclassifications or the imposition of other regulatory requirements that could delay, impede, or prevent our ability to commercialize existing, improved, or new products in the European Economic Area and other markets that require CE Marking. Additionally, to the extent the MDR places stricter requirements on manufacturers of custom-made devices, those new requirements could delay, impede, or otherwise impact the availability of our E-xtra Design Engineering products. COVID-19 has impacted the predictability and timelines associated with the MDR transition. Most recently, the European Commission announced an initiative to extend the MDR transition period and amend other related provisions but it is still unclear if this initiative will be adopted legislatively or whether it will be able to mitigate the challenges posed by the transition to the MDR.

Since the implementation of the MDR, Notified Bodies must review any proposed changes to determine if they require evaluation under the MDR or if they can still be evaluated under currently held MDD certifications. Our inability to obtain certifications for changes under the transitional provisions of the MDR's Article 120 or successfully submit proposed changes requiring MDR evaluation will delay implementation of those changes which could adversely impact our ability to obtain or renew certifications, clearances, or approvals for our products.

Additionally, as MDD-based CE Marks expire, recertification must be obtained under the MDR. Industry-wide, companies are experiencing delays in obtaining new and updated certifications under the MDR as Notified Bodies struggle to recover from COVID-19, deal with depleted workforces, and handle the volume of work required to transition tens of thousands of currently-marketed devices from the MDD to the MDR. As one such example, our MDD-based CE Mark for Chord-X expired in September 2022, which will impact our ability to supply certain territories once our saleable inventory is depleted. If Notified Bodies continue to struggle to meet demand and timely process submissions and recertifications, we may face additional disruptions associated with the MDR transition.

As another example of this risk, our CE-mark for BioGlue expired in December 2021. Due to delays renewing this CE-mark and transitioning BioGlue to a new Notified Body, our ability to supply certain markets with BioGlue was impacted. Although we were able to mitigate most of the impact by obtaining derogations in the majority of relevant territories, we may face similar risks and market disruptions relating to the MDR transition which continues to be in a state of change.

Finally, we anticipate additional regulatory impact as a result of Brexit. The UK Medicines and Healthcare Products Regulatory Agency has announced that CE Marking will continue to be recognized in the UK and certificates issued by EU-recognized Notified Bodies will continue to be valid in the UK market until June 30, 2023. Thereafter, all devices marketed in the UK will require UK Conformity Assessed Marks certified by a UK Approved Body (the re-designation of the UK Notified Body).

In 2019 our Notified Body in the UK, LRQA, informed us that it would no longer provide Notified Body services for medical devices effective September 2019. The governing German competent authority, the Regierungspraesidium-Tubingen, granted us an extended grace period until December 31, 2021 to transfer LRQA-issued certifications for BioGlue and PhotoFix to a new Notified Body. Although our BioGlue CE Mark has been successfully transferred to our new Notified Body, DEKRA, we are still in the process of transferring PhotoFix to DEKRA. While progress has been made, failure to timely complete the transfer or any other delays in the MDR transition, may have a material, adverse effect on our ability to supply PhotoFix in affected jurisdictions, have a material, adverse impact on our business, and may also impact our MDSAP certifications. Failure to timely obtain new MDSAP certifications following their expiration may impact our ability to distribute covered products in Australia, Brazil, Canada, and Japan.

Reclassification by the FDA of CryoValve SG pulmonary heart valve ("CryoValve SGPV") may make it commercially infeasible to continue processing the CryoValve SGPV.

In December 2019 we learned that the FDA is preparing to issue a proposed rule for reclassification of MMM allograft heart valves to Class III medical devices, which could include our CryoValve SGPV. Following a comment period and subsequent publication of any final rule, should the CryoValve SGPV be determined to be MMM, we expect to have approximately thirty months to submit an FDA PMA application, after which the FDA will determine if, and for how long, we may continue to provide these tissues to customers during review of the PMA application. To date, the FDA has not issued such a proposed final rule.

If the FDA ultimately classifies our CryoValve SGPV as a Class III medical device, and if there are delays in obtaining the PMA, if we are unsuccessful in obtaining the PMA, or if the costs associated with these activities are significant, we could decide that the requirements for continued processing of the CryoValve SGPV are too onerous, leading us to discontinue distribution of these tissues.

We may not be successful in obtaining clinical results or regulatory clearances/approvals for new and existing products and services, and our approved products and services may not achieve market acceptance.

Our growth and profitability depends in part upon our ability to develop, and successfully introduce, new products and services, or expand upon existing indications, clearances, and approvals, requiring that we invest significant time and resources to obtain new regulatory clearances/approvals, including investment into pre- and post-market clinical studies. Although we believe certain products and services in our portfolio or under development may be effective in a particular application, we cannot be certain until we successfully execute on relevant clinical trials, and the results we obtain from pre- and post-market clinical studies may be insufficient for us to obtain or maintain any required regulatory approvals or clearances.

We are currently seeking regulatory approval for BioGlue in China, where the Chinese regulatory body has made additional requests, and expressed several concerns, related to the application. We have obtained an extension of time until February 2024 in which to secure approval for BioGlue in China. If we cannot obtain approval by then or the costs to do so are prohibitive, we ultimately may be unable to sell BioGlue in China.

As another example of this risk, we obtained a CE Mark for E-nya in the fourth quarter of 2019 and began limited distribution of E-nya in the second quarter of 2020. In the fourth quarter of 2021 we suspended the limited release to evaluate modifications in response to customer feedback. We ultimately concluded the E-nya device would not achieve our market acceptance targets without additional design changes and ended the limited market release.

As a further example of this risk, in September 2022 we halted the PROACT Xa clinical trial based on the recommendation of the trial's Data and Safety Monitoring Board ("DSMB") due to insufficient evidence to support non-inferiority of apixaban to warfarin for valve thrombosis and thromboembolism. The DSMB found that continuing the trial was unlikely to achieve the primary endpoint while possibly exposing patients to increased risk.

Each of our trials, studies, and approvals is subject to the risks outlined herein.

We cannot give assurance that regulatory agencies will clear or approve these products and services or indications, or any new products and services or new indications, on a timely basis, if ever, or that the products and services or new indications will adequately meet the requirements of the market or achieve market acceptance. Pre- and post-market clinical studies may also be delayed or halted due to many factors beyond our control.

If we are unable to successfully complete the development of a product, service, or application, or if we determine for any reason not to complete development or obtain regulatory approval or clearance of any product, service, or application, particularly in instances when we have expended significant capital, this could materially, adversely affect our financial performance. Research and development efforts are time consuming and expensive, and we cannot be certain that these efforts will lead to commercially successful products or services. Halting R&D efforts and clinical trials prematurely may lead to accelerated or unanticipated wind down costs. Even the successful commercialization of a new product or service in the medical industry can be characterized by slow growth and high costs associated with marketing, under-utilized production capacity, and continuing research and development and education costs, among other things. The introduction of new products or services may require significant physician training or years of clinical evidence in order to gain acceptance in the medical community.

Regulatory enforcement activities or private litigation regarding the use of ethylene oxide ("EtO"), which is used to sterilize some of our products and components, could have a material, adverse impact on us.

Some of our products, including our On-X products, are sterilized using EtO. Although we have a small-scale EtO facility in Austin, Texas, we rely primarily on large-scale EtO facilities to sterilize our products. In addition, some of our suppliers use, or rely upon third parties to use, EtO to sterilize some of our product components. Concerns about the release of EtO into the environment at unsafe levels have led to increased activism and lobbying as well as various regulatory enforcement activities against EtO facilities, including closures and temporary closures, lawsuits against EtO service providers, and proposals increasing regulations related to EtO. The number of EtO facilities in the US is limited, and any permanent or temporary closures or disruption to their operations for any reason could delay, impede, or prevent our ability to commercialize our products. In addition, any regulatory enforcement activities against us for our use of EtO could result in financial, legal, business, and reputational harm to us.

We may be subject to fines, penalties, and other sanctions if we are deemed to be promoting the use of our products for unapproved, or off-label, uses.

Our business and future growth depend on the continued use of our products for approved uses. Generally, regulators contend that, unless our products are approved or cleared by a regulatory body for alternative uses, we may not make claims about the safety or effectiveness of our products or promote them for such uses. Such limitations present a risk that law enforcement could allege that the nature and scope of our sales, marketing, or support activities, though designed to comply with all regulatory requirements, constitute unlawful promotion of our products for an unapproved use. We also face the risk that such authorities might pursue enforcement based on past activities that we discontinued or changed. Investigations concerning the promotion of unapproved uses and related issues are typically expensive, disruptive, and burdensome and generate negative publicity. If our promotional activities are found to be in violation of the law, we may face significant fines and penalties and may be required to substantially change our sales, promotion, grant, and educational activities. In addition, we or our officers could be excluded from participation in government healthcare programs such as Medicare and Medicaid.

Healthcare policy changes may have a material, adverse effect on us.

In response to perceived increases in healthcare costs in recent years, there have been, and continue to be, proposals by the governmental authorities, third-party payors, and elected office holders and candidates to impact public health, control healthcare costs and, more generally, to reform the healthcare systems. Additional uncertainty is anticipated as debates about healthcare, vaccines, and public health continue in light of the COVID-19 pandemic which may have an impact on US law relating to the healthcare industry. Many US healthcare laws, such as the Affordable Care Act, are complex, subject to change, and dependent on interpretation and enforcement decisions from government agencies with broad discretion. The application of these laws to us, our customers, or the specific services and relationships we have with our customers is not always clear. Our failure to anticipate accurately any changes to, or the repeal or invalidation of all or part of the Affordable Care Act and similar or future laws and regulations, or our failure to comply with them, could create liability for us, result in adverse publicity and negatively affect our business, results of operations, and financial condition.

Further, the growth of our business, results of operations and financial condition rely, in part, on customers in the healthcare industry that receive substantial revenues from governmental and other third-party payer programs. A reduction or less than expected increase in government funding for these programs or a change in reimbursement or allocation methodologies, or a change in reimbursement related to products designated as "breakthrough devices" by the FDA, could negatively affect our customers' businesses and, in turn, negatively impact our business, results of operations and financial condition. Any changes that lower reimbursement for our products or reduce medical procedure volumes, could adversely affect our business and profitability.

Legal, Quality, and Regulatory Risks

As a medical device manufacturer and tissue services provider we are exposed to risk of product liability claims and our existing insurance coverage may be insufficient, or we may be unable to obtain insurance in the future, to cover any resulting liability.

Our products and processed tissues allegedly have caused, and may in the future cause, injury or result in other serious complications that may result in product or other liability claims from our customers or their patients. If our products are defectively designed, manufactured, or labeled, or contain inadequate warnings, defective components, or are misused, or are used contrary to our warnings, instructions, and approved indications, we may become subject to costly litigation that can have unpredictable and sometimes extreme outcomes.

We maintain claims-made insurance policies to mitigate our financial exposure to product and tissue processing liability and securities, claims, among others, that are reported to the insurance carrier while the policy is in effect. These policies do not include coverage for punitive damages. Although we have insurance for product and tissue processing liabilities, securities, property, and general liabilities, if we are unsuccessful in arranging cost-effective acceptable resolutions of claims, it is possible that our insurance program may not be adequate to cover any or all possible claims or losses, including losses arising out of natural disasters or catastrophic circumstances. Any significant claim could result in an increase in our insurance rates or jeopardize our ability to secure coverage on reasonable terms, if at all.

Any securities or product liability/tissue processing claim, even a meritless or unsuccessful one, could be costly to defend, and result in diversion of our management's attention from our business, adverse publicity, withdrawal of clinical trial participants, injury to our reputation, or loss of revenue.

We are subject to various US and international bribery, anti-kickback, false claims, privacy, transparency, and similar laws, any breach of which could cause a material, adverse effect on our business, financial condition, and profitability.

Our relationships with physicians, hospitals, and other healthcare providers are subject to scrutiny under various US and international bribery, anti-kickback, false claims, privacy, transparency, and similar laws, often referred to collectively as "healthcare compliance laws." Healthcare compliance laws are broad, sometimes ambiguous, complex, and subject to change and changing interpretations. The ongoing war in Ukraine and the current and future sanctions imposed on Russia and others as a result may exacerbate these risks. See also Part I, Item 1A, "Risk Factors – Business and Economic Risks - We are subject to a variety of risks due to our international operations and continued global expansion." Possible sanctions for violation of these healthcare compliance laws include fines, civil and criminal penalties, exclusion from government healthcare programs, and despite our compliance efforts, we face the risk of an enforcement activity or a finding of a violation of these laws.

We have entered into consulting and product development agreements with healthcare professionals and healthcare organizations, including some who may order our products or make decisions to use them. We have also adopted the AdvaMed Code of Conduct, the MedTech Europe Code of Ethical Business Practice, and the APACMed Code of Ethical Conduct which govern our relationships with healthcare professionals to bolster our compliance with healthcare compliance laws. While our relationships with healthcare professionals and organizations are structured to comply with such laws and we conduct training sessions on these laws and codes, it is possible that enforcement authorities may view our relationships as prohibited arrangements that must be restructured or for which we would be subject to other significant civil or criminal penalties or debarment. In any event, any enforcement review of or action against us as a result of such review, regardless of outcome, could be costly and time consuming. Additionally, we cannot predict the impact of any changes in or interpretations of these laws, whether these changes will be retroactive or will have effect on a going-forward basis only.

The proliferation of new and expanded data privacy laws, including the General Data Protection Regulation in the European Union, could adversely affect our business.

An increasing number of federal, state, and foreign data privacy laws and regulations, which can be enforced by private parties or governmental entities, have been or are being promulgated and are constantly evolving. These laws and regulations may include new requirements for companies that receive or process an individual's personal data (including employees), which increases our operating costs and requires significant management time and energy. Many of these laws and regulations, including the European Union's General Data Protection Regulation ("GDPR") also include significant penalties for noncompliance. Although our personal data practices, policies, and procedures are intended to comply with GDPR and other data privacy laws and regulations, there can be no assurance that regulatory or enforcement authorities will view our arrangements as being in compliance with applicable laws, or that one or more of our employees or agents will not disregard the rules we have established. Any privacy related government enforcement activities may be costly, result in negative publicity, or subject us to significant penalties.

Some of our products and technologies are subject to significant intellectual property risks and uncertainty.

We own trade secrets, patents, patent applications, and licenses relating to our technologies and trademarks and goodwill related to our products and services, which we believe provide us with important competitive advantages. We cannot be certain that we will be able to maintain our trade secrets, that our pending patent applications will issue as patents, or that no one will challenge the validity or enforceability of any intellectual property that we adopt, own, or license. Competitors may independently develop our proprietary technologies or design non-infringing alternatives to patented inventions. We do not control the maintenance, prosecution, enforcement, or strategy for in-licensed intellectual property and as such are dependent in part on the owners of these rights to maintain their viability. Their failure to do so could significantly impair our ability to exploit those technologies. Additionally, our technologies, products, or services could infringe intellectual property rights owned by others, or others could infringe our intellectual property rights.

If we become involved in intellectual property disputes, the costs could be expensive, and if we were to lose or decide to settle, the amounts or effects of the settlement or award by a tribunal could be costly.

Risks Relating to Our Indebtedness

The agreements governing our indebtedness contain restrictions that limit our flexibility in operating our business.

The agreements governing our indebtedness contain, and any instruments governing future indebtedness of ours may contain, covenants that impose significant operating and financial restrictions on us and certain of our subsidiaries, including (subject in each case to certain exceptions) restrictions or prohibitions on our and certain of our subsidiaries' ability to, among other things:

- Incur or guarantee additional debt or create liens on certain assets;
- Pay dividends on or make distributions of our share capital, including repurchasing or redeeming capital stock, or make other restricted payments, including restricted junior payments;
- Enter into agreements that restrict our subsidiaries' ability to pay dividends to us, repay debt owed to us or our subsidiaries, or make loans or advances to us or our other subsidiaries;
- Enter into certain transactions with our affiliates including any transaction or merger or consolidation, liquidation, winding-up, or dissolution; convey, sell, lease, exchange, transfer or otherwise dispose of all or any part of our business, assets or property; or sell, assign, or otherwise dispose of any capital stock of any subsidiary;
- Enter into certain rate swap transactions, basis swaps, credit derivative transactions, and other similar transactions, whether relating to interest rates, commodities, investments, securities, currencies, or any other relevant measure, or transactions of any kind subject to any form of master purchase agreement governed by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement, or any other master agreement;
- Amend, supplement, waive, or otherwise modify our or our subsidiaries' organizational documents in a manner that would be materially adverse to the
 interests of the lenders, or change or amend the terms of documentation regarding junior financing in a manner that would be materially adverse to the
 interests of the lenders;
- Make changes to our and our subsidiaries' fiscal year without notice to the administrative agent;
- Enter into agreements which restrict our ability to incur liens;
- Engage in any line of business substantially different from that in which we are currently engaged; and
- Make certain investments, including strategic acquisitions or joint ventures.

Our indebtedness could adversely affect our ability to raise additional capital to fund operations and limit our ability to react to changes in the economy or our industry.

Our current and future levels of indebtedness could adversely affect our ability to raise additional capital, limit our operational flexibility, and hinder our ability to react to changes in the economy or our industry. It may also limit our ability to borrow money, require us to dedicate substantial portions of our cash flow to repayment, and restrict our ability to invest in business opportunities. Because most of our borrowings are at a variable rate of interest, we are exposed to interest rate fluctuations.

We have pledged substantially all of our US assets as collateral under our existing Credit Agreement. If we default on the terms of such credit agreements and the holders of our indebtedness accelerate the repayment of such indebtedness, there can be no assurance that we will have sufficient assets to repay our indebtedness.

A failure to comply with the covenants in our existing Credit Agreement could result in an event of default, which, if not cured or waived, could have a material, adverse effect on our business, financial condition, and profitability. In the event of any such default, the holders of our indebtedness:

- · Will not be required to lend any additional amounts to us; and
- Could elect to declare all indebtedness outstanding, together with accrued and unpaid interest and fees, to be due and payable and terminate all commitments to extend further credit, if applicable.

If we are unable to repay those amounts, the holders of our secured indebtedness could proceed against their secured collateral to seek repayment out of proceeds from the sale or liquidation of our assets. If our indebtedness were to be accelerated, there can be no assurance that our assets would be sufficient to repay such indebtedness in full.

Risks Related to Ownership of our Common Stock

Our business could be negatively impacted as a result of shareholder activism.

In recent years, shareholder activists have become involved in the governance, strategic direction, and operations of companies. Such involvement with us may disrupt our business and divert the attention of our management, and any perceived uncertainties as to our future direction resulting from such involvement could result in the loss of business opportunities, be exploited by our competitors, cause concern for our current or potential customers, cause significant fluctuations in stock price, or make it more difficult to attract and retain qualified personnel and business partners.

Our business could be impacted by increased shareholder emphasis on environmental, social, and governance matters.

Investors and other key stakeholders are increasingly focusing on areas of corporate responsibility, and particularly matters related to environmental, social, and governance ("ESG") factors. Institutional investors have expressed expectations with respect to ESG matters that they use to guide their investment strategies and may, in some cases, choose not to invest in us if they believe our ESG policies are lagging or inadequate. Other stakeholders also have expectations regarding ESG factors, such as employees or potential employees who desire to work for a company that reflects their personal values. These areas of focus are continuing to evolve, as are the criteria that investors assess companies' performance in these areas. Investors are increasingly looking to companies that demonstrate strong ESG and sustainability practices as an indicator of long-term resilience, especially in light of events such as the COVID-19 pandemic. Keeping up with and meeting these expectations may disrupt our business and divert the attention of our management, and we may be unable to make the investments in ESG programs that our competitors with greater financial resources are able to make. Failure to meet the expectations of investors and other stakeholders in these areas may damage our reputation, impact employee retention, impact the willingness of our customers to do business with us, or otherwise impact our financial results and stock price.

We do not anticipate paying any dividends on our common stock for the foreseeable future.

In December 2015 our Board of Directors discontinued dividend payments on our common stock for the foreseeable future. If we do not pay cash dividends, our shareholders may receive a return on their investment in our common stock only through appreciation of shares of our common stock that they own. In addition, restrictions in our credit facility limit our ability to pay future dividends.

Provisions of Delaware law and anti-takeover provisions in our organizational documents may discourage or prevent a change of control, even if an acquisition would be beneficial to shareholders, which could affect our share price adversely and prevent attempts by shareholders to remove current management.

Effective January 1, 2022 we reincorporated in Delaware. Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay, or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, the organizational documents adopted in connection with our reincorporation contain provisions that restrict persons who may call shareholder meetings, allow the issuance of blank-check preferred stock without the vote of shareholders, and allow the Board of Directors to fill vacancies and fix the number of directors. These provisions of Delaware law and our articles of incorporation and bylaws could prevent attempts by shareholders to remove current management, prohibit or delay mergers or other changes of control transactions, and discourage attempts by other companies to acquire us, even if such a transaction would be beneficial to our shareholders. The effects of reincorporation in Delaware are detailed in our 2021 Special Proxy Statement and Notice of Special Meeting filed with the SEC on October 7, 2021.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters consist of approximately 190,400 square feet of leased manufacturing, administrative, laboratory, and warehouse space located on a 21.5-acre setting, with an additional 14,400 square feet of off-site warehouse space both located in Kennesaw, Georgia. The manufacturing and tissue processing space includes approximately 20,000 square feet of class 10,000 clean rooms and 8,000 square feet of class 100,000 clean rooms. This extensive clean room environment provides a controlled aseptic environment for manufacturing and tissue preservation. Two back-up emergency generators assure continuity of our manufacturing operations and liquid nitrogen freezers maintain preserved tissue at or below –135°C. We manufacture products from our Medical Devices segment, including BioGlue and PhotoFix, and process and preserve tissues from our Preservation Services segment at our headquarters facility. Our corporate headquarters also includes a CardioGenesis cardiac laser therapy maintenance and evaluation laboratory space.

Our corporate complex includes the Ronald C. Elkins Learning Center, a 3,600 square foot auditorium that holds 225 participants, and a 1,500 square foot training lab, both equipped with closed-circuit and satellite television broadcast capability allowing live worldwide broadcasts. The Ronald C. Elkins Learning Center provides visiting surgeons with a hands-on training environment for surgical and implantation techniques for our technology platforms.

Our primary European subsidiary, JOTEC, located in Hechingen, Germany, maintains facilities that consist of approximately 156,000 square feet of leased manufacturing, administrative, laboratory, and warehouse space where we manufacture aortic stent grafts.

Our On-X facility consists of approximately 75,000 square feet of combined manufacturing, administrative, laboratory, warehouse, and office space leased in Austin, Texas.

We lease small amounts of ancillary office and warehouse space in various countries in which we operate direct sales subsidiaries, including in Brazil, Greece, Italy, Poland, Spain, Switzerland, and the United Kingdom. In April 2022 we opened a distribution center in Singapore to support sales activities in the APAC region.

Item 3. Legal Proceedings.

From time to time, we are involved in legal proceedings concerning matters arising in connection with the conduct of our business activities. We regularly evaluate the status of legal proceedings in which we are involved in order to assess whether a loss is probable or there is a reasonable possibility that a loss or additional loss may been incurred, and to determine if accruals are appropriate. We further evaluate each legal proceeding to assess whether an estimate of possible loss or range of loss can be made.

Based on current knowledge, management does not believe that there are any pending matters that potentially could have a material, adverse effect on our business, financial condition, results of operations, or cash flows. However, we are engaged in various legal actions in the normal course of business. There can be no assurances in light of the inherent uncertainties involved in any potential legal proceedings, some of which are beyond our control, and an adverse outcome in any legal proceeding could be material to our results of operations or cash flows for any particular reporting period.

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 Price of Common Stock

Our common stock is traded on the New York Stock Exchange ("NYSE") under the symbol "AORT." Prior to January 24, 2022 our common stock was traded on the NYSE under the symbol "CRY." The following table sets forth, for the periods indicated, the intra-day high and low sale prices per share of common stock on the NYSE.

2022	High	Low
First quarter	\$ 22.04	\$ 16.56
Second quarter	23.07	15.44
Third quarter	23.43	12.90
Fourth quarter	14.30	9.64

2021	High	Low
First quarter	\$ 26.60	\$ 21.65
Second quarter	32.34	21.86
Third quarter	29.13	22.16
Fourth quarter	23.20	16.95

As of February 17, 2023 we had 187 shareholders of record.

Dividends

No dividends were paid in 2022, 2021, or 2020.

On December 1, 2017 we entered into a Credit and Guaranty Agreement (the "Credit Agreement"), among Artivion, as borrower, CryoLife International, Inc., On-X Life Technologies Holdings, Inc., On-X Life Technologies, Inc., AuraZyme Pharmaceuticals, Inc., as guarantor subsidiaries, the financial institutions party thereto from time to time as lenders, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent. The Credit Agreement prohibits the payment of certain restricted payments, including cash dividends. See also Part II, Item 8, Note 10 of the "Notes to Consolidated Financial Statements" for further discussion of the Credit Agreement.

Issuer Purchases of Equity Securities

The following table provides information about purchases we made during the quarter ended December 31, 2022 of equity securities that are registered by us pursuant to Section 12 of the Securities Exchange Act of 1934.

Common Stock

Period	Total Number of Common Shares Purchased	Average Price Paid per Common Share	Total Number of Common Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Common Shares That May Yet Be Purchased Under the Plans or Programs
10/01/22 - 10/31/22	_	\$	_	\$
11/01/22 - 11/30/22	422	11.18	_	_
12/01/22 - 12/31/22	_	_	_	_
Total	422	\$ 11.18		<u> </u>

The common shares purchased during the quarter ended December 31, 2022 were tendered to us in payment of taxes on stock compensation and were not part of a publicly announced plan or program.

Under our Credit Agreement, we are prohibited from repurchasing our common stock, except for the repurchase of stock from our employees or directors when tendered in payment of taxes or the exercise price of stock options, upon the satisfaction of certain requirements.

Item 6. [Reserved]

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

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes included elsewhere in this filing. The discussion contains forward-looking statements that involve known and unknown risks and uncertainties, including those set forth under Part I, Item 1A."Risk Factors" of this Form 10-K. The following discussion and analysis do not include certain items related to the year ended December 31, 2020, including year-to-year comparisons between the year ended December 31, 2021 and the year ended December 31, 2020. For a comparison of our results of operations for the fiscal years ended December 31, 2021 and December 31, 2020, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 22, 2022.

Overview

Artivion, Inc. ("Artivion," the "Company," "we," or "us"), is a leader in the manufacturing, processing, and distribution of medical devices and implantable human tissues used in cardiac and vascular surgical procedures for patients with aortic disease. We have four major product families: aortic stent grafts, surgical sealants, On-X® mechanical heart valves and related surgical products, and implantable cardiac and vascular human tissues. Aortic stent grafts include aortic arch stent grafts, abdominal stent grafts, and synthetic vascular grafts. Aortic arch stent grafts include our E-vita Open NEO, E-vita Open Plus, AMDS, NEXUS, and E-vita Thoracic 3G products. Abdominal stent grafts include our E-xtra Design Engineering, E-nside, E-tegra, E-ventus BX, and E-liac products. Surgical sealants include BioGlue® Surgical Adhesive ("BioGlue") products. In addition to these four major product families, we sell or distribute PhotoFix® bovine surgical patches, CardioGenesis® cardiac laser therapy, and PerClot® hemostatic powder (prior to the sale to a subsidiary of Baxter International, Inc. ("Baxter")).

For the year ended December 31, 2022 we reported annual revenues of \$313.8 million, increasing 5% over the prior year. Excluding the effects of foreign exchange, revenues increased 9% over the prior year. The increase in revenues was due to increases in revenues from aortic stent grafts, On-X products, preservation services, and other products, partially offset by a decrease in revenues from surgical sealants. For the year ended December 31, 2022 we reported a net loss of \$19.2 million. See the "Results of Operations" section below for additional analysis of the fourth quarter and full year 2022 results. See Part I, Item 1, "Business," for further discussion of our business and activities during 2022.

Effects of COVID-19

The COVID-19 pandemic continued to impact global economic conditions during 2022 including having an impact on our operations. Our efforts to protect our supply chain and reduce the spread of COVID-19 among our employees, including our work-from-home arrangements, have been successful to date as we have continued to operate all manufacturing sites at full production. These efforts have not materially affected our ability to maintain our business operations, including the operation of financial reporting systems, internal control over financial reporting, or disclosure controls and procedures. Although we have scaled back most of our COVID-19 mitigation efforts, we continue to monitor the impact of the pandemic and the emergence of new variants on our business and recognize that COVID-19 and its effects could continue to negatively impact our business and results of operations during 2023 and beyond.

The COVID-19 pandemic has also impacted certain aspects of the global supply chain and resulted in supply chain inflation. Although we have yet to experience any material effects on our supply chain or operations, we face an increasing risk that upstream disruptions may occur or worsen. As global economies continue to recover from the COVID-19 downturn, increased opportunities for remote work, and increasing compensation pressure have resulted in competition for talent and an unprecedented number of retirements or career changes. The resulting worker shortages at all levels have impacted supply chains, distribution channels, and employers' and our own ability to adequately staff operations. These shortages to date, have impacted, and may impact our operations going forward. Hospitals and other healthcare providers have also experienced staffing shortages impacting our business including increased restrictions on elective and non-emergent procedures, restrictions on access to healthcare facilities, cancellation of elective procedures, and the re-allocation of scarce resources.

The extent to which our operations and financial performance will be impacted by the pandemic in 2023 and beyond will depend largely on future developments, including changes in hospital utilization rates and staffing, prevalence and severity of new variants, disruptions to workforce availability, and the impact on the global supply chain. Due to the significant uncertainty related to the pandemic and its impact on macroeconomic conditions, our operations, revenues, financial conditions, profitability, and cash flows may be materially impacted.

See the "Risk Factors" identified in Part I, Item 1A of this form 10-K for risks related to COVID-19.

Critical Accounting Policies

A summary of our significant accounting policies is included in Part II, Item 8, Note 1 of the "Notes to Consolidated Financial Statements." We believe that the consistent application of these policies enables us to provide users of the financial statements with useful and reliable information about our operating results and financial condition. The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the US, which require us to make estimates and assumptions. The following are accounting policies that we believe are most important to the portrayal of our financial condition and results of operations and may involve a higher degree of judgment and complexity.

Deferred Preservation Costs, net

Deferred preservation costs include costs of cardiac and vascular tissues available for shipment, tissues currently in active processing, and tissues held in quarantine pending release to implantable status. By federal law, human tissues cannot be bought or sold; therefore, the tissues we preserve are not held as inventory. The costs we incur to procure and process cardiac and vascular tissues are instead accumulated and deferred. Deferred preservation costs are stated at the lower of cost or net realizable value on a first-in, first-out basis and are deferred until revenue is recognized. Upon shipment of tissue to an implanting facility, revenue is recognized, and the related deferred preservation costs are expensed as cost of preservation services. Cost of preservation services also includes, as applicable, lower of cost or net realizable value write-downs and impairments for tissues not deemed to be recoverable, and includes, as incurred, idle facility expense, excessive spoilage, extra freight, and re-handling costs.

The calculation of deferred preservation costs involves judgment and complexity and uses the same principles as inventory costing. Donated human tissue is procured from deceased human donors by organ and tissue procurement organizations ("OPOs") and tissue banks that provide the tissue to us for processing, preservation, and distribution. Deferred preservation costs consist primarily of the procurement fees charged by the OPOs and tissue banks, direct labor and materials (including salary and fringe benefits, laboratory supplies and expenses, and freight-in charges), and indirect costs (including allocations of costs from support departments and facility allocations). Fixed production overhead costs are allocated based on actual tissue processing levels, to the extent that they are within the range of the facility's normal capacity.

These costs are then allocated among the tissues processed during the period based on cost drivers, such as the number of donors or number of tissues processed. We apply a yield estimate to all tissues in process and in quarantine to estimate the portion of tissues that will ultimately become implantable. We estimate quarantine and in process yields based on our experience and reevaluate these estimates periodically. Actual yields could differ significantly from our estimates, which could result in a change in tissues available for shipment and could increase or decrease the balance of deferred preservation costs. These changes could result in additional cost of preservation services expense or could increase per tissue preservation costs, which would impact gross margins on tissue preservation services in future periods.

We regularly evaluate our deferred preservation costs to determine if the costs are appropriately recorded at the lower of cost or net realizable value. We also evaluate our deferred preservation costs for costs not deemed to be recoverable, including tissues not expected to ship prior to the expiration date of their packaging. Lower of cost or net realizable value write-downs are recorded if the tissue processing costs incurred exceed the estimated market value of the tissue services, based on recent average service fees at the time of the evaluation. Impairment write-downs are recorded based on the book value of tissues deemed to be impaired. Actual results may differ from these estimates. Write-downs of deferred preservation costs are expensed as cost of preservation services, and these write-downs are permanent impairments that create a new cost basis, which cannot be restored to its previous levels if our estimates change.

Fair Value Measurements

We record certain financial instruments, including cash equivalents, at fair value on a recurring basis. We may make an irrevocable election to measure other financial instruments at fair value on an instrument-by-instrument basis. Fair value financial instruments are recorded in accordance with the fair value measurement framework.

We also measure certain assets and liabilities at fair value on a non-recurring basis. These non-recurring valuations include evaluating assets such as certain financial assets, long-lived assets, and indefinite lived intangible assets for impairment, allocating value to assets in an acquired asset group and applying accounting for business combinations and the initial recognition of liabilities such as contingent consideration. We use the fair value measurement framework to value these assets and liabilities and report these fair values in the periods in which they are recorded or written down.

The fair value measurement framework includes a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair values in their broad levels. These levels from highest to lowest priority are as follows:

- Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets or liabilities;
- Level 2: Quoted prices in active markets for similar assets or liabilities or observable prices that are based on inputs not quoted in active markets, but corroborated by market data; and
- Level 3: Unobservable inputs or valuation techniques that are used when little or no market data is available.

The determination of fair value and the assessment of a measurement's placement within the hierarchy requires judgment. Level 3 valuations often involve a higher degree of judgment and complexity. Level 3 valuations may require the use of various cost, market, or income valuation methodologies applied to our unobservable estimates and assumptions. Our assumptions could vary depending on the asset or liability valued and the valuation method used. Such assumptions could include: estimates of prices, earnings, costs, actions of market participants, market factors, or the weighting of various valuation methods. We may also engage external advisors to assist in determining fair value, as appropriate.

Although we believe that the recorded fair value of our financial instruments is appropriate, these fair values may not be indicative of net realizable value or reflective of future fair values.

Deferred Income Taxes

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and tax return purposes. We assess the recoverability of our deferred tax assets and provide a valuation allowance against our deferred tax assets when, as a result of this analysis, we believe it is more likely than not that some portion or all of our deferred tax assets will not be realized.

Assessing the recoverability of deferred tax assets involves judgment and complexity, including the consideration of prudent and feasible tax planning. Estimates and judgments used in the determination of the need for a valuation allowance and in calculating the amount of a needed valuation allowance include, but are not limited to, the following:

- The ability to carry back deferred tax attributes to a prior tax year;
- Timing of the anticipated reversal of book/tax temporary differences;
- Projected future operating results;
- Anticipated future state tax apportionment;
- Timing and amounts of anticipated future taxable income;
- · Evaluation of statutory limits regarding usage of certain tax assets; and
- Evaluation of the statutory periods over which certain tax assets can be utilized.

Significant changes in the factors above, or other factors, could affect our ability to use our deferred tax assets. Such changes could have a material, adverse impact on our profitability, financial position, and cash flows. We will continue to assess the recoverability of our deferred tax assets, as necessary, when we experience changes that could materially affect our prior determination of the recoverability of our deferred tax assets.

Valuation of Acquired Assets or Businesses

As part of our corporate strategy, we are seeking to identify and capitalize upon acquisition opportunities of complementary product lines and companies. We evaluate and account for acquired patents, licenses, distribution rights, and other tangible or intangible assets as the purchase of an asset or asset group, or as a business combination, as appropriate. The determination of whether the purchase of a group of assets should be accounted for as an asset group or as a business combination requires judgment based on the weight of available evidence.

For the purchase of an asset group, we allocate the cost of the asset group, including transaction costs, to the individual assets purchased based on their relative estimated fair values. In-process research and development acquired as part of an asset group is expensed upon acquisition.

We account for business combinations using the acquisition method. Under this method, the allocation of the purchase price is based on the fair value of the tangible and identifiable intangible assets acquired and the liabilities assumed as of the date of the acquisition. The excess of the purchase price over the estimated fair value of the tangible net assets and identifiable intangible assets is recorded as goodwill. The identifiable intangible assets typically consist of developed technology, customer relationships, and in-process research and development costs. Transaction costs related to a business combination are expensed as incurred. In-process research and development acquired as part of a business combination is accounted for as an indefinite-lived intangible asset until the related research and development project gains regulatory approval or is discontinued.

We typically engage external advisors to assist us in determining the fair value of acquired asset groups or business combinations, using valuation methodologies such as: the excess earnings, the discounted cash flow, Monte Carlo, or the relief from royalty methods. The determination of fair value in accordance with the fair value measurement framework requires significant judgments and estimates, including, but not limited to: timing of product life cycles, estimates of future revenues, estimates of profitability for new or acquired products, cost estimates for new or changed manufacturing processes, estimates of the cost or timing of obtaining regulatory approvals, estimates of the success of competitive products, and discount rates and represent Level 3 measurements. We, in consultation with our advisors, make these estimates based on our prior experiences and industry knowledge. We believe that our estimates are reasonable, but actual results could differ significantly from our estimates. A significant change in our estimates used to value acquired asset groups or business combinations could result in future write-downs of tangible or intangible assets acquired by us and, therefore, could materially impact our financial position and profitability. If the value of the liabilities assumed by us, including contingent liabilities, is determined to be significantly different from the amounts previously recorded in purchase accounting, we may need to record additional expenses or write-downs in future periods, which could materially impact our financial position and profitability.

New Accounting Pronouncements

See Part II, Item 8, Note 1 of "Notes to Consolidated Financial Statements" for further discussion of new accounting standards that have been adopted or are being evaluated for future adoption.

Results of Operations

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

(Tables in thousands)

Revenues

	Revenues for the Twelve Months Ended December 31,			Revenues as a Percentage of Total Revenues for the Twelve Months Ended December 31,			
	2022		2021	Percent Change	2022	2021	
Products:							
Aortic stent grafts	\$ 92,752	\$	85,387	9 %	29 %	28 %	
Surgical sealants	65,379		70,714	-8 %	21 %	24 %	
On-X	63,904		57,363	11 %	20 %	19 %	
Other	8,318		8,133	2 %	3 %	3 %	
Total products	230,353		221,597	4 %	73 %	74 %	
Preservation services	83,436		77,239	8 %	27 %	26 %	
Total	\$ 313,789	\$	298,836	5 %	100 %	100 %	

Revenues increased 5% for the twelve months ended December 31, 2022 was due to an increase in revenues from aortic stent grafts, On-X products, preservation services, and other products, partially offset by a decrease in revenues from surgical sealants. Excluding the effects of foreign exchange, revenues increased 9% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. Revenues for the twelve months ended December 31, 2021 were negatively impacted in certain regions by delays or cancellations of some surgical procedures as a result of reduced hospital capacity and staffing and hospital restrictions due to the COVID-19 pandemic. The revenue impact from COVID-19 was smaller and varied regionally during the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021.

A detailed discussion of the changes in product revenues and preservation services revenues for the twelve months ended December 31, 2022 is presented below.

Products

Revenues from products increased 4% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The increase was due to an increase in revenues from aortic stent grafts, On-X products, and other products, partially offset by a decrease in revenues from surgical sealants. A discussion of the changes in product revenues for aortic stent grafts, surgical sealants, On-X, and other product revenues is presented below.

Sales of certain products through our direct sales force and distributors across Europe and various other countries are denominated in a variety of currencies including Euros, British Pounds, Polish Zlotys, Swiss Francs, Brazilian Reals, and Canadian Dollars, with a concentration denominated in Euros. Each currency is subject to exchange rate fluctuations. For the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021, the US Dollar strengthened in comparison to major currencies, resulting in revenue decreases when these foreign currency denominated transactions were translated into US Dollars. Future changes in these exchange rates could have a material, adverse effect on our revenues denominated in these currencies. Additionally, our sales to many distributors around the world are denominated in US Dollars, and although these sales are not directly impacted by currency exchange rates, we believe that some of our distributors may delay or reduce purchases of products in US Dollars depending on the relative price of these goods in their local currencies.

Aortic Stent Grafts

Aortic stent grafts include aortic arch stent grafts, abdominal stent grafts, synthetic vascular grafts, and original equipment manufacturing ("OEM") aortic stent graft products. Aortic arch stent grafts include our E-vita Open NEO, E-vita Open Plus, AMDS, NEXUS, and E-vita Thoracic 3G products. Abdominal stent grafts include our E-xtra Design Engineering, E-nside, E-tegra, E-ventus BX, and E-liac products. Aortic stent grafts are used in endovascular and open vascular surgery for the treatment of complex aortic arch, thoracic, and abdominal aortic diseases. Our aortic stent grafts are primarily distributed in international markets.

Aortic stent grafts revenues increased 9% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021.

Aortic stent grafts revenues, excluding OEM, increased 10% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. This increase in revenue was primarily due to an increase in volume of units sold, which increased revenues by 20%, and an increase in average sales prices, which increased revenues by 1%, partially offset by the effect of foreign exchange rates, which decreased revenues by 11%.

On a constant currency basis, revenues for aortic stent grafts, excluding OEM, increased 22% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The increase in revenues was partially due to improved conditions from the COVID-19 pandemic for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. Revenues for the twelve months ended December 31, 2022 increased primarily in Europe, the Middle East, and Africa (collectively, "EMEA"), Canada, Asia Pacific ("APAC"), and Latin America ("LATAM"). The revenue increase in EMEA for the twelve months ended December 31, 2022 was due to increases in sales direct (to hospitals) and indirect (through distributor) markets. The revenue increase in APAC for the twelve months ended December 31, 2022 was primarily due to an increase in sales of newly launched aortic stent grafts and distributor buying patterns in certain markets. The revenue increase in LATAM for the twelve months ended December 31, 2022 was primarily due to market penetration in certain regions. OEM sales of aortic stent grafts accounted for less than 1% of product revenues for the twelve months ended December 31, 2022 and 2021.

Surgical Sealants

Surgical sealants include BioGlue products used as an adjunct to standard methods of achieving hemostasis (such as sutures and staples) in adult patients in open surgical repair of large vessels (such as aorta, femoral, and carotid arteries).

Revenues from the sales of surgical sealants decreased 8% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. This decrease in revenues was primarily due to a decrease in the volume and a change in the mix of milliliters sold, which decreased revenues by 5%, and the effect of foreign exchange rates, which decreased revenues by 3%.

On a constant currency basis, revenues from the sales of surgical sealants decreased 5% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The decrease in revenues was primarily due to decreases in revenues in North America and EMEA, partially offset by increases in revenues in APAC and LATAM.

During the twelve months ended December 31, 2021 revenues from the sales of surgical sealants in North America were larger than in the twelve months ended December 31, 2022, primarily due to inventory restocking orders placed during the first half of 2021 as hospitals experienced reduced impact from the COVID-19 pandemic and began resuming more normal operations. Revenues were negatively impacted during the first quarter of 2022 due to delays and cancellations of some surgical procedures due to hospital staffing challenges as a result of a new COVID-19 variant.

During the twelve months ended December 31, 2022 revenues from sales of surgical sealants in EMEA were adversely impacted primarily due to temporary commercialization restrictions resulting from the expiration of our BioGlue CE Mark during our transition to a new Notified Body. We received renewal of our BioGlue CE Mark and completed our Notified Body transition late in the fourth quarter of 2022.

Domestic revenues from surgical sealants accounted for 49% of total surgical sealant revenues for the twelve months ended December 31, 2022 and 51% of total surgical sealant revenues for the twelve months ended December 31, 2021.

On-X

The On-X catalogue of products includes the On-X prosthetic aortic and mitral heart valves and the On-X ascending aortic prosthesis ("AAP") for heart valve replacement. On-X product revenues also include revenues from the distribution of CarbonAid® CO₂ diffusion catheters and from the sale of Chord-X® ePTFE sutures for mitral chordal replacement. On-X also generates revenue from pyrolytic carbon coating services for OEM customers.

On-X product revenues increased 11% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021.

On-X product revenues, excluding OEM, increased 11% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. This increase in revenues was primarily due to an increase in volume of units sold, which increased revenues by 10%, and an increase in average sales prices, which increased revenues by 3%, partially offset by the effect of foreign exchange rates, which decreased revenues by 2%.

On a constant currency basis, On-X revenues, excluding OEM, increased 13% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The increase in revenues was primarily due to revenue increases in North America, EMEA, and LATAM. The revenue increases in these markets were partially due to improved conditions from the COVID-19 pandemic for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The increase in revenues was also impacted by customer buying patterns in North America, an increase of shipments primarily in direct markets in EMEA, and market penetration in certain regions in LATAM. On-X OEM sales accounted for less than 1% of product revenues for the twelve months ended December 31, 2022 and 2021.

Domestic revenues from On-X accounted for 63% of total On-X revenues for the twelve months ended December 31, 2022, and 62% of On-X revenues for the twelve months ended December 31, 2021.

Other

Other revenues are comprised of PhotoFix, PerClot (prior to the Baxter Transaction, described below), and CardioGenesis cardiac laser therapy product revenues.

On July 28, 2021 we entered into an asset purchase agreement and other ancillary agreements related to the sale of PerClot, a polysaccharide hemostatic agent used in surgery, to Baxter, and an agreement to terminate all of our material agreements with Starch Medical, Inc. ("SMI") related to PerClot (collectively the "Baxter Transaction").

Other revenues increased 2% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021.

The increase in other revenues for the twelve months ended December 31, 2022 was primarily due to an increase in CardioGenesis cardiac laser therapy product services, partially offset by a decrease in PerClot product revenues. The increase in CardioGenesis cardiac therapy product revenues for the twelve months ended December 31, 2022 was primarily due to our ability to resume limited sales of handpieces during the fourth quarter of 2021, as further described below. The decrease in PerClot product revenues for the twelve months ended December 31, 2022 was due to the Baxter Transaction, described in more detail in Part II, Item 8, Note 2 of "Notes to Consolidated Financial Statements" of this form 10-K.

Revenues from our CardioGenesis cardiac laser therapy product line historically consisted primarily of sales of handpieces and, in certain periods, the sale of laser consoles. During the nine months ended September 30, 2021 we had minimal revenues from the CardioGenesis cardiac laser therapy product line as we did not have a supply of handpieces due to the FDA's review of our supplier's change in manufacturing location. After obtaining authorization to resume commercial distribution, our supplier resumed manufacturing a limited supply of handpieces allowing us to resume limited sales during the fourth quarter of 2021. In February 2023 our supplier of handpieces informed us that the sole-source manufacturer of tubing used in the handpiece assembly had gone out of business and, because a new supplier has yet to be identified and qualified, they are exiting the business and will no longer be supplying handpieces effective immediately. We are evaluating the impact of this disruption on our business and possible avenues for resumption of supply including the evaluation of alternate suppliers and handpiece manufacturers. We don't expect revenues from the CardioGenesis cardiac laser therapy product line after the first quarter of 2023 until we qualify and obtain approval for a new hand piece manufacturing source.

Preservation Services

Preservation services include service revenues from processing cardiac and vascular tissues. Our cardiac valves are primarily used in cardiac replacement and reconstruction surgeries, including the Ross procedure, for patients with endocarditis or congenital heart defects. Our cardiac tissues are primarily distributed in domestic markets. The majority of our vascular preservation services revenues are related to shipments of saphenous veins, which are mainly used in peripheral vascular reconstruction surgeries to avoid limb amputations. Competition with synthetic product alternatives and the availability of tissues for processing are key factors affecting revenue volume that can fluctuate from quarter to quarter. Our vascular tissues are primarily distributed in domestic markets.

We continue to evaluate modifications to our tissue processing procedures in an effort to improve tissue processing throughput, reduce costs, and maintain quality across our tissue processing business. Preservation services revenues, particularly revenues for certain high-demand cardiac tissues, can vary from quarter to quarter and year to year due to a variety of factors, including quantity and type of incoming tissues, yields of tissue through the preservation process, timing of receipt of donor information, timing of the release of tissues for implant, demand for certain tissue types due to the number and type of procedures being performed, and pressures from competing products or services.

In the fourth quarter of 2020 we became aware that a supplier shipped to us a saline solution lot that we use in our tissue processing that contained some contamination in a small number of bottles of the solution lot. The contamination was identified by our in-process quality controls. The contaminated solution was estimated to have impacted a small percentage of tissue processed with this solution lot, causing us to write-off approximately \$826,000 of tissue in the fourth quarter of 2020. An additional \$5.0 million of tissue was quarantined in process pending further testing. Upon completion and FDA acceptance of the testing, we began releasing tissue meeting our release criteria late in the second quarter of 2021. We believe that the written-off and quarantined tissue impacted the availability of tissue for distribution, which had a negative impact on revenue in the first quarter of 2021 and, to a lesser extent, the second quarter of 2021.

Revenues from tissue processing increased 8% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The increase in revenues was primarily due to an increase of tissues shipped, which increased revenues by 5%, and an increase in average sales prices, which increased revenues by 3%.

The increase in revenues from tissue processing for the twelve months ended December 31, 2022 was primarily due to an increase in medical procedures that utilize our cardiac tissues.

Cost of Products and Preservation Services

Cost of Products

		Twelve M Dece	lonths mber 3	
	_	2022		2021
Cost of products	5	72,166	\$	65,196

Cost of products increased 11% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. Cost of products for the twelve months ended December 31, 2022 and 2021 included costs related to aortic stent grafts, surgical sealants, On-X, and other products.

The increase in cost of products for the twelve months ended December 31, 2022 was primarily due to an increase in shipments of aortic stent grafts and On-X products as well as an increase in the cost of aortic stent grafts and BioGlue as compared to the twelve months ended December 31, 2021.

Cost of Preservation Services

		Twelve Mo Decem	
		2022	2021
Cost of preservation services	\$	39,100	\$ 36,126

Cost of preservation services increased 8% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. Cost of preservation services included costs for cardiac and vascular tissue preservation services.

The increase in cost of preservation services for the twelve months ended December 31, 2022 was primarily due to an increase in shipments of cardiac tissue and an increase in the processing cost of cardiac and vascular tissues, partially offset by a decrease in shipments of vascular tissue, as compared to the twelve months ended December 31, 2021.

Gross Margin

	Twelve M Dece	onths 1 mber 3	
	 2022		2021
Gross margin	\$ 202,523	\$	197,514
Gross margin as a percentage of total revenues	65 %	ó	66 %

Gross margin increased 3% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The increase for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021 was primarily due to an increase in shipments of aortic stent grafts, On-X products, and preservation services, partially offset by the effect of foreign exchange rates and an increase in cost of certain products. Gross margin as a percentage of total revenues decreased for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021, primarily due to an increase in product costs of certain products sold resulting from inflationary pressures of materials and labor, and to a lesser extent, the mix of products shipped, partially offset by favorable pricing of certain products during the twelve months ended December 31, 2022.

Operating Expenses

General, Administrative, and Marketing Expenses

	Twelve M Decei	onths I nber 3	
	 2022		2021
General, administrative, and marketing expenses	\$ 157,443	\$	169,774
General, administrative, and marketing expenses as a percentage of total revenues	50 %	o O	57 %

General, administrative, and marketing expenses decreased 7% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. The decrease in General, administrative, and marketing expenses for the twelve months ended December 31, 2022 was primarily due to a decrease in business development expenses partially offset by personnel-related expenses, travel, and marketing.

General, administrative, and marketing expenses included \$7.7 million of business development income for the twelve months ended December 31, 2022, as compared to \$16.1 million of business development expense for the twelve months ended December 31, 2021.

Business development income during the twelve months ended December 31, 2022 included a \$9.0 million fair value reduction for the contingent consideration related to Ascyrus Acquisition ("Ascyrus contingent consideration") further described in Part II, Item 8, Note 3 of "Ascyrus Acquisition" of this form 10-K. Business development expenses during the twelve months ended December 31, 2021 included a \$4.9 million expense related to the impairment of the Endospan Option further described in Part II, Item 8, Note 4 of "Endospan Agreements" of this form 10-K and \$9.7 million expense related to an increase in the fair value of the Ascyrus contingent consideration.

Research and Development Expenses

	Twelve M Decer	onths E	
	2022		2021
ф	20.070	Ф	25.546

	2022	2021
Research and development expenses	\$ 38,879	\$ 35,546
Research and development expenses as a percentage of total revenues	12 %	12 %

Research and development expenses increased 9% for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021. Research and development spending for the twelve months ended December 31, 2022 and 2021 was primarily focused on clinical work to gain regulatory approvals for On-X, certain aortic stent grafts, and PerClot products.

On September 23, 2022 we stopped the PROACT Xa clinical trial as recommended by the trial's independent Data and Safety Monitoring Board. The PROACT Xa clinical trial was a prospective, randomized, trial designed to determine if patients with On-X mechanical aortic valves could be maintained safely and effectively on apixaban rather than on warfarin. As a result of PROACT Xa's early termination, we recorded \$4.5 million of termination and wind-down expenses that are included in Research and development operating expenses on the Consolidated Statements of Operations and Comprehensive Loss for the twelve months ended December 31, 2022. The majority of these costs include administrative costs that we paid during the fourth quarter of 2022 and anticipate paying during the first quarter of 2023, as well as the estimated cost of clinical drugs purchased for patients participating in the study that are not expected to be recovered.

Research and development expenses for the twelve months ended December 31, 2022 also include \$1.9 million related to PerClot pre-launch inventory manufactured as part of the Baxter transaction.

Gain from Sale of Non-Financial Assets

Gain from sale of non-financial assets for the twelve months ended December 31, 2021 consisted of the net \$15.9 million gain from the sale of PerClot assets as part of the Baxter Transaction on July 28, 2021.

Interest Expense

Interest expense was \$18.2 million and \$16.9 million for the twelve months ended December 31, 2022 and 2021, respectively. Interest expense for the twelve months ended December 31, 2022 and 2021 relates to interest on debt and uncertain tax positions.

Other Expense, Net

Other expense, net was \$3.1 million and \$6.1 million for the twelve months ended December 31, 2022 and 2021, respectively. Other expense, net for the twelve months ended December 31, 2022 primarily includes the realized and unrealized effects of foreign currency gains and losses. Other expense, net for the twelve months ended December 31, 2021 primarily includes realized and unrealized effects of foreign currency gains and losses and fair value adjustments of financial instruments.

Earnings

(Table in thousands, except per share data)

	Twelve Mo Decem	
	2022	2021
Loss before income taxes	\$ (14,984)	\$ (14,827)
Income tax expense	4,208	7
Net loss	\$ (19,192)	\$ (14,834)
Diluted loss per common share	\$ (0.48)	\$ (0.38)
Diluted weighted-average common shares outstanding	40,032	38,983

We incurred a loss before income taxes for the twelve months ended December 31, 2022 and 2021. The loss before income taxes for the twelve months ended December 31, 2022 was negatively impacted by an increase in certain operating expenses to support revenue expansion, and an increase in investments in the research and development pipeline. The loss before income taxes was partially offset by the change in fair value of the Ascyrus contingent consideration for the twelve months ended December 31, 2022. The loss before income taxes for the twelve months ended December 31, 2021 was primarily due to business development expenses primarily related to the Ascyrus contingent consideration and investments in the research and development pipeline. Revenues for the twelve months ended December 31, 2022 and 2021 were also unfavorably impacted by delays or cancellations of some surgical procedures as a result of reduced hospital capacity and staffing and hospital restrictions due to the COVID-19 pandemic in certain regions. The revenue impact from COVID-19 was smaller and varied regionally during the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021.

Our effective income tax rate was an expense of 28% for the twelve months ended December 31, 2022, as compared to break-even for the twelve months ended December 31, 2021. The change in the tax rate for the twelve months ended December 31, 2022 was primarily due to a decrease in the excess tax benefit related to stock compensation, an increase in the estimated current year valuation allowance, an increase in unfavorable prior year tax return true-ups, and an increase in the benefit related to uncertain tax position statute expirations for the twelve months ended December 31, 2022, as compared to the twelve months ended December 31, 2021.

Our income tax rate for the twelve months ended December 31, 2022 was primarily affected by an increase in the valuation allowance on current year items, nondeductible executive compensation expenses, and uncertain tax position expenses. These tax expenses were partially offset by the research and development tax credit.

Our income tax rate for the twelve months ended December 31, 2021 was primarily affected by an increase in the valuation allowance on current year items, foreign expense items, non-deductible executive compensation expenses, and the recording of a tax reserve on prior year items. These tax expenses were partially offset by the reduction of a valuation allowance on prior year items, the research and development tax credit, and releases of uncertain tax position liabilities.

We experienced a net loss and diluted loss per common share for the twelve months ended December 31, 2022 and 2021. Net loss and diluted loss per common share for the twelve months ended December 31, 2022 was primarily due to an increase in loss before income taxes, as discussed above.

Seasonality

As a result of the uncertainty and other impacts of the COVID-19 pandemic and the resulting shifts of timing in some revenue, our historically observable seasonality of revenues has been impacted or obscured in 2021 and 2022 and potentially beyond.

Historically, we believe the demand for most of our aortic stent grafts is seasonal, with a decline in demand generally occurring in the third quarter due to the summer holiday season in Europe. We are uncertain whether the demand for AMDS and NEXUS products is seasonal, as these products have not fully penetrated many markets and, therefore, the nature of any seasonal trends may not yet be obvious.

Historically, we believe the demand for BioGlue and On-X products is seasonal, with a decline in demand generally occurring in the third quarter followed by stronger demand in the fourth quarter. We believe that this trend may be due to the summer holiday season in Europe and the US.

We do not believe the demand for our other products is seasonal.

Demand for our cardiac preservation services has traditionally been seasonal, with peak demand generally occurring in the third quarter. We believe this trend for cardiac preservation services is primarily due to the high number of surgeries scheduled during the summer months for school-aged patients. Based on experience in recent years, we believe that this trend is lessening as we are distributing a higher percentage of our tissues for use in adult populations.

Demand for our vascular preservation services has also traditionally been seasonal, with lowest demand generally occurring in the fourth quarter. We believe this trend for vascular preservation services is primarily due to fewer vascular surgeries being scheduled during the winter holiday months.

Liquidity and Capital Resources

Net Working Capital

At December 31, 2022 net working capital (current assets of \$247.3 million less current liabilities of \$49.7 million) was \$197.6 million, with a current ratio (current assets divided by current liabilities) of 5 to 1, as compared to net working capital of \$202.7 million and a current ratio of 6 to 1 at December 31, 2021.

Overall Liquidity and Capital Resources

Our primary cash requirements for the twelve months ended December 31, 2022 were for general working capital needs, interest and principal payments under our Credit Agreement (defined below), interest payments under our Convertible Senior Notes (defined below), capital expenditures for facilities and equipment, and repurchases of stock to cover tax withholdings. We funded our cash requirements through our existing cash reserves, proceeds from stock option exercises, and the Baxter Transaction described above.

We believe our cash from operations and existing cash and cash equivalents will enable us to meet our current operational liquidity needs for at least the next twelve months. Our future cash requirements are expected to include interest and principal payments under our Credit Agreement and Convertible Senior Notes (described in "Significant Sources and Uses of Liquidity" section below), expenditures for clinical trials, research and development expenditures, general working capital needs, capital expenditures, and other corporate purposes and may include cash to fund business development activities including obligations in the Endospan and Ascyrus agreements. These items may have a significant effect on our future cash flows during the next twelve months. Subject to the terms of our Credit Agreement, we may seek additional borrowing capacity or financing, pursuant to our current or any future shelf registration statement, for general corporate purposes or to fund other future cash requirements. If we undertake any further significant business development activity, we may need to finance such activities by obtaining additional debt financing or using a registration statement to sell equity securities. There can be no assurance that we will be able to obtain any additional debt or equity financing at the time needed or that such financing will be available on terms that are favorable or acceptable to us.

Significant Sources and Uses of Liquidity

On December 1, 2017 we entered into a credit and guaranty agreement for a \$255.0 million senior secured credit facility, consisting of a \$225.0 million secured term loan facility (the "Term Loan Facility") and a \$30.0 million secured revolving credit facility (the "Revolving Credit Facility" and, together with the Term Loan Facility, the "Credit Agreement"). We and each of our existing domestic subsidiaries (subject to certain exceptions and exclusions) guarantee the obligations under the Credit Agreement (the "Guarantors"). The Credit Agreement is secured by a security interest in substantially all existing and after-acquired real and personal property (subject to certain exceptions and exclusions) of us and the Guarantors.

On June 2, 2021 we entered into an amendment to our Credit Agreement to extend the maturity dates of both the Company's Term Loan and its Revolving Credit Facility. As part of the amendment, the maturity dates of both the Company's Term Loan and its Revolving Credit Facility were each extended by two and one-half years, until June 1, 2027 and June 1, 2025, respectively, subject to earlier springing maturities if our 4.25% Convertible Senior Notes, described below, remain outstanding on April 1, 2025 and December 31, 2024, respectively. With respect to the Term Loan, if the Convertible Senior Notes remain outstanding on April 1, 2025, the Term Loan's maturity date will be April 1, 2025, or, if the Convertible Senior Notes' own maturity date has been extended, the earlier of (i) 91 days prior to the Convertible Senior Notes' new maturity date and (ii) June 1, 2027. In the case of the Revolving Credit Facility, if the Convertible Senior Notes are still outstanding on December 31, 2024, the Revolving Credit Facility's maturity date will be either December 31, 2024 or, if the Convertible Senior Notes' own maturity date has been extended, the earlier of (i) 182 days prior to the Convertible Senior Notes' new maturity date and (ii) June 1, 2025. Under the amendment, the Term Loan Facility bears interest, at our option, at a floating annual rate equal to either the base rate plus a margin of 2.50%, or LIBOR, plus a margin of 3.50%. Prior to the amendment, the optional floating annual rate was equal to either the base rate plus a margin of 2.25%, or LIBOR, plus a margin of 3.25%.

On December 19, 2022 in accordance with adopting ASU 2020-04 and 2021-01, we entered into an amendment to our Credit Agreement to replace the LIBOR based benchmark interest rate with the Secured Overnight Financing Rate ("SOFR") based benchmark interest rate for our Term Loan Facility and our Revolving Credit Facility. Based on historical analysis of the differences between the benchmark rates, SOFR is adjusted to arrive at a Term SOFR rate that serves as the replacement base rate for LIBOR under our amended credit facilities. Under this amendment, at the maturity of our existing LIBOR-based loan on December 30, 2022, the interest rate at the repricing of our Term Loan Facility was calculated as Term SOFR plus a fixed percentage credit spread of 3.50%. The loan under the Revolving Credit Facility bears interest at Term SOFR plus a margin of between 4.00% and 4.25%, depending on our consolidated leverage ratio. As of December 31, 2022 the aggregate interest rate of the Credit Agreement was 8.34% per annum.

On June 18, 2020 we issued \$100.0 million aggregate principal amount of 4.25% Convertible Senior Notes with a maturity date of July 1, 2025 (the "Convertible Senior Notes"). The net proceeds from this offering, after deducting initial purchasers' discounts and costs directly related to this offering, were approximately \$96.5 million. On January 1, 2021 we adopted ASU 2020-06 and adjusted the carrying balance of the Convertible Senior Notes to notional. The Convertible Senior Notes balance was \$100.0 million recorded in Long-term debt on the Consolidated Balance Sheets as of December 31, 2021. The Convertible Senior Notes may be settled in cash, stock, or a combination thereof, solely at our discretion. The initial conversion rate of the Convertible Senior Notes is 42.6203 shares per \$1,000 principal amount, which is equivalent to a conversion price of approximately \$23.46 per share, subject to adjustments. We use the if-converted method for assumed conversion of the Convertible Senior Notes for the diluted earnings per share calculation. The fair value and the effective interest rate of the Convertible Senior Notes as of December 31, 2022 was approximately \$87.6 million and 5.05%, respectively. The fair value was based on market prices observable for similar instruments and is considered Level 2 in the fair value hierarchy.

The interest expense recognized on the Convertible Senior Notes includes approximately \$4.9 million for the aggregate of the contractual coupon interest and the amortization of the debt issuance during the twelve months ended December 31, 2022 and 2021. Interest on the Convertible Senior Notes began accruing upon issuance and is payable semi-annually.

Holders of the Convertible Senior Notes may convert their notes at their option at any time prior to January 1, 2025 but only under the following circumstances: (i) during any calendar quarter commencing after the calendar quarter ending on September 30, 2020 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (ii) during the five business day period after any five consecutive trading day period in which the trading price per \$1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; (iii) we give a notice of redemption with respect to any or all of the notes, at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date; or (iv) upon the occurrence of specified corporate events. On or after January 1, 2025 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert their notes at any time, regardless of the foregoing circumstances.

We cannot redeem the Convertible Senior Notes before July 5, 2023. We can redeem them on or after July 5, 2023, in whole or in part, at our option, if the last reported sale price per share of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption. We may redeem for cash all or part of the Convertible Senior Notes at a redemption price equal to 100% of the principal amount of the redeemable Convertible Senior Notes, plus accrued and unpaid interest to, but excluding, the redemption date. No principal payments are due on the Convertible Senior Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the Convertible Senior Notes do not contain any financial covenants and do not restrict us from conducting significant restructuring transactions or issuing or repurchasing any of its other securities.

We have benefited from various aspects of the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") including a decrease in the amount of interest expense limitation in 2020 and the deferment of a portion of the 2020 employer's portion of social security tax into 2021 and 2022.

As of December 31, 2022 approximately 40% of our cash and cash equivalents were held in foreign jurisdictions.

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

	 Year Ended December 31,			
	 2022	2021		
Cash flows (used in) provided by:	 			
Operating activities	\$ (5,153) \$	(2,585)		
Investing activities	(10,715)	5,660		
Financing activities	(1,639)	(12,223)		
Effect of exchange rate changes on cash and cash equivalents	1,848	2,200		
Decrease in cash and cash equivalents	\$ (15,659) \$	(6,948)		

Net Cash Flows from Operating Activities

Net cash used in operating activities was \$5.2 million and \$2.6 million for the twelve months ended December 31, 2022 and 2021, respectively.

We use the indirect method to prepare our cash flow statement, and accordingly, the operating cash flows are based on our net loss, which is then adjusted to remove non-cash items, items classified as investing and financing cash flows, and for changes in operating assets and liabilities from the prior year end. For the twelve months ended December 31, 2022 these non-cash items primarily included \$22.4 million in depreciation and amortization expenses, \$12.3 million in non-cash compensation, \$9.0 million in fair value adjustments of financial instruments, \$7.4 million in non-cash lease expense, and \$1.7 million of deferred income tax changes.

Our working capital needs, or changes in operating assets and liabilities, also affected cash from operations. For the twelve months ended December 31, 2022 these changes included the unfavorable effect of \$13.3 million due to the timing differences between recording receivables and the receipt of cash, \$8.4 million due to an increase in inventory balances and deferred preservation costs, \$2.2 million due to an increase in prepaid expenses and other assets, and \$2.0 million due to the timing differences between the recording of accounts payable and other current liabilities.

Net Cash Flows from Investing Activities

Net cash used in investing activities was \$10.7 million for the twelve months ended December 31, 2022, as compared to net cash provided by investing activities of \$5.7 million for the twelve months ended December 31, 2021. During the twelve months ended December 31, 2022 cash flows used in investing activities primarily included \$9.0 million of cash used for capital expenditures. During the twelve months ended December 31, 2021 cash flows provided by investing activities included \$19.0 million of net proceeds from the sale of non-financial assets, partially offset by \$13.1 million of cash used for capital expenditures.

Net Cash Flows from Financing Activities

Net cash used in financing activities was \$1.6 million and \$12.2 million for the twelve months ended December 31, 2022 and 2021, respectively. The current year cash used in financing activities was primarily due to \$2.8 million repayment of debt and \$1.8 million for repurchases of common stock to cover tax withholdings, partially offset by \$3.4 million of proceeds from exercise of stock options and issuances of common stock.

Scheduled Contractual Obligations and Future Payments

Our long-term debt obligations and interest payments include \$314.8 million of scheduled principal payments and \$89.7 million in anticipated interest payments related to our Credit Agreement, Convertible Senior Notes, and other governmental loans.

We have contingent payment obligations that include up to \$100.0 million to be paid to the former shareholders of Ascyrus, upon the achievement of certain milestones. We are obliged to make a \$5.0 million third tranche payment under our loan agreement with Endospan upon receipt of certification that certain clinical trial milestones have been achieved. See "Overview" identified in Part II, Item 8, Note 3 of the "Notes to Consolidated Financial Statements" of this Form 10-K.

As part of the Baxter Transaction, we may be required to pay up to \$7.5 million to SMI if certain milestones are met. See "Overview" identified in Part II, Item 8, Note 2 of the "Notes to Consolidated Financial Statements" of this Form 10-K.

Our operating and finance lease obligations result from the lease of land and buildings that comprise our corporate headquarters and our various manufacturing facilities, leases related to additional manufacturing, office, and warehouse space, leases on company vehicles, and leases on a variety of office equipment and other equipment.

Capital Expenditures

Capital expenditures for the twelve months ended December 31, 2022 and 2021 were \$9.0 million and \$13.1 million, respectively. Capital expenditures in the twelve months ended December 31, 2022 were primarily related to computer software, routine purchases of manufacturing and tissue processing equipment, leasehold improvements needed to support our business, and computer equipment.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

Our interest income and interest expense are sensitive to changes in the general level of US interest rates. In this regard, changes in US interest rates affect the interest earned on our cash and cash equivalents of \$39.4 million as of December 31, 2022, and interest paid on the outstanding balances, if any, of our variable rate Revolving Credit Facility, Term Loan Facility, and Convertible Senior Notes. A 10% adverse change in interest rates, as compared to the rates experienced by us in the twelve months ended December 31, 2022 affecting our cash and cash equivalents, Term Loan Facility, Revolving Credit Facility, and Convertible Senior Notes would not have had a material impact on our financial position, profitability, or cash flows.

Foreign Currency Exchange Rate Risk

We have balances, such as cash, accounts receivable, accounts payable, and accruals that are denominated in foreign currencies. These foreign currency denominated balances are sensitive to changes in exchange rates. In this regard, changes in exchange rates could cause a change in the US Dollar equivalent of cash or funds that we will receive in payment for assets or that we would have to pay to settle liabilities. As a result, we could be required to record these changes as gains or losses on foreign currency translation. Realized and unrealized gains and losses were a loss of \$3.1 million, loss of \$5.5 million, and a gain of \$1.9 million, for the years ended December 31, 2022, 2021, and 2020, respectively.

We have revenues and expenses that are denominated in foreign currencies. Specifically, a portion of our international aortic stent and stent grafts, surgical sealants, On-X, and other product revenues are denominated in Euros, British Pounds, Swiss Francs, Polish Zlotys, Canadian Dollars, and Brazilian Reals and a portion of our General, administrative, and marketing expenses are denominated in Euros, British Pounds, Swiss Francs, Polish Zlotys, Canadian Dollars, Brazilian Reals, and Singapore Dollars. These foreign currency transactions are sensitive to changes in exchange rates. In this regard, changes in exchange rates could cause a change in the US Dollar equivalent of net income from transactions conducted in other currencies. As a result, we could recognize a reduction in revenues or an increase in expenses related to a change in exchange rates.

An additional 10% adverse change in exchange rates from the exchange rates in effect on December 31, 2022 could impact our financial position or cash flows by approximately \$7.0 million. An additional 10% adverse change in exchange rates from the weighted-average exchange rates experienced by us for the twelve months ended December 31, 2022 affecting our revenue and expense transactions denominated in foreign currencies, would not have had a material impact on our financial position or profitability.

Item 8. Financial Statements and Supplementary Data.

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Management's Report on Internal Controls over Financial Reporting

The management of Artivion, Inc. and subsidiaries ("Artivion" or "we") is responsible for establishing and maintaining adequate internal controls over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Artivion's internal control system was designed to provide reasonable assurance to Artivion's management and Board of Directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. 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.

Artivion management assessed the effectiveness of Artivion's internal controls over financial reporting as of December 31, 2022. In making this assessment, we used the criteria set forth in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment, we have determined that, as of December 31, 2022, our internal controls over financial reporting was effective based on those criteria.

Artivion's independent registered public accounting firm, Ernst & Young, LLP, has issued an audit report on the effectiveness of Artivion's internal controls over financial reporting as of December 31, 2022.

Artivion, Inc. February 23, 2023

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Artivion, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Artivion, Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive loss, cash flows and shareholders' equity for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 23, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter 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 account or disclosure to which it relates.

Deferred Preservation Costs

Description of the Matter

At December 31, 2022, the Company's deferred preservation costs balance was \$46.4 million. As discussed in Note 1 to the consolidated financial statements, the calculation of deferred preservation costs involves judgment and complexity and uses the same principles as inventory costing. Donated human tissue is procured from deceased human donors by organ and tissue procurement organizations ("OPOs") and tissue banks, that provide the tissue to the Company for processing, preservation, and distribution. Deferred preservation costs consist primarily of the procurement fees charged by the OPOs and tissue banks, direct labor and materials (including salary and fringe benefits, laboratory supplies and expenses, and freight-in charges), and indirect costs (including allocations of costs from support departments and facility allocations). Fixed production overhead costs are allocated based on actual tissue processing levels, to the extent that they are within the range of the facility's normal capacity. These costs are then allocated among the tissues processed during the period based on cost drivers, such as the number of donors or number of tissues processed. The Company applies a yield estimate to all tissues in process and in quarantine to estimate the portion of tissues that will ultimately become implantable. Estimated yields are based on the Company's actual historical yield experience with similar tissues and these estimates are evaluated periodically to determine whether the appropriate historical volume and time periods are being used to calculate the yields applied to in-process tissues to determine the equivalent units on hand at each period end.

Auditing management's deferred preservation costs was complex and required judgment due to the detailed calculations within the Company's methodology to determine the amount of preservation costs deferred, including the estimation of the number of in-process tissue equivalent units based on historical volumes and yields by tissue type that is utilized to determine the number of tissues in process that will ultimately become implantable to which the deferred costs will be applied.

How We Addressed the Matter in Our Audit We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the process used by management to calculate the Company's deferred preservation costs, including controls over management's review of the completeness and accuracy of the deferred preservation cost model and key inputs such as the historical yield information used to estimate the in-process equivalent units as a component of the deferred preservation costs, as discussed above.

To test the appropriateness of the amounts recorded as deferred preservation costs, we performed audit procedures that included, among others, testing the nature of costs being capitalized and the accuracy of the calculation of deferred preservation costs by agreeing the amounts to and testing the underlying reports and analyses supporting the calculation of costs to be capitalized. We tested the yield estimates applied to determine the equivalent units of in-process tissues by understanding and testing the historical information utilized and comparing the yields utilized in the period end model to those historical results. We also compared the reconciliation of the ending balance of deferred preservation costs as calculated in the Company's deferred preservation cost calculation model to amounts recorded in the general ledger.

/s/ Ernst & Young LLP We have served as the Company's auditor since 2013. Atlanta, Georgia February 23, 2023

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Artivion, Inc.

Opinion on Internal Control Over Financial Reporting

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

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive loss, cash flows and shareholders' equity for each of the three years in the period ended December 31, 2022, and the related notes and our report dated February 23, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young, LLP Atlanta, Georgia February 23, 2023

Artivion, Inc. and Subsidiaries Consolidated Balance Sheets

In Thousands, Except Per Share Data

	De	December 31,				
	2022		2021			
ASSETS						
Current assets:						
Cash and cash equivalents	\$ 39,3	51 \$	55,010			
Trade receivables, net	61,8	20	53,019			
Other receivables	7,7	64	5,086			
Inventories, net	74,4	78	76,971			
Deferred preservation costs, net	46,3	71	42,863			
Prepaid expenses and other	17,5	50	14,748			
Total current assets	247,3	34	247,697			
Goodwill	243,6	31	250,000			
Acquired technology, net	151,2	63	166,994			
Operating lease right-of-use assets, net	41,8	59	45,714			
Property and equipment, net	38,6	74	37,521			
Other intangibles, net	31,3	84	34,502			
Deferred income taxes	1,3	14	2,357			
Other long-term assets	7,3	39	8,267			
	-					
Total assets	\$ 762,7	98 \$	793,052			

Artivion, Inc. and Subsidiaries Consolidated Balance Sheets

In Thousands, Except Per Share Data

		December 31,			
		2022		2021	
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:	_				
Accounts payable	\$	12,004	\$	10,395	
Accrued compensation		13,810		13,163	
Accrued expenses		12,374		7,687	
Taxes payable		2,635		3,634	
Current maturities of operating leases		3,308		3,149	
Accrued procurement fees		2,111		3,689	
Current portion of long-term debt		1,608		1,630	
Current portion of finance lease obligation		513		528	
Other		1,312		1,078	
Total current liabilities		49,675		44,953	
Long-term debt		306,499		307,493	
Non-current maturities of operating leases		41,257		44,869	
Contingent consideration		40,400		49,400	
Deferred income taxes		24,499		28,799	
Deferred compensation liability		5,468		5,952	
Non-current finance lease obligations		3,644		4,374	
Other		7,027		6,484	
Total liabilities		478,469		492,324	
Commitments and contingencies					
Shareholders' equity:					
Preferred stock \$0.01 par value per share, 5,000 shares authorized, no shares issued Common stock \$0.01 par value per share, 75,000 shares authorized, 41,830 and 41,397 shares issued as of		_		_	
December 31, 2022 and 2021, respectively		418		414	
Additional paid-in capital		337,385		322,874	
Retained (deficit) earnings		(17,217)		1,975	
Accumulated other comprehensive loss		(21,609)		(9,887)	
Treasury stock at cost, 1,487 shares as of December 31, 2022 and 2021		(14,648)		(14,648)	
Total shareholders' equity		284,329		300,728	
Total liabilities and shareholders' equity	\$	762,798	\$	793,052	
Total liabilities and shareholders' equity	Ψ	102,170	Ψ	173,032	

Artivion, Inc. and Subsidiaries Consolidated Statements of Operations and Comprehensive Loss

In Thousands, Except Per Share Data

		Year Ended December 31,						
		2022		2021		2020		
Revenues:								
Products	\$	230,353	\$	221,597	\$	179,299		
Preservation services		83,436		77,239		73,928		
Total revenues		313,789		298,836		253,227		
Cost of products and preservation services:								
Products		72,166		65,196		50,128		
Preservation services		39,100		36,126		35,315		
Total cost of products and preservation services		111,266		101,322		85,443		
Gross margin		202,523		197,514		167,784		
Operating expenses:								
General, administrative, and marketing		157,443		169,774		141,136		
Research and development		38,879		35,546		24,207		
Total operating expenses		196,322		205,320		165,343		
Gain from sale of non-financial assets		_		(15,923)		_		
Operating income		6,201		8,117		2,441		
Interest expense		18,224		16,887		16,698		
Interest income		(147)		(79)		(217)		
Other expense, net		3,108		6,136		3,134		
Loss before income taxes		(14,984)		(14,827)		(17,174)		
Income tax expense (benefit)		4,208		7		(492)		
Net loss	\$	(19,192)	\$	(14,834)	\$	(16,682)		
Loss per share:								
Basic	\$	(0.48)	\$	(0.38)	\$	(0.44)		
Diluted	\$	(0.48)		(0.38)		(0.44)		
Weighted-average common shares outstanding:								
Basic		40,032		38,983		37,861		
Diluted		40,032		38,983		37,861		
Net loss	\$	(19,192)	S	(14,834)	S	(16,682)		
Other comprehensive (loss) income:	Ψ	(17,172)	Ψ	(14,004)	Ψ	(10,002)		
Foreign currency translation adjustments		(11,722)		(16,630)		15,332		
Comprehensive loss	\$	(30,914)	_	(31,464)	_	(1,350)		

Artivion, Inc. and Subsidiaries Consolidated Statements of Cash Flows

In Thousands

In Inou			
	2022	r Ended December 31, 2021	2020
			2020
Net cash flows from operating activities:	¢ (10.102) ¢	(14.024) Ф	(17,792)
Net loss	\$ (19,192) \$	5 (14,834) \$	(16,682)
Adjustments to reconcile net loss to net cash from operating activities:			
Depreciation and amortization	22,442	23,977	20,712
Non-cash compensation	12,344	10,711	6,912
Non-cash lease expense	7,432	7,521	7,145
Write-down of inventories and deferred preservation costs	4,374	5,377	3,443
Non-cash interest expense	1,832	2,005	3,656
Write-off of Endospan Option	_	4,944	
Change in fair value of long-term loan receivable	-	409	4,949
Gain on sale of non-financial assets	-	(15,923)	
Deferred income taxes	(1,717)	(4,470)	4,283
Change in fair value of contingent consideration	(9,000)	8,870	4,523
Other	2,268	2,060	124
Changes in anomating assets and liabilities.			
Changes in operating assets and liabilities:	(1.059)	(1.902)	(0.157
Accounts payable, accrued expenses, and other liabilities	(1,958)	(1,893)	(9,157
Prepaid expenses and other assets	(2,234)	(1,404)	(2,720
Inventories and deferred preservation costs	(8,404)	(18,375)	(24,757
Receivables	(13,340)	(11,560)	9,938
Net cash flows (used in) provided by operating activities	(5,153)	(2,585)	12,369
Net cash flows from investing activities:			
Proceeds from sale of non-financial assets, net	-	19,000	_
Payments for Endospan agreement		_	(5,000
Ascyrus Acquisition, net of cash acquired		_	(59,119
Acquisition of intangible assets	(1,699)	(972)	(1,157
Capital expenditures	(9,016)	(13,091)	(7,328
Other		723	(524
Net cash flows (used in) provided by investing activities	(10,715)	5,660	(73,128
Net cash flows from financing activities:			
Proceeds from exercise of stock options and issuance of common stock	3,368	3,756	2,432
Proceeds from issuance of convertible debt	3,308	3,730	100,000
Proceeds from revolving line of credit	-	<u>—</u>	30,000
Proceeds from financing insurance premiums			2,815
	-	-	
Repayment of revolving line of credit		(2.210)	(30,000)
Payment of debt issuance costs	—	(2,219)	(3,647
Payment of contingent consideration	(1.705)	(8,200)	(1.005
Redemption and repurchase of stock to cover tax withholdings	(1,795)	(1,914)	(1,995
Repayment of debt	(2,753)	(3,085)	(5,346
Other	(459)	(561)	(651)
Net cash flows (used in) provided by financing activities	(1,639)	(12,223)	93,608
Effect of exchange rate changes on cash and cash equivalents	1,848	2,200	(5,185
(Decrease) increase in cash and cash equivalents	(15,659)	(6,948)	27,664
Cash and cash equivalents, beginning of year	55,010	61,958	34,294
			61,958
Cash and cash equivalents, end of year	\$ 39,351	33,010 \$	01,938

Artivion, Inc. and Subsidiaries Consolidated Statements of Shareholders' Equity

In Thousands

		nmon ock		Additional Paid In Capital	j	Retained Earnings (Deficit)	C	Accumulated Other Comprehensive (Loss) Income	Tre: St	asur ock	y	Total Shareholders' Equity
	Shares	Amoun	t				_		Shares		Amount	
Balance at December 31, 2019	39,018	\$ 3	90	\$ 271,782	\$	36,704	\$	(8,589)	(1,484)	\$	(14,591)	\$ 285,696
Net loss	_	-	_	_		(16,682)		_	_		_	(16,682)
Other comprehensive income	_		_	_		_		15,332	_		_	15,332
Stock issued for the Ascyrus Acquisition	992		10	19,990		_		_	_		_	20,000
Equity component of the convertible note issuance	_		_	16,426		_		_	_		_	16,426
Equity compensation	296		3	7,501		_		_	_		_	7,504
Exercise of options	89		1	927		_		_	(3)		(57)	871
Employee stock purchase plan	83		1	1,560		_		_	_		_	1,561
Redemption and repurchase of stock to cover tax withholdings	(84)		(1)	(1,994)		_		_	_		_	(1,995)
Balance at December 31, 2020	40,394	\$ 40)4	\$ 316,192	\$	20,022	\$	6,743	(1,487)	\$	(14,648)	\$ 328,713
Net loss	_					(14,834)		_	_		_	(14,834)
Other comprehensive loss	_			_				(16,630)	_		_	(16,630)
Stock issued for contingent consideration	553		6	9,994		_			_		_	10,000
Adoption of ASU 2020-06	_			(16,426)		(3,213)		_	_		_	(19,639)
Equity compensation	260		3	11,274				_	_		_	11,277
Exercise of options	179		1	2,145		_		_	_		_	2,146
Employee stock purchase plan	87		1	1,608		_		_	_		_	1,609
Redemption and repurchase of stock to cover tax withholdings	(76)		(1)	(1,913)		_		_	_		_	(1,914)
Balance at December 31, 2021	41,397	\$ 4	14	\$ 322,874	\$	1,975	\$	(9,887)	(1,487)	\$	(14,648)	\$ 300,728
Net loss	_			_		(19,192)			_		_	(19,192)
Other comprehensive loss	_		_	_				(11,722)	_		_	(11,722)
Equity compensation	282		3	12,939		_			_		_	12,942
Exercise of options	151		1	1,788		_		_	_		_	1,789
Employee stock purchase plan	95		1	1,578		_		_	_		_	1,579
Redemption and repurchase of stock to cover tax withholdings	(95)		(1)	(1,794)		_		_	_		_	(1,795)
Balance at December 31, 2022	41,830	\$ 4	18	\$ 337,385	\$	(17,217)	\$	(21,609)	(1,487)	\$	(14,648)	\$ 284,329

Artivion, Inc. and Subsidiaries Notes to Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting Policies

Nature of Business

Artivion, Inc. ("Artivion," the "Company," "we," or "us"), is a leader in the manufacturing, processing, and distribution of medical devices and implantable human tissues used in cardiac and vascular surgical procedures for patients with aortic disease. We have four major product families: aortic stent grafts, surgical sealants, On-X® mechanical heart valves and related surgical products, and implantable cardiac and vascular human tissues. Aortic stent grafts include aortic arch stent grafts, abdominal stent grafts, and synthetic vascular grafts. Aortic arch stent grafts include our E-vita Open NEO, E-vita Open Plus, AMDS, NEXUS, and E-vita Thoracic 3G products. Abdominal stent grafts include our E-xtra Design Engineering, E-nside, E-tegra, E-ventus BX, and E-liac products. Surgical sealants include BioGlue® Surgical Adhesive ("BioGlue") products. In addition to these four major product families, we sell or distribute PhotoFix® bovine surgical patches, CardioGenesis® cardiac laser therapy, and PerClot® hemostatic powder (prior to the sale to a subsidiary of Baxter International, Inc. ("Baxter")).

Basis of Presentation and Principles of Consolidation

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("US GAAP"). The accompanying consolidated financial statements include the accounts of the Company and our wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. Certain prior-year amounts have been reclassified to conform to the current year presentation.

Foreign Currencies

Our revenues and expenses transacted in foreign currencies are remeasured as they occur at exchange rates in effect at the time of each transaction. Realized and unrealized gains and losses on foreign currency transactions are recorded as a component of Other expense, net on our Consolidated Statements of Operations and Comprehensive Loss. Realized and unrealized gains and losses were a loss of \$3.1 million, a loss of \$5.5 million, and a gain of \$1.8 million for the years ended December 31, 2022, 2021, and 2020, respectively. Our assets and liabilities denominated in foreign currencies are recognized at the exchange rate in effect at the time of each transaction. At period end, the assets and liabilities are translated at the exchange rate in effect as of the balance sheet date and are recorded as a separate component of Accumulated other comprehensive loss in the shareholders' equity section of our Consolidated Balance Sheets.

Use of Estimates

The preparation of the accompanying consolidated financial statements in conformity with US GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. Estimates and assumptions are used when accounting for allowance for doubtful accounts, inventory, deferred preservation costs, acquired assets or businesses, intangible assets, deferred income taxes, commitments and contingencies (including product and tissue processing liability claims, claims incurred but not reported, and amounts recoverable from insurance companies), stock based compensation, certain accrued liabilities (including accrued procurement fees, income taxes, and financial instruments including contingent consideration), and other items as appropriate.

Revenue Recognition

Contracts with Customers

We routinely enter into contracts with customers that include general commercial terms and conditions, notification requirements for price increases, shipping terms and, in most cases, prices for the products and services that we offer. These agreements, however, do not obligate us to provide goods or services to the customer, and there is no consideration promised to us at the onset of these arrangements. For customers without separate agreements, we have a standard list price established by geography and by currency for all products and services, and our invoices contain standard terms and conditions that are applicable to those customers where a separate agreement is not controlling. Our performance obligations are established when a customer submits a purchase order notification (in writing, electronically or verbally) for goods and services, and we accept the order. We identify performance obligations as the delivery of the requested product or service in appropriate quantities and to the location specified in the customer's contract and/or purchase order. We generally recognize revenue upon the satisfaction of these criteria when control of the product or service has been transferred to the customer at which time we have an unconditional right to receive payment. Our prices are fixed and are not affected by contingent events that could impact the transaction price. We do not offer price concessions and do not accept payment that is less than the price stated when we accept the purchase order, except in rare credit related circumstances. We do not have any material performance obligations where we are acting as an agent for another entity.

Revenues for products, including: aortic stent grafts, surgical sealants, On-X products, and other medical devices, are typically recognized at the time the product is shipped, at which time the title passes to the customer, and there are no further performance obligations. Revenues from consignment are recognized when the medical device is implanted. We recognize revenues for preservation services when tissue is shipped to the customer.

Warranty

Our general product warranties do not extend beyond an assurance that the products or services delivered will be consistent with stated specifications and do not include separate performance obligations. Warranties included with our CardioGenesis cardiac laser products provide for annual maintenance services, which are priced separately and are recognized as revenues at the stand-alone price over the service period, whether invoiced separately or recognized based on our allocation of the transaction price.

Significant Judgments in the Application of the Guidance in ASC 606

There are no significant judgments associated with the satisfaction of our performance obligations. We generally satisfy performance obligations upon shipment of the product or service obligation to the customer. This is consistent with the time in which the customer obtains control of the product or service. Performance obligations are also generally settled quickly after the purchase order acceptance, other than as identified for E-xtra Design Engineering products, therefore, the value of unsatisfied performance obligations at the end of any reporting period is immaterial.

For performance obligations provided through our E-xtra Design Engineering product line, we determine the value of our enforceable right to payment based on the time required and costs incurred for design services and manufacture of the in-process device in relation to the total inputs required to complete the device.

We consider variable consideration in establishing the transaction price. Forms of variable consideration potentially applicable to our arrangements include sales returns, rebates, volume-based bonuses, and prompt pay discounts. We use historical information along with an analysis of the expected value to properly calculate and to consider the need to constrain estimates of variable consideration. Such amounts are included as a reduction to revenue from the sale of products and services in the periods in which the related revenue is recognized and adjusted in future periods as necessary.

Commissions and Contract Costs

Sales commissions are earned upon completion of each performance obligation, and therefore, are expensed when incurred. These costs are included in General, administrative, and marketing expenses in the Consolidated Statements of Operations and Comprehensive Loss. We generally do not incur incremental charges associated with securing agreements with customers which would require capitalization and recovery over the life of the agreement.

Practical Expedients

Our payment terms for sales direct to customers are substantially less than the one-year collection period that falls within the practical expedient in the determination of whether a significant financing component exists.

Shipping and Handling Charges

Fees charged to customers for shipping and handling of products and tissues are included in product and preservation service revenues. The costs for shipping and handling of products and tissues are included as a component of cost of products and cost of preservation services.

Taxes Collected from Customers

Taxes collected on the value of transaction revenue are excluded from product and service revenues and cost of sales and are accrued in current liabilities until remitted to governmental authorities.

Advertising Costs

The costs to develop, produce, and communicate our advertising are expensed as incurred and are classified as General, administrative, and marketing expenses. The total amount of advertising expense included in our Consolidated Statements of Operations and Comprehensive Loss was \$1.6 million, \$1.0 million, and \$1.1 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Stock-Based Compensation

We have stock option and stock incentive plans for employees and non-employee directors that provide for grants of restricted stock awards ("RSA"s), restricted stock units ("RSU"s), performance stock units ("PSU"s), and options to purchase shares of our common stock at exercise prices generally equal to the fair values of such stock at the dates of grant. We also maintain a shareholder approved Employee Stock Purchase Plan (the "ESPP") for the benefit of our employees. The ESPP allows eligible employees the right to purchase common stock on a regular basis at the lower of 85% of the market price at the beginning or end of each offering period. The RSAs, RSUs, PSUs, and stock options granted by us typically vest over a one to three-year period. The stock options granted by us typically expire within seven years of the grant date.

We value our RSAs, RSUs, and PSUs based on the stock price on the date of grant. We expense the related compensation cost of RSAs and RSUs using the straight-line method over the vesting period. We expense the related compensation cost of PSUs based on the number of shares expected to be issued, if achievement of the performance component is probable, using a straight-line method over each vesting tranche of the award which results in accelerated recognition of expenses. The amount of compensation costs expensed related to PSUs is adjusted as needed if we deem that achievement of the performance component is no longer probable or if our expectation of the number of shares to be issued changes. We use a Black-Scholes model to value our stock option grants and expense the related compensation cost using the straight-line method over the vesting period. The fair value of our ESPP options is also determined using a Black-Scholes model and is expensed over the vesting period.

The fair value of stock options and ESPP options is determined on the grant date using assumptions for the expected term, volatility, dividend yield, and the risk-free interest rate. The expected term is primarily based on the contractual term of the option and our data related to historic exercise and post-vesting forfeiture patterns, which is adjusted based on our expectations of future results. Our anticipated volatility level is primarily based on the historic volatility of our common stock, adjusted to remove the effects of certain periods of unusual volatility not expected to recur, and adjusted based on our expectations of future volatility, for the life of the option or option group. Our model includes a zero-dividend yield assumption and we do not anticipate paying dividends in the future. The risk-free interest rate is based on recent US Treasury note auction results with a similar life to that of the option. Our model does not include a discount for post-vesting restrictions, as we have not issued awards with such restrictions.

The period expense for our stock compensation is determined based on the valuations discussed above and forfeitures are accounted for in the period awards are forfeited.

Income Per Common Share

Income per common share is computed using the two-class method, which requires us to include unvested RSAs that contain non-forfeitable rights to dividends (whether paid or unpaid) as participating securities in the income per common share calculation.

Under the two-class method, net income is allocated to the weighted-average number of common shares outstanding during the period and the weighted-average participating securities outstanding during the period. The portion of net income that is allocated to the participating securities is excluded from basic and dilutive net income per common share. Diluted net income per share is computed using the weighted-average number of common shares outstanding plus the dilutive effects of outstanding stock options and awards and other dilutive instruments as appropriate.

Financial Instruments

Our financial instruments include cash equivalents, accounts receivable, notes receivable, accounts payable, and debt obligations. The financial assets' and liabilities', such as receivables and accounts payable, carrying values approximate their fair value due to their short-term duration, and the carrying value of their debt obligations approximate fair value as they contain variable interest rates that approximate market values. Other financial instruments are recorded as discussed in the sections below.

Fair Value Measurements

We record certain financial instruments, including cash equivalents, at fair value on a recurring basis. We may make an irrevocable election to measure other financial instruments at fair value on an instrument-by-instrument basis. Fair value financial instruments are recorded in accordance with the fair value measurement framework

We also measure certain assets and liabilities at fair value on a non-recurring basis. These non-recurring valuations include evaluating assets such as certain financial assets, long-lived assets, and indefinite lived intangible assets for impairment, allocating value to assets in an acquired asset group, applying accounting for business combinations, and the initial recognition of liabilities such as contingent consideration. We use the fair value measurement framework to value these assets and liabilities and report these fair values in the periods in which they are recorded or written down.

The fair value measurement framework includes a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair values in their broad levels. These levels from highest to lowest priority are as follows:

- Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets or liabilities;
- Level 2: Quoted prices in active markets for similar assets or liabilities or observable prices that are based on inputs not quoted in active markets, but corroborated by market data; and
- Level 3: Unobservable inputs or valuation techniques that are used when little or no market data is available.

The determination of fair value and the assessment of a measurement's placement within the hierarchy requires judgment. Level 3 valuations often involve a higher degree of judgment and complexity. Level 3 valuations may require the use of various cost, market, or income valuation methodologies applied to our unobservable estimates and assumptions. Our assumptions could vary depending on the asset or liability value and the valuation method used. Such assumptions could include: estimates of prices, earnings, costs, actions of market participants, market factors, or the weighting of various valuation methods. We may also engage external advisors to assist in determining fair value, as appropriate.

Although we believe that the recorded fair values of our financial instruments are appropriate, these fair values may not be indicative of net realizable value or reflective of future fair values.

Cash and Cash Equivalents

Cash and cash equivalents consist primarily of highly liquid investments at the time of acquisition. The carrying value of cash equivalents approximates fair value. We maintain depository accounts with certain financial institutions. Although these depository accounts may exceed government insured depository limits, we have evaluated the credit worthiness of these applicable financial institutions and determined the risk of material financial loss due to the exposure of such credit risk to be minimal.

Cash Flow Supplemental Disclosures

Supplemental disclosures of cash flow information for the years ended December 31 (in thousands):

		2022	2021			2020
Cash paid during the year for:	_					
Interest	\$	14,243	\$	14,407	\$	13,049
Income taxes		9,244		5,483		4,122
Non-cash investing and financing activities:						
Operating lease right-of-use assets	\$	1,803	\$	31,726	\$	1,864
Issuance of common stock for Ascyrus Acquisition		_		_		20,000
Issuance of common stock for contingent consideration				10.000		

Accounts Receivable and Allowance for Doubtful Accounts

Our accounts receivable are primarily from hospitals and distributors that either use or distribute our products and tissues. We assess the likelihood of collection based on a number of factors, including past transaction history and the credit worthiness of the customer, as well as the potential increased risks related to international customers and large distributors. We determine the allowance for doubtful accounts based upon specific reserves for known collection issues, as well as a non-specific reserve based upon aging buckets. We charge off uncollectible amounts against the reserve in the period in which we determine they are uncollectible. Our accounts receivable balances are reported net of allowance for doubtful accounts of \$1.3 million and \$1.1 million as of December 31, 2022 and 2021, respectively.

Inventories, net

Inventories, net are comprised of finished goods for our product lines including: aortic stent grafts; surgical sealants; On-X products; CardioGenesis laser consoles, handpieces, and accessories; PhotoFix; other medical devices; work-in-process; and raw materials. Inventories for finished goods are valued at the lower of cost or net realizable value on a first-in, first-out basis and raw materials are valued on a moving average cost basis. Typically, upon shipment or upon implant of a medical device on consignment, revenue is recognized, and the related inventory costs are expensed as cost of products. Cost of products also includes, as applicable, lower of cost or net realizable value of write-downs and impairments for products not deemed to be recoverable and, as incurred, idle facility expense, excessive spoilage, extra freight, and re-handling costs.

Inventory costs for manufactured products consist primarily of direct labor and materials (including salary and fringe benefits, raw materials, and supplies) and indirect costs (including allocations of costs from departments that support manufacturing activities and facility allocations). The allocation of fixed production overhead costs is based on actual production levels, to the extent that they are within the range of the facility's normal capacity. Inventory costs for products purchased for resale or manufactured under contract consist primarily of the purchase cost, freight-in charges, and indirect costs as appropriate.

We regularly evaluate our inventory to determine if the costs are appropriately recorded at the lower of cost or net realizable value. We also evaluate our inventory for costs not deemed to be recoverable, including inventory not expected to ship prior to its expiration. Lower of cost or net realizable value write-downs are recorded if the book value exceeds the estimated net realizable value of the inventory, based on recent sales prices at the time of the evaluation. Impairment write-downs are recorded based on the book value of inventory deemed to be impaired. Actual results may differ from these estimates. Write-downs of inventory are expensed as cost of products, and these write-downs are permanent impairments that create a new cost basis, which cannot be restored to its previous levels if our estimates change.

We recorded write-downs to our inventory totaling \$4.0 million, \$4.8 million, and \$1.7 million for the years ended December 31, 2022, 2021, and 2020, respectively. The 2022 and 2021 write-downs were primarily related to aortic stent grafts inventory and On-X ascending aortic prosthesis ("AAP") inventory. The 2020 write-down was primarily related to aortic stent grafts inventory, On-X AAP inventory, and BioGlue inventory not expected to ship prior to the expiration date.

Deferred Preservation Costs, net

Deferred preservation costs include costs of cardiac and vascular tissues available for shipment, tissues currently in active processing, and tissues held in quarantine pending release to implantable status. By federal law, human tissues cannot be bought or sold; therefore, the tissues we preserve are not held as inventory. The costs we incur to procure and process cardiac and vascular tissues are instead accumulated and deferred. Deferred preservation costs are stated at the lower of cost or net realizable value on a first-in, first-out basis and are deferred until revenue is recognized. Upon shipment of tissue to an implanting facility, revenue is recognized, and the related deferred preservation costs are expensed as cost of preservation services. Cost of preservation services also includes, as applicable, lower of cost or net realizable value write-downs and impairments for tissues not deemed to be recoverable, and includes, as incurred, idle facility expense, excessive spoilage, extra freight, and re-handling costs.

The calculation of deferred preservation costs involves judgment and complexity and uses the same principles as inventory costing. Donated human tissue is procured from deceased human donors by organ and tissue procurement organizations ("OPOs") and tissue banks that provide the tissue to us for processing, preservation, and distribution. Deferred preservation costs consist primarily of the procurement fees charged by the OPOs and tissue banks, direct labor and materials (including salary and fringe benefits, laboratory supplies and expenses, and freight-in charges), and indirect costs (including allocations of costs from support departments and facility allocations). Fixed production overhead costs are allocated based on actual tissue processing levels, to the extent that they are within the range of the facility's normal capacity.

These costs are then allocated among the tissues processed during the period based on cost drivers, such as the number of donors or number of tissues processed. We apply a yield estimate to all tissues in process and in quarantine to estimate the portion of tissues that will ultimately become implantable. We estimate quarantine and in process yields based on our experience and reevaluate these estimates periodically. Actual yields could differ significantly from our estimates, which could result in a change in tissues available for shipment and could increase or decrease the balance of deferred preservation costs. These changes could result in additional cost of preservation services expense or could increase per tissue preservation costs, which would impact gross margins on tissue preservation services in future periods.

We regularly evaluate our deferred preservation costs to determine if the costs are appropriately recorded at the lower of cost or net realizable value. We also evaluate our deferred preservation costs for costs not deemed to be recoverable, including tissues not expected to ship prior to the expiration date of their packaging. Lower of cost or net realizable value write-downs are recorded if the tissue processing costs incurred exceed the estimated market value of the tissue services, based on recent average service fees at the time of the evaluation. Impairment write-downs are recorded based on the book value of tissues deemed to be impaired. Actual results may differ from these estimates. Write-downs of deferred preservation costs are expensed as cost of preservation services, and these write-downs are permanent impairments that create a new cost basis, which cannot be restored to its previous levels if our estimates change.

We recorded write-downs to our deferred preservation costs totaling \$369,000, \$575,000, and \$1.7 million for the years ended December 31, 2022, 2021, and 2020, respectively, primarily due to tissues not expected to ship prior to the expiration date of the packaging. In addition, write-offs during the year ended December 31, 2020 included \$826,000 of non-conforming tissues resulting from contaminated saline solution.

Property and Equipment, net

Property and equipment, net is stated at cost less depreciation. Depreciation expense is recorded over the estimated useful lives of the assets, generally three to ten years, on a straight-line basis. Leasehold improvements are amortized on a straight-line basis over the remaining lease term at the time the assets are capitalized or the estimated useful lives of the assets, whichever is shorter.

Property and equipment, net balance for the years ended December 31 was as follows (in thousands):

	2022	2021	
Equipment and software	\$ 72,480	\$ 73,820	
Leasehold improvements	47,384	39,175	
Furniture and fixtures	7,148	6,668	
Total property and equipment	 127,012	 119,663	
Less accumulated depreciation and amortization	(88,338)	(82,142)	
Property and equipment, net	\$ 38,674	\$ 37,521	

Depreciation expense for the years ended December 31 was as follows (in thousands):

	2022	2021	2020
Depreciation expense	\$ 7,132	\$ 7,157	\$ 6,948

Goodwill and Other Intangible Assets

Our intangible assets consist of goodwill, acquired technology, customer lists and relationships, patents, trademarks, and other intangible assets, as discussed in Note 7. Our goodwill is attributable to a segment or segments of our business, as appropriate, as the related acquired business that generated the goodwill is integrated into our operations. Upon divestiture of a component of our business, the goodwill related to the segment is allocated to the divested business using the relative fair value allocation method.

We evaluate our goodwill and other indefinite lived intangible assets for impairment on an annual basis during the fourth quarter of the year, and, if necessary, during interim periods if factors indicate that an impairment review is warranted. As of October 31, 2022 and 2021, our indefinite lived intangible assets consisted of goodwill, in-process research and development, acquired procurement contracts and agreements, and trademarks. We performed a valuation analysis of our indefinite lived intangible assets as of October 31, 2022 and determined that the fair value of the assets and the fair value of the segment more likely than not exceeded their associated carrying values and were, therefore, not impaired.

Our definite lived intangible assets consist of acquired technologies, customer lists and relationships, distribution and manufacturing rights and know-how, patents, and other intangible assets. We amortize our definite lived intangible assets over their expected useful lives using the straight-line method, which we believe approximates the period of economic benefits of the related assets. Our indefinite lived intangible assets do not amortize but are instead subject to periodic impairment testing as discussed in "Impairments of Long-Lived Assets and Indefinite Lived Intangible Assets" below.

Impairments of Long and Indefinite Lived Intangible Assets

Long-Lived Assets

We assess the potential impairment of our: (i) net property and equipment, (ii) amortizing intangible long-lived assets to be held and used and (iii) operating lease right-of-use assets whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors that could trigger an impairment review include, but are not limited to, the following:

- Significant underperformance relative to expected historical or projected future operating results;
- Significant negative industry or economic trends;
- Significant decline in our stock price for a sustained period; or
- Significant decline in our market capitalization relative to net book value.

If we determine that an impairment review is necessary, we will evaluate the assets or asset groups by comparing their carrying values to the sum of the undiscounted future cash flows expected to result from their use and eventual disposition. If the carrying values exceed the future cash flows, then the asset or asset group is considered impaired, and we will write down the value of the asset or asset group to its concluded fair value. For the years ended December 31, 2022, 2021, and 2020 we did not record an impairment of our long-lived assets as there were no indicators of impairment or the sum of the undiscounted future cash flows exceeded the carrying value of the long-lived asset (asset group).

Accrued Procurement Fees

Donated tissue is procured from deceased human donors by OPOs and tissue banks that provide the tissue to us for processing, preservation, and distribution. We reimburse the OPOs and tissue banks for their costs to recover the tissue and include these costs as part of deferred preservation costs, as discussed above. We accrue estimated procurement fees due to the OPOs and tissue banks at the time tissues are received based on contractual agreements between us and the OPOs and tissue banks.

Leases

We have operating and finance lease obligations resulting from the lease of land and buildings that comprise our corporate headquarters and various manufacturing facilities; leases related to additional manufacturing, office, and warehouse space; leases on Company vehicles; and leases on a variety of office and other equipment, as discussed in Note 9. Certain of our leases contain escalation clauses, rent concessions, and renewal options for additional periods.

We exercise judgment in the determination of whether a financial arrangement includes a lease and in determining the appropriate discount rates to be applied to leases based on our general collateralized credit standing and the geographical market considerations impacting lease rates across all locations. When available, we use the implicit discount rate in the lease contract to discount lease payments to present value. If an implicit discount rate is not available in the lease contract, we use our incremental borrowing rate. We elected the package of practical expedients that allow us to omit leases with initial terms of 12 months or less from our balance sheet, which are expensed on a straight-line basis over the life of the lease. We have elected not to separate lease and non-lease components for future leases.

Our leases do not include terms or conditions which would result in variable lease payments other than for small office equipment leases with an additional charge for volume of usage. These incremental payments are excluded from our calculation of lease liability and the related right-of-use asset. We do not include option terms in the determination of lease liabilities and the related right-of-use assets unless we determine at lease commencement that the exercise of the option is reasonably certain. Our leases do not contain residual value guarantee provisions or other restrictions or financial covenant provisions.

Debt Issuance Costs

Debt issuance costs related to our term loan and line of credit are capitalized and reported net of the current and long-term debt or as a prepaid asset when there are no outstanding borrowings. If there are unamortized debt issuance costs related to our line of credit but only borrowings on the term loan, these debt issuance costs will be combined with the debt issuance costs related to the term loan and reported net of the current and long-term debt for the term loan. We amortize debt issuance costs to interest expense on our term loan using the effective interest method over the life of the debt agreement. We amortize debt issuance costs to interest expense on our line of credit on a straight-line basis over the life of the debt agreement. Debt issuance costs related to our convertible debt agreement are amortized using the effective interest rate method as a direct deduction from the recorded debt issuance costs allocated to debt.

Liability Claims

In the normal course of business, we are made aware of adverse events involving our products and tissues. Future adverse events could ultimately give rise to a lawsuit against us, and liability claims may be asserted against us in the future based on past events that we are not aware of at the present time. We maintain claims-made insurance policies to mitigate our financial exposure to product and tissue processing liability claims. Claims-made insurance policies generally cover only those asserted claims and incidents that are reported to the insurance carrier while the policy is in effect. Thus, a claims-made policy does not generally represent a transfer of risk for claims and incidents that have been incurred but not reported to the insurance carrier during the policy period. Any punitive damage components of claims are uninsured.

We engage external advisors to assist us in estimating our liability and any related amount recoverable under our insurance policies as of each balance sheet date. We use a frequency-severity approach to estimate our unreported product and tissue processing liability claims, whereby projected losses are calculated by multiplying the estimated number of claims by the estimated average cost per claim. The estimated claims are determined based on the reported claim development method and the Bornhuetter-Ferguson method using a blend of our historical claim experience and industry data. The estimated cost per claim is calculated using a lognormal claims model blending our historical average cost per claim with industry claims data. We use a number of assumptions in order to estimate the unreported loss liability including: the future claim reporting time lag, the frequency of reported claims, the average cost per claim, and the maximum liability per claim. We believe that the assumptions we use provide a reasonable basis for our calculation. However, the accuracy of the estimates is limited by various factors, including, but not limited to, our specific conditions, uncertainties surrounding the assumptions used, and the scarcity of industry data directly relevant to our business activities. Due to these factors, actual results may differ significantly from our assumptions and from the amounts accrued.

We accrue our estimate of unreported product and tissue processing liability claims as a component of Other long-term liabilities and record the related recoverable insurance amounts as a component of Other long-term assets. The amounts recorded represent our estimate of the probable losses and anticipated recoveries for unreported claims related to products sold and services performed prior to the balance sheet date.

Legal Contingencies

We accrue losses from a legal contingency when the loss is both probable and reasonably estimable. The accuracy of our estimates of losses for legal contingencies is limited by uncertainties surrounding litigation. Therefore, actual results may differ significantly from the amounts accrued, if any. We accrue for legal contingencies as a component of accrued expenses and/or other long-term liabilities on our Consolidated Balance Sheets. Gains from legal contingencies are recorded when the contingency is resolved.

Uncertain Tax Positions

We periodically assess our uncertain tax positions and recognize tax benefits if they are "more-likely-than-not" to be upheld upon review by the appropriate taxing authority. We measure the tax benefit by determining the maximum amount that has a "greater than 50 percent likelihood" of ultimately being realized. We reverse previously accrued liabilities for uncertain tax positions when audits are concluded, statutes expire, administrative practices dictate that a liability is no longer warranted, or in other circumstances, as deemed necessary. These assessments can be complex, and we often obtain assistance from external advisors to make these assessments. We recognize interest and penalties related to uncertain tax positions in interest expense, net on our Consolidated Statements of Operations and Comprehensive Loss. See Note 8 for further discussion of our liabilities for uncertain tax positions.

Deferred Income Taxes

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and tax return purposes. We assess the recoverability of our deferred tax assets and provide a valuation allowance against our deferred tax assets when, as a result of this analysis, we believe it is more likely than not that some portion or all of our deferred tax assets will not be realized.

Assessing the recoverability of deferred tax assets involves judgment and complexity including the consideration of prudent and feasible tax planning. Estimates and judgments used in the determination of the need for a valuation allowance and in calculating the amount of a needed valuation allowance include, but are not limited to, the following:

- The ability to carry back deferred tax asset attributes to a prior tax year;
- Timing of the anticipated reversal of book/tax temporary differences;
- Projected future operating results;
- Anticipated future state tax apportionment;
- Timing and amounts of anticipated future taxable income;
- Evaluation of statutory limits regarding usage of certain tax assets; and
- Evaluation of the statutory periods over which certain tax assets can be utilized.

Significant changes in the factors above, or other factors, could affect our ability to use our deferred tax assets. Such changes could have a material, adverse impact on our profitability, financial position, and cash flows. We will continue to assess the recoverability of our deferred tax assets, as necessary, when we experience changes that could materially affect our prior determination of the recoverability of our deferred tax assets.

Valuation of Acquired Assets or Businesses

As part of our corporate strategy, we are seeking to identify and capitalize upon acquisition opportunities of complementary product lines and companies. We evaluate and account for acquired patents, licenses, distribution rights, and other tangible or intangible assets as the purchase of an asset group, or as a business combination, as appropriate. The determination of whether the purchase of a group of assets should be accounted for as an asset group or as a business combination requires judgment based on the weight of available evidence.

For the purchase of an asset group, we allocate the cost of the asset group, including transaction costs, to the individual assets purchased based on their relative estimated fair values. In-process research and development acquired as part of an asset group is expensed upon acquisition.

We account for business combinations using the acquisition method. Under this method, the allocation of the purchase price is based on the fair value of the tangible and identifiable intangible assets acquired and the liabilities assumed as of the date of the acquisition. The excess of the purchase price over the estimated fair value of the tangible net assets and identifiable intangible assets is recorded as goodwill. The identifiable intangible assets typically consist of developed technology, customer relationships, and in-process research and development costs. Transaction costs related to business combinations are expensed as incurred. In-process research and development acquired as part of a business combination is accounted for as an indefinite-lived intangible asset until the related research and development project gains regulatory approval or is discontinued.

We typically engage external advisors to assist us in determining the fair value of acquired asset groups or business combinations, using valuation methodologies such as: the excess earnings, the discounted cash flow, Monte Carlo, or the relief from royalty methods. The determination of fair value in accordance with the fair value measurement framework requires significant judgments and estimates, including, but not limited to: timing of product life cycles, estimates of future revenues, estimates of profitability for new or acquired products, cost estimates for new or changed manufacturing processes, estimates of the cost or timing of obtaining regulatory approvals, estimates of the success of competitive products, and discount rates and represent Level 3 measurements. We, in consultation with our advisors, make these estimates based on our prior experiences and industry knowledge. We believe that our estimates are reasonable, but actual results could differ significantly from our estimates. A significant change in our estimates used to value acquired asset groups or business combinations could result in future write-downs of tangible or intangible assets acquired by us and, therefore, could materially impact our financial position and profitability. If the value of the liabilities assumed by us, including contingent liabilities, is determined to be significantly different from the amounts previously recorded in purchase accounting, we may need to record additional expenses or write-downs in future periods, which could materially impact our financial position and profitability.

New Accounting Pronouncements

Recently Adopted

In March 2020 the Financial Accounting Standards Board (the "FASB") issued Accounting Standard Update ("ASU") 2020-04, Reference Rate Reform Topic 848 ("ASC 848"). The amendments in this ASU were put forth in response to the market transition from the LIBOR and other interbank offered rates to alternative reference rates. US GAAP requires entities to evaluate whether a contract modification, such as the replacement or change of a reference rate, results in the establishment of a new contract or continuation of an existing contract. ASC 848 allows an entity to elect not to apply certain modification accounting requirements to contracts affected by reference rate reform. The standard provides this temporary election through December 31, 2022 and cannot be applied to contract modifications that occur after December 31, 2022. In January 2021 the FASB issued ASU 2021-01, Reference Rate Reform (Topic 848). The objective of the new reference rate reform standard is to clarify the scope of Topic 848 and provide explicit guidance to help companies applying optional expedients and exceptions. We adopted ASU 2020-04 and ASU 2021-01 on a prospective basis in fiscal year 2022. The adoption of ASU 2020-04 and ASU 2021-01 did not have a material impact on our financial condition or results of operations.

In August 2020 the FASB issued ASU Update No. 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)* ("ASU 2020-06"). The update simplifies the accounting for convertible instruments by eliminating two accounting models (i.e., the cash conversion model and beneficial conversion feature model) and reducing the number of embedded conversion features that could be recognized separately from the host contract. ASU 2020-06 also enhances transparency and improves disclosures for convertible instruments and earnings per share guidance. On January 1, 2021 we adopted ASU 2020-06 using the modified retrospective approach and recorded \$20.4 million to increase long-term debt, \$3.2 million to reduce retained earnings, and \$16.4 million to reduce additional paid-in capital included on the Consolidated Balance Sheets. See Note 10 for further discussion of convertible debt.

In December 2019 the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). The amendments in this ASU simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The amendments also improve consistent application of and simplify accounting principles generally accepted in the United States of America ("GAAP") for other areas of Topic 740 by clarifying and amending existing guidance. The amendments are effective for public entities in fiscal years beginning after December 15, 2020 including interim periods within those fiscal years. We adopted ASU 2019-12 on January 1, 2021 and the adoption did not have a material impact on our financial condition or results of operations.

As of January 1, 2020 we adopted the Accounting Standards Codification ("ASC") No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). The purpose of Update No. 2016-13 is to replace the current incurred loss impairment methodology for financial assets measured at amortized cost with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information, including forecasted information, to develop credit loss estimates. Update No. 2016-13 is effective for annual periods beginning after December 15, 2019. The adoption of ASU 2016-13 did not result in a material effect on the Company's financial condition, results of operations, or cash flows.

2. Sale of PerClot

Overview

On July 28, 2021 we entered into an asset purchase agreement and other ancillary agreements related to the sale of PerClot to Baxter and an agreement to terminate all of our material agreements with Starch Medical, Inc. ("SMI") related to PerClot (collectively the "Baxter Transaction"). Under the terms of the Baxter Transaction, Baxter would pay an aggregate of up to \$60.8 million in consideration (we would receive up to \$45.8 million and SMI would receive up to \$15.0 million), consisting of (i) \$25.0 million at closing, of which \$6.0 million was paid to SMI; (ii) up to \$25.0 million upon our receipt of Premarket Approval ("PMA") from the US Food and Drug Administration (the "FDA") for PerClot and our transfer of the PMA to Baxter, of which up to \$6.0 million is payable to SMI, subject to certain reductions if PMA approval is delayed beyond December 31, 2022; and (iii) up to \$10.0 million upon Baxter's achievement of certain cumulative worldwide net sales of PerClot prior to December 31, 2026 and December 31, 2027, of which up to \$3.0 million is payable to SMI. In addition, at the conclusion of our manufacturing and supply services for Baxter, Baxter will pay \$780,000 upon the transfer of our PerClot manufacturing equipment. Under the terms of the Baxter Transaction, we will continue to provide to Baxter certain transition, manufacturing, and supply services relating to the sale of SMI PerClot outside of the US and manufacture and supply of PerClot to Baxter post PMA approval.

Accounting for the Transaction

Upon closing of the Baxter Transaction, we received \$25.0 million from Baxter and paid \$6.0 million to SMI. We derecognized intangible assets with a carrying value of \$1.6 million and wrote-off \$1.5 million of prepaid royalties previously recorded on our Consolidated Balance Sheets related to PerClot. Under the terms of the agreement, Baxter acquired intellectual property related to our development efforts for PerClot. We recorded a pre-tax gain of \$15.9 million, included as Gain from sale of non-financial assets within the Consolidated Statements of Operations and Comprehensive Loss for the year ended December 31, 2021. The PerClot product line was included as part of our Medical Devices segment.

3. Acquisition of Ascyrus

Overview

On September 2, 2020 we entered into a Securities Purchase Agreement (the "Ascyrus Agreement") to acquire 100% of the outstanding equity interests of Ascyrus Medical LLC ("Ascyrus"). Ascyrus developed the AMDS, the world's first aortic arch remodeling device for use in the treatment of acute Type A aortic dissections.

Under the terms of the Ascyrus Agreement, we will pay an aggregate of up to \$200.0 million in consideration, consisting of: (i) a cash payment of approximately \$60.0 million and the issuance of \$20.0 million in shares of Artivion common stock, in each case, that were delivered at the closing of the acquisition, (ii) a cash payment of \$10.0 million and the issuance of \$10.0 million in shares of Artivion common stock upon FDA approval of the Investigational Device Exemption ("IDE") application for the AMDS in 2021, (iii) if the FDA approves PMA application submitted for the AMDS, a cash payment of \$25.0 million, (iv) if regulatory approval of the AMDS is obtained in Japan on or before June 30, 2027, a cash payment of \$10.0 million and (vi) a potential additional consideration cash payment capped at \$55.0 million (or up to \$65.0 million to \$75.0 million if the Japanese or Chinese approvals are not secured on or before June 30, 2027 and those approval milestone payments are added to the potential additional consideration cash payment cap) calculated as two times the incremental worldwide sales of the AMDS (or any other acquired technology or derivatives of such acquired technology) outside of the European Union during the three-year period following the date the FDA approves a PMA application submitted for the AMDS.

Accounting for the Transaction

As part of the acquisition, we may be required to pay additional consideration in cash and equity up to \$120.0 million to the former shareholders of Ascyrus upon the achievement of certain milestones and the sales-based additional earnout described above. On September 2, 2020 the fair value of the total potential purchase consideration of \$200.0 million included the total purchase consideration, as well as the contingent consideration liability discussed below. Our allocation of the purchase consideration was allocated to Ascyrus's tangible and identifiable intangible assets acquired and liabilities assumed, based on their estimated fair values as of September 2, 2020.

The contingent consideration represents the estimated fair value of future potential payments. The fair value of the contingent consideration liability was estimated by discounting to present value the contingent payments expected to be made based on a probability-weighted scenario approach. We applied a discount rate based on our unsecured credit spread and the term commensurate risk-free rate to the additional consideration to be paid, and then applied a risk-based estimate of the probability of achieving each scenario to calculate the fair value of the contingent consideration. This fair value measurement was based on unobservable inputs, including management estimates and assumptions about the future achievement of milestones and future estimate of revenues, and is, therefore, classified as Level 3 within the fair value hierarchy presented in Note 5. We used a discount rate of approximately 12% and estimated future achievement of milestone dates between 2025 and 2026 to calculate the fair value of contingent consideration as of December 31, 2022. We will remeasure this liability at each reporting date and will record changes in the fair value of the contingent consideration in General, administrative, and marketing expenses on the Consolidated Statements of Operations and Comprehensive Loss. Increases or decreases in the fair value of the contingent consideration liability can result from changes in passage of time, discount rates, the timing and amount of our revenue estimates, and the timing and expectation of regulatory approvals.

We performed an assessment of the fair value of the contingent consideration and recorded \$9.0 million and \$9.5 million in fair value reductions for the years ended December 31, 2022 and 2021, respectively, in General, administrative, and marketing expenses on the Consolidated Statements of Operations and Comprehensive Loss, as a result of this assessment.

In December 2021 the FDA approved our IDE application for AMDS. Upon the approval, we funded a cash payment of \$10.0 million and issued \$10.0 million in shares of Artivion common stock pursuant to the Ascyrus Agreement. The contingent consideration liability of \$40.4 million and \$49.4 million is included in Other long-term liabilities as of December 31, 2022 and 2021, respectively, in the Consolidated Balance Sheets.

4. Agreements with Endospan

Exclusive Distribution Agreement and Securities Purchase Option Agreement

On September 11, 2019 Artivion's wholly owned subsidiary, JOTEC, entered into an exclusive distribution agreement ("Endospan Distribution Agreement") with Endospan Ltd. ("Endospan"), an Israeli corporation, pursuant to which JOTEC obtained exclusive distribution rights for NEXUS and accessories in certain countries in Europe in exchange for a fixed distribution fee of \$9.0 million paid in September 2019.

We also entered into a securities purchase option agreement ("Endospan Option") with Endospan for \$1.0 million paid in September 2019. The Endospan Option Agreement provides Artivion the option to purchase all the outstanding securities of Endospan from Endospan's securityholders at the time of acquisition, or the option to acquire all of Endospan's assets, in each case, for a price between \$350.0 and \$450.0 million before, or within a certain period of time or after FDA approval of NEXUS, with such option expiring if not exercised within 90 days after receiving notice that Endospan has received approval from the FDA for NEXUS.

Loan Agreement

Artivion and Endospan also entered into a loan agreement ("Endospan Loan"), dated September 11, 2019, in which Artivion agreed to provide Endospan a secured loan of up to \$15.0 million to be funded in three tranches of \$5.0 million each.

The first tranche of the Endospan Loan was funded upon execution of the agreement in September 2019. In September 2020 we funded the second tranche payment of \$5.0 million upon the certification of the NEXUS IDE from the FDA. The third tranche is required to be funded upon certification of enrollment of at least 50% of the required number of patients in the primary arm of the FDA approved clinical trial for NEXUS, in each case subject to Endospan's continued compliance with the Endospan Loan and certain other conditions. If a termination fee becomes payable by Endospan under the Endospan Distribution Agreement, it will be added to the amount payable to Artivion under the Endospan Loan.

Variable Interest Entity

We consolidate the results of a variable interest entity ("VIE") when it is determined that we are the primary beneficiary. Based on our initial evaluation of Endospan and the related agreements with Endospan, we determined that Endospan is a VIE. Although the arrangement with Endospan resulted in our holding a variable interest, it did not empower us to direct those activities of Endospan that most significantly impact the VIE economic performance. Therefore, we are not the primary beneficiary, and we have not consolidated Endospan into our financial results. Our payments to Endospan in September 2019 totaled \$15.0 million which included a \$9.0 million distribution fee, a \$1.0 million securities purchase option, and \$5.0 million for the first tranche of the Endospan Loan. An additional \$5.0 million was funded as part of the second tranche payment described above. We evaluated Endospan for VIE classification as of December 31, 2022 and determined that Endospan meets the criteria of a non-consolidating VIE. Our payments to date, including any loans, guarantees, and other subordinated financial support related to this VIE, totaled \$20.0 million as of December 31, 2022, representing our maximum exposure to loss, and were not individually significant to our consolidated financial statements.

Valuation

The agreements with Endospan were entered into concurrently and had certain terms that are interrelated. In our evaluation of the initial relative fair value of each of the Endospan agreements to determine the amount to record, we utilized discounted cash flows to estimate the fair market value for the Endospan Loan and for the Endospan Distribution Agreement. We estimated the fair value of the Endospan Option utilizing the Monte Carlo simulation. Inputs in our valuation of the Endospan agreements included cash payments and anticipated payments based on the executed agreements with Endospan, projected discounted cash flows in connection with the Endospan transaction, our expected internal rate of return and discount rates, and our assessed probability and timing of receipt of certification of certain approvals and milestones in obtaining FDA approval. Based on the initial fair value of the Endospan Loan and the relative fair values of the Endospan Distribution Agreement and Endospan Option Agreement, we recorded the Endospan Loan value of \$358,000 in Other long-term assets in the Consolidated Balance Sheets as of December 31, 2019. The value of the Endospan Distribution Agreement of \$3.5 million and \$5.5 million was included in Other Intangibles, net in the Consolidated Balance Sheets as of December 31, 2022, and 2021, respectively.

In the fourth quarter of December 31, 2021 we fully impaired the value of the Endospan Option primarily driven by a decrease in forecasted operating results. We recorded \$4.9 million impairment expense included in General, administrative, and marketing expense on the Consolidated Statements of Operations and Comprehensive Loss as of December 31, 2021.

We elected the fair value option for recording the Endospan Loan. We assess the fair value of the Endospan Loan based on quantitative and qualitative characteristics, and adjust the amount recorded to its current fair market value at each reporting period. We performed an assessment of the fair value of the Endospan Loan and determined that the loan fair value decreased and had no value as of December 31, 2022 and 2021. As a result of the fair value adjustment, we recorded an expense of \$409,000 in Other Expense on the Consolidated Statements of Operations and Comprehensive Loss as of December 31, 2021.

5. Financial Instruments

A summary of financial instruments measured at fair value was as follows (in thousands):

<u>December 31, 2022</u>		Level 1		Level 2		Level 3		Total
Cash equivalents:								
Money market funds	\$	10,098	\$		\$		\$	10,098
Total assets	\$	10,098	\$	_	\$	_	\$	10,098
Long-term liabilities:								
Contingent consideration		_		_		(40,400)		(40,400)
Total liabilities	\$		\$		\$	(40,400)	\$	(40,400)
December 31, 2021		Level 1		Level 2		Level 3		Total
December 31, 2021 Cash equivalents:		Level 1		Level 2		Level 3		Total
	\$		\$	Level 2	\$	Level 3	\$	Total 10,015
Cash equivalents:	\$ \$		\$ \$		\$ \$	Level 3 — — —	\$ \$	
Cash equivalents: Money market funds	\$ \$	10,015	<u> </u>		\$ \$	Level 3	\$ \$	10,015
Cash equivalents: Money market funds	\$ \$	10,015	<u> </u>		\$ \$	Level 3	\$ \$	10,015
Cash equivalents: Money market funds Total assets	\$ <u>\$</u>	10,015	<u> </u>		\$ \$	Level 3	\$ \$	10,015

We used prices quoted from our investment advisors to determine the Level 1 valuation of our investments in money market funds. The estimated market value of all cash equivalents is equal to cost basis as there were no gross realized gains or losses on cash equivalents for the years ended December 31, 2022, 2021, and 2020.

The fair value of the contingent consideration component of the Ascyrus acquisition was updated using Level 3 inputs. See Note 3 for further discussion of the Ascyrus acquisition. Changes in fair value of Level 3 assets and liabilities are listed in the tables below (in thousands):

	Contingent Consideration
Balance as of December 31, 2021	\$ (49,400)
Change in valuation	9,000
Balance as of December 31, 2022	\$ (40,400)

6. Inventories and Deferred Preservation Costs, net

Inventories, net at December 31, 2022 and 2021 were comprised of the following (in thousands):

	202	2	2021
Raw materials and supplies	\$	36,715	\$ 35,780
Work-in-process		10,476	9,712
Finished goods		27,287	31,479
Total inventories, net	\$	74,478	\$ 76,971

Deferred preservation costs, net at December 31, 2022 and 2021 were comprised of the following (in thousands):

	2022	2021
Cardiac tissues	\$ 21,799	\$ 20,591
Vascular tissues	24,572	22,272
Total deferred preservation costs, net	\$ 46,371	\$ 42,863

To facilitate product usage, we maintain consignment inventory of our On-X heart valves at domestic hospital locations and On-X heart valves, aortic stent grafts, and AMDS products at international hospital locations. We retain title and control over this consignment inventory until the device is implanted, at which time we invoice the hospital and recognize revenue. As of December 31, 2022 we had \$12.7 million in consignment inventory, with approximately 41% in domestic locations and 59% in foreign locations. As of December 31, 2021 we had \$12.9 million in consignment inventory, with approximately 43% in domestic locations and 57% in foreign locations.

Inventory and deferred preservation costs obsolescence reserves were \$2.2 million and \$3.2 million as of December 31, 2022 and 2021, respectively.

7. Goodwill and Other Intangible Assets

Indefinite Lived Intangible Assets

As of December 31, 2022 and 2021 the carrying values of our indefinite lived intangible assets were as follows (in thousands):

	2022	2021
Goodwill	\$ 243,631	\$ 250,000
In-process R&D	2,080	2,208
Procurement contracts and agreements	2,013	2,013
Trademarks	_	66

We monitor the phases of development of our acquired in-process research and development projects, including the risks associated with further development and the amount and timing of benefits expected to be derived from the completed projects. Incremental costs associated with development are charged to expense as incurred. Capitalized costs are amortized over the estimated useful life of the developed asset once completed. Our in-process research and development projects are reviewed for impairment annually, or more frequently, if events or changes in circumstances indicate that the asset might be impaired. We evaluate our goodwill and indefinite lived intangible assets for impairment on an annual basis during the fourth quarter of the year, and, if necessary, during interim periods if factors indicate that an impairment review is warranted. We did not record any impairment of indefinite lived intangible assets, including goodwill, during the twelve months ended December 31, 2022, 2021, and 2020. In-process research and development, procurement contracts and agreements are included in Other intangibles, net on the Consolidated Balance Sheets as of December 31, 2022 and 2021.

Based on our experience with similar agreements, we believe that our acquired procurement contracts and agreements have indefinite useful lives, as we expect to continue to renew these contracts for the foreseeable future.

As of December 31, 2022 and 2021 the value of our goodwill, all of which was related to our Medical Devices segment, was as follows (in thousands):

		Medical Devices Segment					
	_	2022	2021				
Balance as of January 1,	\$	250,000	\$ 260,061				
Ascyrus acquisition		_	(942)				
Foreign currency translation		(6,369)	(9,119)				
Balance as of December 31,	\$	243,631	\$ 250,000				

Definite Lived Intangible Assets

The definite lived intangible assets balance includes balances related to acquired technology, customer relationships, distribution and manufacturing rights and know-how, patents, and other definite lived intangible assets. As of December 31, 2022 and 2021 the gross carrying values, accumulated amortization, and approximate amortization period of our definite lived intangible assets were as follows (in thousands, except weighted average useful life):

December 31, 2022	Gross Carrying Accumulated Net Car Value Amortization Val						Weighted Average Useful Life (Years)		
Acquired technology	\$	198,420	\$	47,157	\$	151,263	18.2		
Other intangibles:									
Customer lists and relationships		31,030		11,100		19,930	20.5		
Distribution and manufacturing rights and know-how		9,274		5,796		3,478	5.0		
Patents		4,246		3,180		1,066	17.0		
Other		5,360		2,543		2,817	4.4		
Total other intangibles	\$	49,910	\$	22,619	\$	27,291	10.3		

December 31, 2021	Gro	ss Carrying Value	Accumulated Amortization	I	Net Carrying Value	Weighted Average Useful Life (Years)
Acquired technology	\$	213,626	\$ 46,632	\$	166,994	17.7
Other intangibles:						
Customer lists and relationships		31,148	9,618		21,530	20.5
Distribution and manufacturing rights and know-how		9,847	4,308		5,539	5.0
Patents		4,083	3,144		939	17.0
Other		3,969	1,762		2,207	4.4
Total other intangibles	\$	49,047	\$ 18,832	\$	30,215	10.6

Amortization Expense

Amortization expense recorded in General, administrative, and marketing expenses on our Consolidated Statements of Operations and Comprehensive Loss for the years ended December 31 was as follows (in thousands):

	2022	2021	2020
Amortization expense	\$ 15,310	\$ 16,820	\$ 13,764

As of December 31, 2022 scheduled amortization of intangible assets for the next five years is as follows (in thousands):

	2023	2024	2025	2026	2027	Total
Amortization expense	\$ 14,935	\$ 14,577	\$ 12,680	\$ 12,458	\$ 12,360	\$ 67,010

8. Income Taxes

Income Tax Expense

Loss before income taxes consisted of the following (in thousands):

	2022	2021	2020
Domestic	\$ (13,798)	\$ (10,263)	\$ (11,443)
Foreign	(1,186)	(4,564)	(5,731)
Loss before income taxes	\$ (14,984)	\$ (14,827)	\$ (17,174)

Income tax expense (benefit) consisted of the following (in thousands):

	2022		2021		2020
Current:	 				
Federal	\$ 1,606	\$	1,896	\$	(2,460)
State	367		551		445
Foreign	3,120		3,391		707
	 5,093		5,838		(1,308)
Deferred:					
Federal	\$ 236	\$	(2,801)	\$	1,721
State	234		(307)		384
Foreign	(1,355)		(2,723)		(1,289)
	(885)		(5,831)		816
Income tax expense (benefit)	\$ 4,208	\$	7	\$	(492)

Our income tax expense (benefit) in 2022, 2021, and 2020 included our federal, state, and foreign tax obligations. Our effective income tax rate was a tax expense of 28% for the year ended December 31, 2022. Our effective income tax rate was break-even for the year ended December 31, 2021. Our effective income tax rate was a tax benefit of 3% for the year ended December 31, 2020.

Our income tax rate for the year ended December 31, 2022 was primarily affected by an increase in the valuation allowance on current year items, nondeductible executive compensation expenses, and uncertain tax position expenses, partially offset by the research and development tax credit. Our income tax rate for the year ended December 31, 2021 was primarily affected by an increase in the valuation allowance on current year items, foreign expense items, nondeductible executive compensation expenses, and the recording of a tax reserve on prior year items, partially offset by the reduction of a valuation allowance on prior year items, the research and development tax credit, and releases of uncertain tax position liabilities. Our income tax rate for the year ended December 31, 2020 was primarily affected by changes in our uncertain tax position liabilities, research and development tax credits, and state income taxes, net of federal benefits, partially offset by an increase in the valuation allowance on current year items.

The income tax benefit amounts differ from the amounts computed by applying the US federal statutory income tax rate of 21% for the years ended December 31, 2022, 2021, and 2020 to pretax income as a result of the following (in thousands):

	2022	2021	2020
Tax benefit at statutory rate	\$ (3,147)	\$ (3,114)	\$ (3,606)
Increase (reduction) in income taxes resulting from:			
Valuation allowance change	4,779	1,566	3,952
Nondeductible executive compensation	878	1,075	580
Net change in uncertain tax positions	527	762	(1,115)
State income taxes, net of federal benefit	484	73	(455)
Equity compensation	472	(477)	(204)
Foreign income taxes	415	1,138	378
Provision to return adjustments	336	63	531
Foreign interest disallowance	151	307	298
Nondeductible entertainment expenses	117	65	94
Foreign deferred items	(112) 53	(63)
Research and development credit	(961) (959)	(457)
Other	269	(545)	(425)
Total income tax expense (benefit)	\$ 4,208	\$ 7	\$ (492)

Deferred Taxes

Total deferred tax liabilities, net

We generate deferred tax assets primarily as a result of finance and operating leases, net operating losses, excess interest carryforward, accrued compensation, stock compensation, and capital leases. Our deferred tax liabilities are primarily comprised of intangible assets acquired in previous years, finance and operating leases, unrealized gains and losses, and capital leases.

The tax effects of temporary differences which give rise to deferred tax assets and liabilities at December 31 were as follows (in thousands):

	2022	2021
Deferred tax assets:		
Finance and operating leases	\$ 12,581	\$ 13,762
Loss carryforwards	9,660	6,649
Excess interest carryforward	5,559	3,547
Stock compensation	2,463	2,007
Accrued expenses	1,734	2,088
Deferred compensation	1,317	1,535
Property	1,310	1,356
Inventory and deferred preservation costs write-downs	764	397
Credit carryforwards	503	601
Other	4,283	3,770
Less valuation allowance	(17,942	(13,282)
Total deferred tax assets, net	22,232	22,430
	2022	2021
Deferred tax liabilities:		
Inventory and deferred preservation costs write-downs	-	(105)
Prepaid items	(323	
Debt costs	(818	(1,024)
Unrealized gains and losses	(6,624	(4,088)
Finance and operating leases	(12,217	(13,404)
Intangible assets	(24,601	(29,086)
Other	(834	(770)
Total deferred tax liabilities	(45,417	(48,872)

As of December 31, 2022 and 2021 we maintained a net deferred tax liability of \$23.2 million and \$26.4 million, respectively. As of December 31, 2022 and 2021 we maintained valuation allowances against our deferred tax assets of \$17.9 million and \$13.3 million, respectively, primarily related to net operating loss carryforwards and disallowed excess interest carryforwards.

(23,185)

(26,442)

As of December 31, 2022 we had approximately \$1.6 million of federal net operating loss carryforwards related to the acquisitions of Cardiogenesis and Hemosphere that we anticipate partially utilizing before expiration, approximately \$2.5 million of state net operating loss carryforwards that will begin to expire in 2023, approximately \$5.6 million of foreign net operating loss carryforwards that will begin to expire in 2025, and approximately \$483,000 in research and development tax credit carryforwards that will begin to expire in 2030, and approximately \$93,000 in credits from other jurisdictions that mostly expire in 2027.

As of December 31, 2022 we had a deferred tax asset of \$5.6 million of disallowed interest expense deduction carryforwards as a result of the interest deductibility rule imposed by the "Tax Cuts and Jobs Act" of 2017 ("Tax Act"), and later modified by the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"). This deferred tax asset can be carried forward indefinitely. This rule disallows interest expense to the extent it exceeds 30% of adjusted taxable income, modified to be 50% in 2021 by the CARES Act. For the years ended December 31, 2022 and 2021 our interest deduction was limited to \$8.1 million and \$11.7 million, respectively.

During the twelve months ended December 31, 2021 we corrected certain immaterial prior year errors primarily related to the release of a valuation allowance, reduction of income taxes payable, and an increase in the tax reserve. On correcting the errors, we recorded an income tax benefit of \$2.1 million.

We believe that the realizability of our acquired net operating loss carryforwards will be limited in future periods due to a change in control of our former subsidiaries Hemosphere, Inc. ("Hemosphere") and Cardiogenesis Corporation ("Cardiogenesis"), as mandated by Section 382 of the Internal Revenue Code of 1986, as amended. We believe that our acquisitions of these companies each constituted a change in control as defined in Section 382 and that, prior to our acquisition, Hemosphere had experienced other equity ownership changes that should be considered such a change in control. The deferred tax assets recorded on our Consolidated Balance Sheets exclude amounts that we expect will not be realizable due to changes in control. A portion of the acquired net operating loss carryforwards is related to state income taxes for which we believe it is more likely than not that some will not be realized. Therefore, we recorded a valuation allowance against these state net operating loss carryforwards. In addition, during the year, the realizability of a portion of our net operating loss carryforwards and other deferred tax assets was limited. We recorded a valuation allowance against these deferred tax assets.

Reinvestment of Unremitted Earnings

We intend to reinvest substantially all of the unremitted earnings of our non-US subsidiaries to fund working capital, strategic investments, and debt repayment and postpone their remittance indefinitely. Accordingly, no provision for state and local taxes or foreign withholding taxes was recorded on these unremitted earnings in the accompanying Consolidated Statements of Operations and Comprehensive Loss. The Company is permanently reinvested with respect to the outside basis differences in its significant non-US subsidiaries. As of December 31, 2022 we had a deferred tax liability of zero for the tax effects of this outside basis difference in its Consolidated Statements of Operations and Comprehensive Loss.

Uncertain Tax Positions

A reconciliation of the beginning and ending balances of our uncertain tax position liability, excluding interest and penalties, was as follows (in thousands):

	2022	2021	2020
Beginning balance	\$ 4,089	\$ 2,574	\$ 3,523
Increases related to current year tax positions	847	1,661	473
Increases related to prior year tax positions	20	386	420
Decreases related to prior year tax positions	(103)	(170)	(238)
(Decreases) increases for foreign exchange differences	(145)	(121)	99
Decreases due to the lapsing of statutes of limitations	 (200)	(241)	(1,703)
Ending balance	\$ 4,508	\$ 4,089	\$ 2,574

We recorded non-current liabilities of \$358,000 and \$220,000 related to interest and penalties on uncertain tax positions on our Consolidated Balance Sheets as of December 31, 2022 and 2021, respectively. We included expense of \$145,000 for December 31, 2022, and income of \$35,000 and \$180,000 for December 31, 2021 and 2020, respectively, for interest and penalties related to unrecognized tax benefits in our Consolidated Statements of Operations and Comprehensive Loss.

As of December 31, 2022 our uncertain tax liability of \$4.9 million, including interest and penalties, was recorded as a reduction to deferred tax assets of \$100,000, and a non-current liability of \$4.8 million on our Consolidated Balance Sheets. The amount of uncertain tax liabilities that are expected to affect our tax rate if recognized were \$3.6 million, \$3.2 million, and \$2.6 million for the years ended December 31, 2022, 2021, and 2020, respectively. As of December 31, 2021 our total uncertain tax liability, including interest and penalties of \$4.3 million, was recorded as a reduction to deferred tax assets of \$300,000 and as a non-current liability of \$4.0 million on our Consolidated Balance Sheets.

We believe it is reasonably possible that approximately \$112,000 of our uncertain tax liability will be recognized in 2023 due to the lapsing of various federal and state and foreign statutes of limitations, of which substantially all would affect the tax rate.

Other

Our tax years 2019 and forward generally remain open to examination by the major taxing jurisdictions to which we are subject. However, certain returns from years prior to 2019, in which net operating losses and tax credits have arisen, are still open for examination by the tax authorities.

9. Leases

We have operating and finance lease obligations resulting from the lease of land and buildings that comprise our corporate headquarters and various manufacturing facilities; leases related to additional manufacturing, office, and warehouse space; leases on Company vehicles; and leases on a variety of office and other equipment.

On January 6, 2021 we executed a modification to extend the lease of our headquarters located in Kennesaw, Georgia. This modification resulted in an increase in the present value of future lease obligations and corresponding right-of-use asset of \$23.3 million, using a discount rate of 6.41%.

On June 1, 2021 we began occupancy of the newly constructed addition to our leased international headquarters located in Hechingen, Germany. This lease resulted in an increase in the present value of future lease obligations and corresponding right-of-use asset of \$9.8 million, using a discount rate of 5.46%.

Information related to leases included in the Consolidated Balance Sheets was as follows (in thousands, except lease term and discount rate):

Operating leases:	December 31, 2022		Dece	mber 31, 2021
Operating lease right-of-use assets	\$	56,061	\$	58,097
Accumulated amortization		(14,202)		(12,383)
Operating lease right-of-use assets, net	\$	41,859	\$	45,714
Current maturities of operating leases	\$	3,308	\$	3,149
Non-current maturities of operating leases		41,257		44,869
Total operating lease liabilities	\$	44,565	\$	48,018
Finance leases:				
Property and equipment, at cost	\$	6,408	\$	6,759
Accumulated amortization	•	(2,498)	,	(2,105)
Property and equipment, net	\$	3,910	\$	4,654
Current maturities of finance leases	\$	513	\$	528
Non-current maturities of finance leases		3,644		4,374
Total finance lease liabilities	\$	4,157	\$	4,902
Weighted average remaining lease term (in years):				
Operating leases		11.9		12.5
Finance leases		7.8		8.8
Weighted average discount rate:				
Operating leases		5.9 %		5.8 %
Finance leases		2.1 %		2.0 %

Current maturities of finance leases are included as a component of Other current liabilities on our Consolidated Balance Sheets. A summary of lease expenses for our finance and operating leases included in General, administrative, and marketing expenses on our Consolidated Statements of Operations and Comprehensive Loss was as follows (in thousands):

	December 31, 2022	December 31, 2021
Amortization of property and equipment	\$ 518	\$ 596
Interest expense on finance leases	89	110
Total finance lease expense	607	706
Operating lease expense ^a	7,432	7,521
Sublease income	(306)	(399)
Total lease expense	\$ 7,733	\$ 7,828

^a Total rental expense for operating leases was \$7.1 million in 2020.

A summary of our cash flow information related to leases was as follows (in thousands):

Cash paid for amounts included in the measurement of lease liabilities:	2022	2021
Operating cash flows for operating leases	\$ 6,927 \$	6,061
Financing cash flows for finance leases	507	557
Operating cash flows for finance leases	90	105

Future minimum lease payments and sublease rental income are as follows (in thousands):

	Finance Leases	Operating Leases
2023	\$ 583	\$ 5,898
2024	595	5,629
2025	574	5,445
2026	555	4,912
2027	550	4,794
Thereafter	1,637	36,955
Total minimum lease payments	\$ 4,494	\$ 63,633
Less amount representing interest	(337)	(19,068)
Present value of net minimum lease payments	 4,157	44,565
Less current maturities	(513)	(3,308)
Lease obligations, less current maturities	\$ 3,644	\$ 41,257

10. Debt

Credit Agreement

On December 1, 2017 we entered into a credit and guaranty agreement for a \$255.0 million senior secured credit facility, consisting of a \$225.0 million secured term loan facility (the "Term Loan Facility") and a \$30.0 million secured revolving credit facility (the "Revolving Credit Facility" and, together with the Term Loan Facility, the "Credit Agreement"). We and each of our existing domestic subsidiaries (subject to certain exceptions and exclusions) guarantee the obligations under the Credit Agreement (the "Guarantors"). The Credit Agreement is secured by a security interest in substantially all existing and afteracquired real and personal property (subject to certain exceptions and exclusions) of us and the Guarantors.

On December 1, 2017 we borrowed the entire \$225.0 million Term Loan Facility. The proceeds of the Term Loan Facility were used along with cash on hand and shares of Artivion common stock to (i) fund the acquisition of JOTEC and its subsidiaries (the "JOTEC Acquisition"), (ii) pay certain fees and expenses related to the JOTEC Acquisition and the Credit Agreement, and (iii) pay the outstanding balance of our prior credit facility. The Revolving Credit Facility may be used for working capital, capital expenditures, acquisitions permitted under the Credit Agreement, and other general corporate purposes pursuant to the terms of the Credit Agreement.

The loan under the Term Loan Facility is repayable on a quarterly basis according to the amortization provisions set forth in the Credit Agreement. We have the right to repay the loan under the Credit Agreement in whole or in part at any time. Amounts repaid in respect of the loan under the Term Loan Facility may not be reborrowed. Amounts repaid in respect of the loan under the Revolving Credit Facility may be reborrowed. All outstanding principal and interest in respect of (i) the Term Loan Facility must be repaid on or before December 1, 2024 and (ii) the Revolving Credit Facility must be repaid on or before December 1, 2022.

In October 2018 we finalized an amendment to the Credit Agreement to reprice interest rates, resulting in a reduction in the interest rate margins over base rates on the Term Loan Facility. The loan under the Term Loan Facility bears interest, at our option, at a floating annual rate equal to either the base rate, plus a margin of 2.25%, or LIBOR, plus a margin of 3.25%. Prior to the repricing, the optional floating annual rate was equal to either the base rate plus a margin of 3.00%, or LIBOR, plus a margin of 4.00%. The loan under the Revolving Credit Facility bears interest, at our option, at a floating annual rate equal to either the base rate, plus a margin of between 3.00% and 3.25%, depending on our consolidated leverage ratio, or LIBOR, plus a margin of between 4.00% and 4.25%, depending on our consolidated leverage ratio. While a payment event of default or bankruptcy event of default exists, we are obligated to pay a per annum default rate of interest of 2.00% in excess of the interest rate otherwise payable with respect to the overdue principal amount of any loans outstanding and overdue interest payments and other overdue fees and amounts. We are obligated to pay an unused commitment fee equal to 0.50% of the unutilized portion of the revolving loans. In addition, we are also obligated to pay other customary fees for a credit facility of this size and type.

The Credit Agreement contains certain customary affirmative and negative covenants, including covenants that limit our ability and the ability of our subsidiaries to, among other things, grant liens, incur debt, dispose of assets, make loans and investments, make acquisitions, make certain restricted payments (including cash dividends), merge or consolidate, change business or accounting or reporting practices, in each case subject to customary exceptions for a credit facility of this size and type. In addition, with respect to the Revolving Credit Facility, when the principal amount of loans outstanding thereunder is in excess of 25% of the Revolving Credit Facility, the Credit Agreement requires us to comply with a specified maximum first lien net leverage ratio.

The Credit Agreement includes certain customary events of default that include, among other things, non-payment of principal, interest, or fees; inaccuracy of representations and warranties; breach of covenants; cross-default to certain material indebtedness; bankruptcy and insolvency; and change of control. Upon the occurrence and during the continuance of an event of default, the lenders may declare all outstanding principal and accrued but unpaid interest under the Credit Agreement immediately due and payable and may exercise the other rights and remedies provided under the Credit Agreement and related loan documents.

On April 29, 2020 we entered into an amendment to our Credit Agreement. As part of the amendment, we obtained a waiver of our maximum first lien net leverage ratio covenant through the end of 2020. In addition, the amendment to our Credit Agreement provides that EBITDA, for covenant testing purposes, in each quarter of 2020 will be deemed equal to a fixed value equal to our bank covenant EBITDA in the fourth quarter of 2019 when our first lien net leverage was 3.4x. As a result of these changes, we are subject to a new minimum liquidity covenant. We are also subject to restrictions on certain payments, including cash dividends. We are required to maintain a minimum liquidity of at least \$12.0 million as of the last day of any month in 2020, and as of the last day of any quarter through the third quarter of 2021 when our Revolving Credit Facility is drawn in excess of 25% (or \$7.5 million) of the amount available as of the last day of any fiscal quarter during that period. Beginning in 2021, if we repay borrowings under our Revolving Credit Facility to 25% or less, no financial maintenance covenants, including the minimum liquidity covenant and the maximum first lien net leverage ratio covenant, are applicable. We are in compliance with our debt covenants as of December 31, 2022.

On June 2, 2021 we entered into an amendment to our Credit Agreement to extend the maturity dates of both our Term Loan and its Revolving Credit Facility. As part of the amendment, the maturity dates of both our Term Loan and its Revolving Credit Facility were each extended by two and one-half years, until June 1, 2027 and June 1, 2025, respectively, subject to earlier springing maturities if our 4.25% Convertible Senior Notes, described below, remain outstanding on April 1, 2025 and December 31, 2024, respectively. With respect to the Term Loan, if the Convertible Senior Notes remain outstanding on April 1, 2025, or, if the Convertible Senior Notes' own maturity date has been extended, the earlier of (i) 91 days prior to the Convertible Senior Notes' new maturity date and (ii) June 1, 2027. In the case of the Revolving Credit Facility, if the Convertible Senior Notes are still outstanding on December 31, 2024, the Revolving Credit Facility's maturity date will be either December 31, 2024 or, if the Convertible Senior Notes' own maturity date has been extended, the earlier of (i) 182 days prior to the Convertible Senior Notes' new maturity date and (ii) June 1, 2025. Under the amendment, the Term Loan Facility bears interest, at our option, at a floating annual rate equal to either the base rate, plus a margin of 2.50%, or LIBOR, plus a margin of 3.50%. Prior to the amendment, the optional floating annual rate was equal to either the base rate plus a margin of 2.25%, or LIBOR, plus a margin of 3.25%. We paid debt issuance costs of \$2.1 million, of which \$1.8 million will be amortized over the life of the term loan facility and included in current and long-term debt on the Consolidated Balance Sheets. The remaining \$361,000 of debt issuance costs and \$474,000 of non-cash debt extinguishment costs were recorded in Interest expense on the Consolidated Statements of Operations and Comprehensive Loss.

On December 19, 2022 in accordance with adopting ASU 2020-04 and 2021-01, we entered into an amendment to our Credit Agreement to replace the LIBOR based benchmark interest rate with the Secured Overnight Financing Rate ("SOFR") based benchmark interest rate for our Term Loan Facility and our Revolving Credit Facility. Based on historical analysis of the differences between the benchmark rates, SOFR is adjusted to arrive at a Term SOFR rate that serves as the replacement base rate for LIBOR under our amended credit facilities. Under this amendment, at the maturity of our existing LIBOR-based loan on December 30, 2022, the interest rate at the repricing of our Term Loan Facility was calculated as Term SOFR plus a fixed percentage credit spread of 3.50%. The loan under the Revolving Credit Facility bears interest at Term SOFR plus a margin of between 4.00% and 4.25%, depending on our consolidated leverage ratio. As of December 31, 2022 the aggregate interest rate of the Credit Agreement was 8.34% per annum.

Convertible Senior Notes

On June 18, 2020 we issued \$100.0 million aggregate principal amount of 4.25% Convertible Senior Notes with a maturity date of July 1, 2025 (the "Convertible Senior Notes"). The net proceeds from this offering, after deducting initial purchasers' discounts and costs directly related to this offering, were approximately \$96.5 million. On January 1, 2021 we adopted ASU 2020-06 and adjusted the carrying balance of the Convertible Senior Notes to notional. The Convertible Senior Notes balance was \$100.0 million recorded in Long-term debt on the Consolidated Balance Sheets as of December 31, 2022. The Convertible Senior Notes may be settled in cash, stock, or a combination thereof, solely at our discretion. The initial conversion rate of the Convertible Senior Notes is 42.6203 shares per \$1,000 principal amount, which is equivalent to a conversion price of approximately \$23.46 per share, subject to adjustments. We use the if-converted method for assumed conversion of the Convertible Senior Notes for the diluted earnings per share calculation. The fair value and the effective interest rate of the Convertible Senior Notes as of December 31, 2022 was approximately \$87.6 million and 5.05%, respectively. The fair value was based on market prices observable for similar instruments and is considered Level 2 in the fair value hierarchy.

The interest expense recognized on the Convertible Senior Notes includes approximately \$4.9 million for the aggregate of the contractual coupon interest and the amortization of the debt issuance costs during the twelve months ended December 31, 2022 and 2021. The interest expense recognized on the Convertible Senior Notes includes approximately \$4.2 million for the aggregate of the contractual coupon interest, the accretion of the debt discount, and the amortization of the debt issuance costs for the twelve months ended December 31, 2020. Interest on the Convertible Senior Notes began accruing upon issuance and is payable semi-annually. As of December 31, 2022 there were \$1.9 million of unamortized debt issuance costs related to convertible senior notes.

Holders of the Convertible Senior Notes may convert their notes at their option at any time prior to January 1, 2025 but only under the following circumstances: (i) during any calendar quarter commencing after the calendar quarter ending on September 30, 2020 (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (ii) during the five business day period after any five consecutive trading day period in which the trading price per \$1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; (iii) we give a notice of redemption with respect to any or all of the notes, at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date; or (iv) upon the occurrence of specified corporate events. On or after January 1, 2025 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert their notes at any time, regardless of the foregoing circumstances.

We cannot redeem the Convertible Senior Notes before July 5, 2023. We can redeem them on or after July 5, 2023, in whole or in part, at our option, if the last reported sale price per share of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which we provide notice of redemption. We may redeem for cash all or part of the Convertible Senior Notes at a redemption price equal to 100% of the principal amount of the redeemable Convertible Senior Notes, plus accrued and unpaid interest to, but excluding, the redemption date. No principal payments are due on the Convertible Senior Notes prior to maturity. Other than restrictions relating to certain fundamental changes and consolidations, mergers or asset sales and customary anti-dilution adjustments, the Convertible Senior Notes do not contain any financial covenants and do not restrict us from conducting significant restructuring transactions or issuing or repurchasing any of our other securities. As of December 31, 2022 and 2021 we are not aware of any current events or market conditions that would allow holders to convert the Convertible Senior Notes.

Government Supported Bank Debt

In June 2015 JOTEC obtained two loans from Sparkasse Zollernalb, which are government sponsored by the Kreditanstalt f✓r Wiederaufbau Bank (KFW). Both KFW loans have a term of nine years and the interest rates are 2.45% and 1.40%.

The short-term and long-term balances of our term loans were as follows (in thousands):

	As of December 31,			
	2022			2021
Term loan balance	\$	213,750	\$	216,000
Convertible senior notes		100,000		100,000
2.45% Sparkasse Zollernalb (KFW Loan 1)		296		566
1.40% Sparkasse Zollernalb (KFW Loan 2)		733		1,061
Total loan balance		314,779		317,627
Less unamortized loan origination costs		(6,672)		(8,504)
Net borrowings		308,107		309,123
Less short-term loan balance, net		(1,608)		(1,630)
Long-term loan balance, net	\$	306,499	\$	307,493

At December 31, 2022 the aggregate maturities of long-term debt for the next five years are as follows (in thousands):

	 2023	2024	2025	2026	2027	Thereafter	Total
Maturities	\$ 2,754	\$ 2,576	\$ 102,450	\$ 2,250	\$ 204,749	\$ —	\$ 314,779

Our aggregate maturity schedule is subject to change due to a provision within the Credit Agreement that requires us to make annual prepayments based on an excess cash flow calculation.

Interest Expense

Total interest expense was \$18.2 million, \$16.9 million, and \$16.7 million in 2022, 2021, and 2020, respectively. Interest expense includes interest on debt and uncertain tax positions in all periods.

11. Commitments and Contingencies

Liability Claims

In the normal course of business, we are made aware of adverse events involving our products and tissues. Future adverse events could ultimately give rise to a lawsuit against us, and liability claims may be asserted against us in the future based on past events that we are not aware of at the present time. We maintain claims-made insurance policies to mitigate our financial exposure to product and tissue processing liability claims. Claims-made insurance policies generally cover only those asserted claims and incidents that are reported to the insurance carrier while the policy is in effect. The amounts recorded in these Consolidated Financial Statements as of December 31, 2022 and 2021 represent our estimate of the probable losses and anticipated recoveries for incurred but not reported claims related to products sold and services performed prior to the balance sheet date.

Employment Agreements

The employment agreement of our Chairman, President, and Chief Executive Officer ("CEO"), Mr. J. Patrick Mackin, provides for a severance payment, which would become payable upon the occurrence of certain employment termination events, including termination by us without cause.

PROACT Xa Clinical Trial Termination

On September 23, 2022 we announced that we were stopping the PROACT Xa clinical trial as recommended by the trial's independent Data and Safety Monitoring Board. The PROACT Xa clinical trial was a prospective, randomized, trial designed to determine if patients with On-X mechanical aortic valves could be maintained safely and effectively on apixaban rather than on warfarin. As a result of PROACT Xa's early termination, we recorded \$4.5 million of termination and wind-down expenses that are included in Research and development operating expenses on the Consolidated Statements of Operations and Comprehensive Loss for the twelve months ended December 31, 2022. The majority of these costs include administrative costs, that we paid during the fourth quarter of 2022 and anticipate paying during the first quarter of 2023, as well as the estimated cost of clinical drugs purchased for patients participating in the study that are not expected to be recovered.

12. Employee Benefit Plans

401(k) Plan

We have a 401(k) savings plan ("401(k) Plan") providing retirement benefits to all US employees who have completed at least three months of service. We made matching contributions of each participant's contribution up to 4.0% of each participant's salary in 2022, 2021 and 2020. Our contributions approximated \$2.6 million, \$2.1 million, and \$1.9 million for the years ended 2022, 2021, and 2020, respectively. We may make discretionary contributions to the 401(k) Plan; however, no discretionary contributions were made in any of the past three years.

Deferred Compensation Plan

Our Deferred Compensation Plan ("Deferred Plan") allows certain of our US employees to defer receipt of a portion of their salary and cash bonus. The Deferred Plan provides for tax-deferred growth of deferred compensation. Pursuant to the terms of the Deferred Plan, we agree to return the deferred amounts plus gains and losses, based on investment fund options chosen by each respective participant, to the plan participants upon distribution. All deferred amounts and deemed earnings thereon are vested at all times. We have no current plans to match any contributions. Amounts owed to plan participants are unsecured obligations of the Company. We have established a rabbi trust in which it will make contributions to fund our obligations under the Deferred Plan. Pursuant to the terms of the trust, we will be required to make contributions each year to fully match our obligations under the Deferred Plan. The trust's funds are primarily invested in Company Owned Life Insurance ("COLI"), and we plan to hold the policies until the deaths of the insured.

Our deferred compensation liabilities are recorded as a component of Other current liabilities and long-term Deferred compensation liabilities, as appropriate, on the Consolidated Balance Sheets based on the anticipated distribution dates. We recorded \$5.5 million in Long-term liabilities as of December 31, 2022 in the Consolidated Balance Sheets. We recorded \$378,000 in Other current liabilities and \$6.0 million in Long-term liabilities as of December 31, 2021 in the Consolidated Balance Sheets. The cash surrender value of COLI recorded in Other long-term assets on the Consolidated Balance Sheets was \$5.5 million and \$6.6 million as of December 31, 2022 and 2021, respectively. Changes in the value of participant accounts and changes in the cash surrender value of COLI are recorded as part of our operating expenses and are subject to our normal allocation of expenses to inventory and deferred preservation costs.

13. Revenue Recognition

Sources of Revenue

Revenues are disaggregated by following sources:

- Domestic Hospitals direct sales of products and preservation services.
- International Hospitals direct sales of products and preservation services.
- International Distributors generally these contracts specify a geographic area that the distributor will service, terms and conditions of the relationship, and purchase targets for the next calendar year.
- CardioGenesis Cardiac Laser Console Trials and Sales CardioGenesis cardiac trialed laser consoles are delivered under separate agreements.

For the years ended December 31, 2022, 2021, and 2020 the sources of revenue were as follows (in thousands):

	2022		2021		2020
Domestic hospitals	\$	158,129	\$	150,301	\$ 137,810
International hospitals		105,072		106,639	80,524
International distributors		47,604		41,046	34,429
CardioGenesis cardiac laser therapy		2,984		850	464
Total sources of revenue	\$	313,789	\$	298,836	\$ 253,227

Also see segment and geographic disclosure in Note 16 below.

14. Stock Compensation

Overview

We are currently authorized to grant and have available for grant the following number of shares under our stock plans as of December 31, 2022 and 2021:

	Authorized	Available for Grant			
Plan	Shares	2022	2021		
1996 Discounted Employee Stock Purchase Plan, as amended	2,900,000	967,000	63,000		
2020 Equity and Cash Incentive Plan	4,105,000	999,000	3,310,000		
Total	7,005,000	1,966,000	3,373,000		

During 2020 the Shareholders approved a new 2020 Equity and Cash Incentive Plan ("ECIP") and funded it with 2.7 million of newly issuable shares. On August 11, 2020 4.1 million shares were registered under the 2020 ECIP, consisting of the newly issuable shares as well as 1.4 million of the shares that remained available for grant under the 2009 ECIP as of that date.

Stock Awards

In 2022 the Compensation Committee of our Board of Directors (the "Committee") authorized awards from approved stock incentive plans of RSAs to non-employee directors and RSUs and PSUs to certain employees and Company officers, which, counting PSUs at target levels, together totaled 871,000 shares and had an aggregate grant date market value of \$13.5 million. Two types of PSUs were granted in 2022, an annual grant with a one-year performance period ("Annual PSU") and a special LTIP PSU grant (the "2022 LTIP PSU") with a one-year performance period. If the highest performance threshold was met, the Annual PSU granted in 2022 represented the right to receive up to 150% of the target number of shares of common stock. The performance component of the Annual PSU granted in 2022 was based on attaining specified levels of revenue growth and specified levels of EBITDA, as defined in the PSU grant documents, for the 2022 calendar year. The Annual PSU granted in 2022 earned approximately 51% of the target number of shares and subsequently modified on February 13, 2023 to earn approximately 89% of the target number of shares. If the highest performance threshold was met, the Special 2022 LITP PSU grant represented a right to receive up to 200% of the target number of shares of common stock. The 2022 LTIP PSU grant earned approximately 140% of target number of shares.

During 2019, the Committee authorized, and we granted, an LTIP PSU (the "Original LTIP"), which has multiple performance periods over a five-year period. If the highest performance thresholds were met, the Original LTIP represents the right to receive up to 288%, and up to 192% for a certain key executive, of the target number of shares of common stock. The performance component of the Original LTIP was based on attaining specified levels of adjusted revenue growth and gross margin, as defined in the Original LTIP grant document, for the years 2019 through 2023. During 2020 we determined that the threshold performance under the first performance period (2019 through 2021) of the Original LTIP was unlikely to be achieved which resulted in a reversal of \$1.9 million in expense in the fourth quarter of 2020. During 2022, the second performance period of the Original LTIP earned approximately 136% and 108% to a certain key executive of target number of shares of common stock.

In 2021 the Committee authorized awards from approved stock incentive plans of RSUs to certain employees, RSAs to non-employee Directors, and RSAs and PSUs to certain Company officers, which, counting PSUs at target levels, together totaled 500,000 shares and had an aggregate grant date market value of \$12.6 million. Two types of PSUs were granted in 2021, an Annual PSU and a special LTIP PSU (the "2021 LTIP PSU"), each with a one-year performance period. If the highest performance threshold was met, the Annual PSU granted in 2021 represented the right to receive up to 150% of the target number of shares of common stock. The performance component of the Annual PSU granted in 2021 was based on attaining specified levels of revenue growth and certain non-financial metrics, as defined in the PSU grant documents, for the 2021 calendar year. The Annual PSU granted in 2021 earned approximately 110% of the target number of shares. If the highest performance threshold was met, the 2021 LTIP PSU grant in 2021 represented a right to receive up to 200% of the target number of shares of common stock. The 2021 LTIP PSU grant earned approximately 118% of target number of shares.

In 2020 the Committee authorized awards from approved stock incentive plans of RSUs to certain employees, RSAs to non-employee Directors, and RSAs and PSUs to certain Company officers, which, counting PSUs at target levels, together totaled 335,000 shares and had an aggregate grant date market value of \$8.3 million. If the highest performance threshold was met, the PSU granted in 2020 represented the right to receive up to 150% of the target number of shares of common stock. The performance component of the PSU awards granted in 2020 was based on attaining specified levels of EBITDA, as defined in the PSU grant documents, for the 2020 calendar year. Our actual 2020 EBITDA performance was below the threshold required for any payouts under the 2020 PSU plan which resulted in a \$1.1 million reversal of expense in the fourth quarter of 2020. In February 2021 the Committee used structured discretion to determine that the 2020 PSUs were earned and should be paid out at 100% of target resulting in a modification of the award which resulted in \$1.3 million of compensation expense during the twelve months ended December 31, 2021 related to these performance awards. This modification resulted in a forfeiture and a subsequent grant of 70,000 PSU shares during the twelve months ended December 31, 2021.

A summary of stock grant activity for the years ended December 31, 2022, 2021, and 2020 for RSAs, RSUs, and PSUs, based on the target number of shares, was as follows:

RSAs	Shares	Weighted Average Grant Date Fair Value
Unvested at December 31, 2019	243,000 \$	23.30
Granted	123,000	24.70
Vested	(108,000)	20.66
Unvested at December 31, 2020	258,000	25.08
Granted	140,000	25.68
Vested	(130,000)	22.40
Forfeited	(33,000)	27.39
Unvested at December 31, 2021	235,000	26.59
Granted	64,000	17.91
Vested	(89,000)	28.60
Unvested at December 31, 2022	210,000	23.09

RSUs	Shares	Weighted Average Remaining Contractual Term in years	Aggregate Intrinsic Value
Unvested at December 31, 2019	226,000	0.93 \$	6,131,000
Granted	141,000		
Vested	(118,000)		
Forfeited	(37,000)		
Unvested at December 31, 2020	212,000	1.02	5,015,000
Granted	144,000		
Vested	(93,000)		
Forfeited	(39,000)		
Unvested at December 31, 2021	224,000	0.94	4,558,000
Granted	643,000		
Vested	(100,000)		
Forfeited	(33,000)		
Unvested at December 31, 2022	734,000	2.02	8,895,000
Vested and expected to vest	734,000	2.02 \$	8,895,000

PSUs	Shares	Weighted Average Remaining Contractual Term in years	Aggregate Intrinsic Value
Unvested at December 31, 2019	347,000	2.33	\$ 9,400,000
Granted	70,000		
Vested	(55,000)		
Forfeited	(31,000)		
Unvested at December 31, 2020	331,000	1.64	7,805,000
Granted	215,000		
Vested	(60,000)		
Forfeited	(114,000)		
Unvested at December 31, 2021	372,000	0.90	7,579,000
Granted	182,000		
Vested	(117,000)		
Forfeited	(97,000)		
Unvested at December 31, 2022	340,000	0.67	4,121,000
Vested and expected to vest	340,000	0.67	\$ 4,121,000

During the years ended December 31, 2022, 2021, and 2020 the total fair value of \$5.8 million, \$7.3 million, and \$6.7 million, respectively, in combined RSAs, RSUs, and PSUs vested.

Stock Options

The Compensation Committee of our Board of Directors authorized grants of stock options from approved stock incentive plans to certain Company officers and employees totaling 1,031,000, 226,000, and 212,000 shares in 2022, 2021, and 2020, respectively, with exercise prices equal to the stock prices on the respective grant dates.

A summary of our stock option activity for the years ended December 31, 2022, 2021, and 2020 was as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in years	Aggregate Intrinsic Value
Outstanding at December 31, 2019	1,129,000 \$	16.14	3.67 \$	12,763,000
Granted	212,000	26.24		
Exercised	(88,000)	10.49		
Forfeited	(12,000)	27.36		
Outstanding at December 31, 2020	1,241,000	18.16	3.38	8,215,000
Granted	226,000	24.90		
Exercised	(179,000)	12.02		
Forfeited	(42,000)	26.00		
Outstanding at December 31, 2021	1,246,000	20.00	3.20	4,039,000
Granted	1,031,000	13.29		
Exercised	(151,000)	11.85		
Forfeited	(3,000)	21.55		
Outstanding at December 31, 2022	2,123,000	17.31	4.56	1,150,000
Vested and expected to vest	2,123,000 \$	17.31	4.56 \$	1,150,000
Exercisable at December 31, 2022	892,000 \$	20.18	2.11 \$	368,000

Other information concerning stock options for the years ended December 31 was as follows:

	2022	2021	2020	
Weighted-average fair value of options granted	\$ 5.31	\$ 8.82	\$	8.64
Intrinsic value of options exercised	1,120,000	2,716,000	1,26	7,000

Employees purchased common stock totaling 95,000, 87,000, and 83,000 shares in 2022, 2021, and 2020, respectively, through our ESPP.

Stock Compensation Expense

The following weighted-average assumptions were used to determine the fair value of options:

	2022		2021		2020)
	Stock Options	ESPP Options	Stock Options	ESPP Options	Stock Options	ESPP Options
Expected life of options	5.00 Years	0.50 Years	5.00 Years	0.50 Years	5.00 Years	0.50 Years
Expected stock price volatility	0.40	0.40	0.40	0.45	0.35	0.52
Risk-free interest rate	3.58 %	1.34 %	0.57 %	0.07 %	1.41 %	1.00 %

The following table summarizes stock compensation expense (in thousands):

	2022	2021			2020
RSA, RSU, and PSU expense	\$ 10,351	\$	9,023	\$	5,288
Stock option and ESPP option expense	2,591		2,254		2,216
Total stock compensation expense	\$ 12,942	\$	11,277	\$	7,504

Included in the total stock compensation expense, as applicable in each period, were expenses related to RSAs, RSUs, PSUs, and stock options issued in each respective year, as well as those issued in prior periods that continue to vest during the period, and compensation related to our ESPP. These amounts were recorded as stock compensation expense and were subject to our normal allocation of expenses to inventory costs and deferred preservation costs. We capitalized \$598,000, \$566,000, and \$592,000 in the years ended December 31, 2022, 2021, and 2020, respectively, of the stock compensation expense into our inventory costs and deferred preservation costs.

As of December 31, 2022 we had total unrecognized compensation expense of \$11.3 million related to RSAs, RSUs, and PSUs and \$5.4 million related to unvested stock options. As of December 31, 2022 this expense is expected to be recognized over a weighted-average period of 2.27 years for RSUs, 2.32 years for stock options, 0.66 years for RSAs, and 0.67 years for PSUs.

15. Loss Per Common Share

The following table sets forth the computation of basic and diluted loss per common share (in thousands, except per share data):

Basic loss per common share	2022	2021	2020
Net loss	\$ (19,192)	\$ (14,834)	\$ (16,682)
Net loss allocated to participating securities	98	94	111
Net loss allocated to common shareholders	\$ (19,094)	\$ (14,740)	\$ (16,571)
Basic weighted-average common shares outstanding	 40,032	38,983	37,861
Basic loss per common share	\$ (0.48)	\$ (0.38)	\$ (0.44)
Diluted loss per common share	2022	2021	2020
Net loss	\$ (19,192)	\$ (14,834)	\$ (16,682)
Net loss allocated to participating securities	98	94	111
Net loss allocated to common shareholders	\$ (19,094)	\$ (14,740)	\$ (16,571)
Basic weighted-average common shares outstanding	40,032	38,983	37,861
Effect of dilutive options and awards ^a	<u> </u>		_
Diluted weighted-average common shares outstanding	40,032	 38,983	37,861
Diluted loss per common share	\$ (0.48)	\$ (0.38)	\$ (0.44)

^a We excluded stock options from the calculation of diluted weighted-average common shares outstanding if the per share value, including the sum of (i) the exercise price of the options and (ii) the amount of the compensation cost attributed to future services and not yet recognized, was greater than the average market price of the shares because the inclusion of these stock options would be antidilutive to loss per common share. For the years ended December 31, 2022, 2021, and 2020 all stock options and awards were excluded from the calculation of diluted weighted-average common shares outstanding as these would be antidilutive to the net loss.

16. Segment and Geographic Information

We have two reportable segments organized according to our products and services: Medical Devices and Preservation Services. The Medical Devices segment includes external revenues from product sales of aortic stent grafts, surgical sealants, On-X, and other product revenues. Aortic stent grafts include aortic arch stent grafts, abdominal stent grafts, and synthetic vascular grafts. Aortic arch stent grafts include our E-vita Open NEO, E-vita Open Plus, AMDS, NEXUS, E-vita Thoracic 3G, and E-nya products. Abdominal stent grafts include our E-xtra Design Engineering, E-nside, E-tegra, E-ventus BX, and E-liac products. Surgical sealants include BioGlue Surgical Adhesive products. The Preservation Services segment includes external services revenues from the preservation of cardiac and vascular tissues. There are no intersegment revenues.

The primary measure of segment performance, as viewed by our management, is segment gross margin, or net external revenues less cost of products and preservation services. We do not segregate assets by segment; therefore, asset information is excluded from the segment disclosures below.

The following table summarizes revenues, cost of products and preservation services, and gross margins for our reportable segments (in thousands):

	2022	2021	2020
Revenues:			
Medical devices	\$ 230,353	\$ 221,597	\$ 179,299
Preservation services	83,436	77,239	73,928
Total revenues	313,789	298,836	253,227
Cost of products and preservation services:			
Medical devices	72,166	65,196	50,128
Preservation services	39,100	36,126	35,315
Total cost of products and preservation services	111,266	101,322	85,443
Gross margin:			
Medical devices	158,187	156,401	129,171
Preservation services	44,336	41,113	38,613
Total gross margin	\$ 202,523	\$ 197,514	\$ 167,784

Net revenues by product for the years ended December 31, 2022, 2021, and 2020 were as follows (in thousands):

	2022	2021	2020
Products:			
Aortic stent grafts	\$ 92,752	\$ 85,387	\$ 61,663
Surgical sealants	65,379	70,714	62,068
On-X	63,904	57,363	48,053
Other	8,318	8,133	7,515
Total products	 230,353	 221,597	 179,299
Preservation services:	83,436	77,239	73,928
Total revenues	\$ 313,789	\$ 298,836	\$ 253,227

Net revenues by geographic location attributed to countries based on the location of the customer for the years ended December 31, 2022, 2021, and 2020 were as follows (in thousands):

		2022	2021	2020
US	\$	161,113	\$ 151,151	\$ 138,274
International		152,676	147,685	114,953
Total revenues	\$	313,789	\$ 298,836	\$ 253,227

Revenues attributed to customers in Germany accounted for 9% of total revenues for the year ended December 31, 2022 and 10% for the years ended December 31, 2021 and 2020.

At December 31, 2022 and 2021 46% and 45% of our long-lived assets were held in the US, respectively, where the corporate headquarters and a portion of our manufacturing facilities are located. Our long-lived international assets were \$20.7 million and \$20.6 million as of December 31, 2022 and 2021, respectively, of which 97% were located in Hechingen, Germany. At December 31, 2022 and 2021, \$243.6 million and \$250.0 million, respectively, of our goodwill was allocated entirely to our Medical Devices segment.

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

None

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures ("Disclosure Controls") as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934. These Disclosure Controls are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the Commission's rules and forms, and that such information is accumulated and communicated to management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosures.

Our management, including our President and CEO and our Executive Vice President of Finance, Chief Operating Officer, and CFO, do not expect that its Disclosure Controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdown can occur because of simple error or mistake. Our Disclosure Controls have been designed to provide reasonable assurance of achieving their objectives.

Management's Annual Report on Internal Controls over Financial Reporting

Our management utilizes the criteria set forth in "Internal Control-Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission to evaluate the effectiveness of its Disclosure Controls over financial reporting. Based upon the most recent Disclosure Controls evaluation conducted by management with the participation of the CEO and CFO, as of December 31, 2022, the CEO and CFO have concluded that our Disclosure Controls were effective at the reasonable assurance level to satisfy their objectives and to ensure that the information required to be disclosed by us in our periodic reports is accumulated and communicated to management, including the CEO and CFO, as appropriate to allow timely decisions regarding disclosure and is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms

The report called for by Item 308(a) of Regulation S-K is incorporated herein by reference to "Management's Report on Internal Control over Financial Reporting" on page 58 of this report.

The attestation report called for by Item 308(b) of Regulation S-K is incorporated herein by reference to "Report of Independent Registered Public Accounting Firm" on page 59 of this report.

The Securities and Exchange Commission's general guidance permits the exclusion of an assessment of the effectiveness of a registrant's disclosure controls and procedures as they relate to its internal control over financial reporting for an acquired business during the first year following such acquisition if, among other circumstances and factors, there is not adequate time between the acquisition date and the date of assessment.

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

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdiction that Prevent Inspections.

None.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance.

The response to Item 10 is incorporated herein by reference to the information to be set forth in the definitive Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2022, with the exception of information concerning executive officers listed below.

The following table lists the executive officers of Artivion as of December 31, 2022 and their ages, positions with Artivion, and the dates from which they have continually served as executive officers with Artivion. Each of the executive officers of Artivion was elected by the Board of Directors to serve until the Board of Directors' meeting immediately following the next annual meeting of shareholders or until his or her earlier removal by the Board of Directors or his or her resignation.

Name	Service as Executive	Age	Position
J. Patrick Mackin	Since 2014	56	Chairman, President, and Chief Executive Officer
F. Peter Barthold	Since 2020	58	Vice President, Research and Development
John E. Davis	Since 2015	58	Senior Vice President, Global Sales and Marketing
Matthew A. Getz	Since 2019	54	Vice President, Human Resources
Andrew M. Green	Since 2021	54	Vice President, Regulatory Affairs
Jean F. Holloway, Esq.	Since 2015	65	Senior Vice President, General Counsel, Chief Compliance Officer, and Secretary
Amy D. Horton, CPA	Since 2006	52	Vice President and Chief Accounting Officer
D. Ashley Lee, CPA	Since 2000	58	Executive Vice President, Chief Operating Officer, and Chief Financial Officer
Dennis B. Maier	Since 2017	49	Senior Vice President, Operations
Rochelle L. Maney	Since 2021	46	Vice President, Global Quality Assurance
Marshall S. Stanton, M.D.	Since 2021	66	Senior Vice President, Clinical Research and Chief Medical Officer

- J. Patrick Mackin assumed the position of President and Chief Executive Officer in September 2014, was appointed to the Board of Directors in October 2014 and was appointed Chairman in May 2015. Mr. Mackin has more than 30 years of experience in the medical device industry. Prior to joining Artivion, Mr. Mackin served as President of Cardiac Rhythm Disease Management, the largest operating division of Medtronic, Inc. At Medtronic, he previously held the positions of Vice President, Vascular, Western Europe and Vice President and General Manager, Endovascular Business Unit. Prior to joining Medtronic in 2002, Mr. Mackin worked for six years at Genzyme, Inc. serving as Senior Vice President and General Manager for the Cardiovascular Surgery Business Unit and as Director of Sales, Surgical Products division. Before joining Genzyme, Mr. Mackin spent four years at Deknatel/Snowden-Pencer, Inc. in various roles and three years as a First Lieutenant in the US Army. Mr. Mackin received an MBA from Northwestern University's Kellogg Graduate School of Management and is a graduate of the US Military Academy at West Point.
- **F. Peter Barthold** was appointed to the position of Vice President of Research and Development in July 2020. Mr. Barthold has more than 20 years of experience in development, manufacturing, and commercialization of vascular implants. Prior to this position, he served as a Director of Research and Development from January 2018. Over his 20 years of experience with JOTEC GmbH in Hechingen, Germany, Mr. Barthold served as a Director of Research and Development from 2007 to 2017, as well as a number of other leadership positions. Prior to joining JOTEC, he worked as a project manager at MAFO AG and was a research associate at the Institute for Applied Research in Reutlingen, Germany. Mr. Barthold holds a graduate engineering degree in Chemistry of Synthetic Materials from the Reutlingen University, Reutlingen, Germany in 1993. Mr. Barthold announced his retirement as of January 9, 2023, and has stepped down as an executive officer of the Company as of that date.

John E. Davis was appointed to the position of Senior Vice President, Global Sales and Marketing in September 2015. He has over 25 years of experience in Sales and Marketing and Executive Leadership. Prior to joining Artivion, he served as Executive Vice President of Sales and Marketing at CorMatrix, a privately held medical device company creating innovative biomaterial devices to repair damaged heart tissue from March 2012 to September 2015. Prior to CorMatrix, he served for four years as a Vice President of Sales in the Cardiac Rhythm Management Devices business at St. Jude Medical, now part of Abbott Laboratories. Before St. Jude Medical, he served for 14 years with Medtronic in the Cardiac Rhythm Disease Management division in senior sales leadership roles. In his early career he served with Roche Diagnostics and Ciba-Geigy Corporation. Mr. Davis received a Bachelor's degree from Western Carolina University.

Matthew A. Getz was appointed to the position of Vice President, Human Resources in August 2019. Mr. Getz brings more than 25 years of human resources leadership experience in media, banking, and technology industries, and oversees the company's global human resources practice and strategy. Prior to joining Artivion, he served as the Chief Human Resources Officer of Encompass Digital Media and has held senior human resources roles at SunTrust Bank, Xiocom Wireless, Earthlink and BlessingWhite. Mr. Getz holds an MBA with a concentration in organizational management and international business from Georgia State University and a BBA in accounting from Mercer University.

Andrew M. Green was appointed to the position of Vice President, Regulatory affairs in March 2021. Mr. Green has 28 years of regulatory, clinical, quality, and business experience in the medical device and biologics industry. More specifically, he spent 3 years at the FDA as a scientific reviewer in the cardiovascular devices branch, almost 10 years at Novoste Corporation as the Vice President of Regulatory, Clinical, and Quality, and five years providing regulatory, clinical, and quality consulting services to medical device companies. Mr. Green also has broad business experience, having served as the President and COO of CorMatrix Cardiovascular for several years before ultimately serving as its CEO. After the acquisition of the CorMatrix assets by Aziyo Biologics, Mr. Green continued with Aziyo in several roles, including as the Executive Vice President of Regulatory and Medical Affairs. He started his career serving as a combat medic in the US Army and Army Reserves. Mr. Green has a Bachelor in Biological Sciences and a Masters in Bioengineering, both from Clemson University.

Jean F. Holloway, Esq. was appointed to the position of Senior Vice President, General Counsel, Chief Compliance Officer, and Secretary in January 2016. She previously served as Vice President, General Counsel, and Secretary beginning in April 2015 and was subsequently appointed to the additional position of Chief Compliance Officer in October 2015. Prior to joining Artivion, she held various positions, including Vice President, General Counsel and Secretary of Bard, Deputy General Counsel, Medtronic, Inc., Vice President, Litigation, Boston Scientific, Inc., and Deputy General Counsel, Guidant Corporation. Ms. Holloway also spent nearly 15 years in private practice as a trial lawyer at Dorsey & Whitney, Faegre & Benson and Sidley & Austin. She clerked for two years on the Seventh Circuit Court of Appeals for the Honorable Luther M. Swygert. Ms. Holloway has a JD/MBA from the University of Chicago and two undergraduate degrees from Yale University in engineering and political science.

Amy D. Horton, CPA was appointed to the position of Vice President and Chief Accounting Officer in January 2016 and had previously served as Chief Accounting Officer of Artivion since 2006. Ms. Horton has been with the Company since January 1998, serving as Controller from April 2000 to August 2006, and as Assistant Controller prior to that. From 1993 to 1998, Ms. Horton was employed as a Certified Public Accountant with Ernst & Young, LLP. She received her BS and Master's degrees in Accounting from Brigham Young University in Provo, Utah.

D. Ashley Lee, CPA has served as Executive Vice President, Chief Operating Officer, and Chief Financial Officer since November 2004. Mr. Lee has been with Artivion since December 1994 serving as Vice President of Finance, Chief Financial Officer, and Treasurer from December 2002 to November 2004; as Vice President, Finance and Chief Financial Officer from April 2000 to December 2002; and as Controller Artivion from December 1994 until April 2000. From 1993 to 1994, Mr. Lee served as the Assistant Director of Finance for Compass Retail, Inc., a wholly-owned subsidiary of Equitable Real Estate. From 1987 to 1993, Mr. Lee was employed as a Certified Public Accountant with Ernst & Young, LLP. Mr. Lee received his BS in Accounting from the University of Mississippi.

Dennis B. Maier was appointed to the position of Vice President, Operations in July 2017and promoted to the position of Senior Vice President, Operations in February 2022. Mr. Maier has more than 15 years of experience in the medical device industry. Prior to joining Artivion, he served as the Senior Director of Baxter Healthcare's direct material global purchasing and supplier management team. He also served as Vice President of Global Sourcing for Hill-Rom. Prior to that, he spent five years with Medtronic leading several Cardiac Rhythm Disease Management (CRDM) manufacturing operations, as well as serving as Director of CRDM Global Commodity management. Mr. Maier also spent eight years with Abbott Vascular and Boston Scientific (both former Guidant Corporation businesses) in a variety of leadership roles. Prior to entering the medical device industry, Mr. Maier worked briefly for Ford Motor Company and served six years as an officer in the U.S Army. He received an MBA from the Krannert Graduate School of Management at Purdue University and a B.S. in Mechanical Engineering from the US Military Academy at West Point.

Rochelle L. Maney was appointed to the position of Vice President, Global Quality in March of 2021. She has over 20 years of experience in the medical device and tissue industries and has been with the Company since 2000 serving in multiple leadership roles, most recently as Vice President, Quality for the Kennesaw, Georgia manufacturing facility. She is the lead executive for Quality in strategy, diligence, and acquisitions and is responsible for all quality functions at the Company's three manufacturing facilities in Georgia, Texas, and Hechingen, Germany. Ms. Maney is a member of the American Society of Quality and serves on the Quality Council for the American Association of Tissue Banks. She received her Bachelor of Science in Biology degree from Berry College.

Marshall S. Stanton, MD was appointed to the position of Senior Vice President, Clinical Research and Chief Medical Officer in March of 2021. Dr. Stanton has over 20 years of experience in the medical device industry and over 30 years of advancing healthcare. Before joining Artivion, he held various senior management positions at Medtronic including Senior Vice President and President of the Pain Therapies Business Unit, General Manager of the Implantable Defibrillator Business, and leader of the Clinical Research department of the Cardiac and Vascular Group. While there, he served on the leadership team of the Medtronic Women's Network. Prior to Medtronic, he practiced cardiology for a decade at the Mayo Clinic. Dr. Stanton received his MD degree from the Medical College of Virginia and BA from the University of Pennsylvania.

Item 11. Executive Compensation.

The response to Item 11 is incorporated herein by reference to the information to be set forth in the definitive Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2022.

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

The response to Item 12 is incorporated herein by reference to the information to be set forth in the definitive Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2022.

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

The response to Item 13 is incorporated herein by reference to the information to be set forth in the definitive Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2022.

Item 14. Principal Accounting Fees and Services.

The response to Item 14 is incorporated herein by reference to the information to be set forth in the definitive Proxy Statement for the Annual Meeting of Stockholders to be filed with the Commission within 120 days after December 31, 2022.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

The following are consolidated financial statements of Artivion, Inc. and subsidiaries are filed as part of this report under Item 8 – Financial Statements and Supplementary Data:

(a) 1. Financial Statements.

Consolidated Financial Statements begin on page 62.

2. Financial Statement Schedules.

All financial statement schedules are omitted, as the required information is immaterial, not applicable, or the information is presented in the consolidated financial statements or related notes.

3. Exhibits

The information required by this Item is set forth on the exhibit index that follows the signature page of this Annual Report on Form 10-K.

SIGNATURES

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

ARTIVION, INC.

By

/s/ J. PATRICK MACKIN

February 23, 2023

J. Patrick Mackin
President, Chief Executive Officer, and

Chairman of the Board of Directors

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>	
/s/ J. PATRICK MACKIN J. Patrick Mackin	President, Chief Executive Officer, and Chairman of the Board of Directors (Principal Executive Officer)	February 23, 2023	
/s/ D. ASHLEY LEE D. Ashley Lee	Executive Vice President, Chief Operating Officer, and Chief Financial Officer (Principal Financial Officer)	February 23, 2023	
/s/ AMY D. HORTON	Vice President and Chief Accounting Officer	February 23, 2023	
Amy D. Horton	(Principal Accounting Officer)	1 columny 23, 2023	
/s/ THOMAS F. ACKERMAN	Director	February 23, 2023	
Thomas F. Ackerman	Bilector	1 Cordary 23, 2023	
/s/ DANIEL J BEVEVINO	Director	February 23, 2023	
Daniel J Bevevino	2.0000		
/s/ MARNA P. BORGSTROM	Director	February 23, 2023	
Marna P. Borgstrom	Director		
/s/ JAMES W. BULLOCK	Director	February 23, 2023	
James W. Bullock	Director		
/s/ JEFFREY H. BURBANK	Director	February 23, 2023	
Jeffrey H. Burbank	Director	1 cordary 23, 2023	
/s/ ELIZABETH A. HOFF	Director	February 23, 2023	
Elizabeth A. Hoff	Director	reditary 23, 2023	
/s/ JON W. SALVESON	Director	February 23, 2023	
Jon W. Salveson	Director	1 Columny 23, 2023	
/s/ ANTHONY B. SEMEDO	Director	February 23, 2023	
Anthony B. Semedo	Director	1 Columny 23, 2023	

Exhibit Number	Description
2.1	Securities Purchase Agreement, dated September 2, 2020, by and among Artivion, Inc., Ascyrus Medical LLC, the securityholders of Ascyrus Medical LLC and the Securityholder Representative (as defined therein). (Incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed September 2, 2020.)
2.2	Asset Purchase Agreement dated July 28, 2021, by among Artivion, Inc., and Baxter Healthcare Company. (Incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed July 29, 2021.)
2.3	<u>Plan of Conversion, effective January 1, 2022. (Incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed January 4, 2022.)</u>
3.1	Delaware Certificate of Incorporation, effective January 1, 2022. (Incorporated herein by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed January 4, 2022.)
3.2	Delaware Certificate of Amendment of Certificate of Incorporation, effective January 18, 2022. (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed January 20, 2022.)
3.3	Amended and Restated Bylaws of Artivion, Inc., a Delaware Corporation (Incorporated herein by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed January 20, 2022.)
4.1	Form of Certificate for our Common Stock. (Incorporated herein by reference to Exhibit 4.2 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1997.)
4.2*	Description of Artivion, Inc.'s Securities under Section 12 of the Exchange Act.
4.3	Indenture, dated as of June 23, 2020, by and between Artivion, Inc. and US Bank National Association, as trustee. (Incorporated herein by reference to Exhibit A of Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed June 23, 2020.)
4.4	Form of Note filed as Exhibit A to Indenture, dated as of June 23, 2020, by and between Artivion, Inc. and US Bank National Association, as trustee. (Incorporated herein by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed June 23, 2020.)
10.1†	Artivion, Inc. 2009 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed July 30, 2009.)
10.1(a)†	Amended and Restated Artivion, Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 99.1 to the Registrant's Form S-8 filed June 22, 2012.)
10.1(b)†	First Amendment to the Amended and Restated Artivion, Inc. 2009 Stock Incentive Plan, dated July 24, 2012. (Incorporated herein by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q filed October 30, 2012.)
10.1(c)†	Second Amended and Restated Artivion Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Appendix B to the Registrant's Definitive Proxy Statement filed April 8, 2014.)
10.1(d)†	Form of Non-Qualified Stock Option Grant Agreement pursuant to the Artivion, Inc. 2009 Employee Stock Incentive Plan entered into with each Named Executive Officer. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed April 29, 2010.)
10.2†	Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q filed July 28, 2015.)
10.2(a)†	Artivion, Inc. Equity and Cash Incentive Plan, as amended. (Incorporated herein by reference to Exhibit 10.2(a) to Registrant's Report on Form 10-K for the year ended December 31, 2018.)
10.2(b)†	Form of 2019 Performance Share Award Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.2(b) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2019.)
10.2(c)†	Form of 2019 Long Term Incentive Program Performance Share Award Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.2(c) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2019.)
10.2(d)†∞	Form of 2018 Officer Restricted Stock Award Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.2(c) to Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)

Exhibit Number	Description					
10.2(e)†∞	Form of 2018 Non-Employee Director Restricted Stock Award Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan.					
10.2(f)†∞	(Incorporated herein by reference to Exhibit 10.2(d) to Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.) Form of 2018 Grant of Non-Qualified Stock Option pursuant to the Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein					
10.2(1) \infty	by reference to Exhibit 10.2(e) to Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)					
10.3	Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Appendix B to the Registrant's 2020 Proxy Statement filed on March 31, 2020.)					
10.3(a)†*	Form of 2022 Grant of Non-Employee Director Restricted Stock Award Agreement pursuant to the Artivion, Inc. 2020 Equity and Cash Incentive Plan.					
10.3(b)	Form of Non-Qualified Stock Option Grant Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan Option Award					
10.2()	Agreement. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed May 6, 2022.)					
10.3(c)	Form of PSU Award Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed May 6, 2022.)					
10.3(d)	Form of Restricted Stock Unit Award Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed May 6, 2022.)					
10.3(e)	Form of Special PSU Award Agreement pursuant to the Artivion, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q filed May 6, 2022.)					
10.4	Artivion, Inc. Amended and Restated Employee Stock Purchase Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed May 20, 2022.)					
10.5†	Artivion, Inc. Executive Deferred Compensation Plan. (Incorporated herein by reference to Exhibit 10.52 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2010.)					
10.6†*	Summary of 2022 Compensation Arrangements with Non-Employee Directors.					
10.7†	Employment Agreement between Artivion, Inc. and J. Patrick Mackin, dated as of July 7, 2014. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed July 11, 2014.)					
10.8†	Stock Option Grant Agreement by and between Artivion, Inc. and J. Patrick Mackin, dated September 2, 2014. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed October 28, 2014.)					
10.9†	Form of Indemnification Agreement for Non-Employee Directors and Executive Officers. (Incorporated herein by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q filed November 4, 2022.)					
10.10†	Change of Control Severance Agreement between Artivion, Inc. and John E. Davis, dated August 2, 2022. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed November 4, 2022.)					
10.11†	Change of Control Severance Agreement between Artivion, Inc. and D. Ashley Lee, dated August 2, 2022 (Incorporated herein by reference to Exhibit 10.4 to Registrant's Quarterly Report on Form 10-Q filed November 4, 2022.)					
10.12†	Change of Control Severance Agreement between Artivion, Inc. and Jean F. Holloway, dated August 2, 2022 (Incorporated herein by reference to Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q filed November 4, 2022.)					
10.13+	Clinical Research Agreement, dated October 10, 2019, by and between Artivion, Inc. and Duke University. (Incorporated herein by reference to Exhibit 10.19 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2019.)					
10.13(a)+	First Amendment to Clinical Research Agreement, dated October 10, 2019, by and between Artivion, Inc. and Duke University. (Incorporated herein by reference to Exhibit 10.23(a) to the Annual Report on Form 10-K filed February 23, 2021.)					

Exhibit Number	Description		
10.13(b)+*	Second Amendment to Clinical Research Agreement, dated January 20, 2022, by and between Artivion, Inc. and Duke University.		
10.13(c)+*	Third Amendment to Clinical Research Agreement, dated November 18, 2022, by and between Artivion, Inc. and Duke University.		
10.14	Credit and Guaranty Agreement, dated as of December 1, 2017, by and among Artivion, Inc., CryoLife International, Inc., On-X Life Technologies Holdings, Inc., On-X Life Technologies, Inc., AuraZyme Pharmaceuticals, Inc., the financial institutions party thereto from time to time as lenders, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent. (Incorporated herein by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed December 1, 2017.)		
10.14(a)	First Amendment to Credit and Guaranty Agreement by and among Artivion, Inc., CryoLife International, Inc., On-X Life Technologies Holdings, Inc., On-X Life Technologies, Inc., AuraZyme Pharmaceuticals, Inc., the financial institutions party thereto from time to time as lenders, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent, dated as of October 26, 2018. (Incorporated herein by reference to Exhibit 10.1 of Registrant's Current Report on Form 8-K filed October 31, 2018.)		
10.14(b)	Second Amendment to Credit and Guaranty Agreement by and among Artivion, Inc., CryoLife International, Inc., On-X Life Technologies Holdings, Inc., On-X Life Technologies, Inc., AuraZyme Pharmaceuticals, Inc., the financial institutions party thereto from time to time as lenders, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent, dated as of April 29, 2020. (Incorporated herein by reference to Exhibit 10.3 of Registrant's Quarterly Report on Form 10-Q filed July 31, 2020.)		
10.14(c)	Third Amendment to Credit and Guaranty Agreement between Artivion, Inc. and Deutsche Bank AG New York Branch as administrative agent and collateral agent, dated June 2, 2021. (Incorporated herein by reference to Exhibit 10.1 of the Registrant's Quarterly Report on Form 10-Q filed July 30, 2021.)		
10.14(d)*	Fourth Amendment to Credit and Guaranty Agreement between Artivion, Inc. (f/k/a CryoLife, Inc.), the Guarantor Subsidiaries defined therein, the financial institutions party thereto from time to time as lenders, and Deutsche Bank AG New York Branch, as Administrative Agent.		
10.15	Lease Agreement between Artivion, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to Amli Land Development—I Limited Partnership, dated April 18, 1995. (Incorporated herein by reference to Exhibit 10.16 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2007.)		
10.15(a)	First Amendment to Lease Agreement between Artivion, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to Amli Land Development—I Limited Partnership, dated August 6, 1999. (Incorporated herein by reference to Exhibit 10.16(a) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1999.)		
10.15(b)	Restatement and Amendment to Funding Agreement between Artivion, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to Amli Land Development—I Limited Partnership, dated August 6, 1999. (Incorporated herein by reference to Exhibit 10.16(b) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000.)		
10.15(c)	Second Amendment to Lease Agreement between Artivion, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to P&L Barrett, L.P., dated May 10, 2010. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed July 29, 2010.)		
10.15(d)++	Third Amendment to Lease Agreement between Artivion, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to P&L Barrett, L.P., dated May 10, 2020. (Incorporated herein by reference to Exhibit 10.15(d) to the Registrant's Quarterly Report on Form 10-Q filed April 30, 2021.)		
10.16++	Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated March 2, 2009. (Incorporated herein by reference to Exhibit 10.14 to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)		
10.16(a)++	First Amendment to Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated November 15, 2012. (Incorporated herein by reference to Exhibit 10.14(a) to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)		

Exhibit Number	Description	
10.16(b)++	Second Amendment to Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated January 29, 2015. (Incorporated herein by reference to Exhibit 10.14(b) to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)	
10.16(c)++	Third Amendment to Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated January 29, 201 (Incorporated herein by reference to Exhibit 10.14(c) to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)	
10.17	<u>Lease Agreement between JOTEC GmbH and Lars Sunnanväder for Lotzenäcker 23, dated October 27, 2017 and November 2, 2017.</u> (<u>Incorporated herein by reference to Exhibit 10.15 to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.</u>)	
10.17(a)	First Amendment to Lease Agreement between JOTEC GmbH and Lars Sunnanväder for Lotzenäcker 23, dated December 28, 2017 and January 1, 2018. (Incorporated herein by reference to Exhibit 10.15(a) to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)	
10.18++	Lease Agreement between JOTEC GmbH and Lars Sunnanväder for Lotzenäcker 25, dated October 27, 2017 and November 2, 2017. (Incorporated herein by reference to Exhibit 10.16 to the Registrant's Quarterly Report on Form 10-Q filed May 4, 2018.)	
10.18(a)++	First Amendment to Lease Agreement between JOTEC GmbH and Lars Sunnanväder for Lotzenäcker 25, dated April 27, 2018. (Incorporated herein by reference to Exhibit 10.16(a) to the Registrant's Quarterly Report on Form 10-Q filed August 7, 2018.)	
10.19++	<u>Lease Agreement between JOTEC GmbH and Frau Annika Sunnanväder for an objected located on the leased property at Lotzenäcker 25, dated October 28, 2020. (Incorporated herein by reference to Exhibit 10.19 to the Registrant's Annual Report on Form 10-K filed February 23, 2021.)</u>	
10.20	Loan Agreement, dated September 11, 2019, by and between Artivion, Inc., as lender, and Endospan Ltd., as borrower. (Incorporate herein by reference to Exhibit 10.1 of Registrant's Quarterly Report on Form 10-Q filed October 31, 2019.)	
10.21+	Exclusive Distribution Agreement, dated September 11, 2019, by and between JOTEC GmbH, as distributor, and Endospan Ltd., as manufacturer. (Incorporated herein by reference to Exhibit 10.2 of Registrant's Quarterly Report on Form 10-Q filed October 31, 2019.)	
10.21(a)+	First Amendment to Exclusive Distribution Agreement, by and between JOTEC GmbH, as distributor, and Endospan Ltd., a manufacturer, dated as of August 31, 2020. (Incorporated herein by reference to Exhibit 10.21(a) to the Annual Report on Form 10-filed February 23, 2021.)	
10.21(b)+*	Second Amendment to Exclusive Distribution Agreement, by and between JOTEC GmbH, as distributor, and Endospan Ltd., as manufacturer.	
10.22	Purchase Agreement, dated as of June 18, 2020, by and between Artivion, Inc. and Morgan Stanley & Co. LLC, as the initial purchaser. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed June 23, 2020.)	
21.1*	Subsidiaries of Artivion, Inc.	
23.1*	Consent of Ernst & Young LLP	
31.1*	Certification by J. Patrick Mackin pursuant to section 302 of the Sarbanes-Oxley Act of 2002.	
31.2*	Certification by D. Ashley Lee pursuant to section 302 of the Sarbanes-Oxley Act of 2002.	
32**	Certification Pursuant To 18 USC. Section 1350, As Adopted Pursuant To Section 906 Of The Sarbanes-Oxley Act Of 2002.	
101.INS*	XBRL Instance Document	
101.SCH*	XBRL Taxonomy Extension Schema Document	
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document	
101.DEF*	XBRL Taxonomy Extension Definition Linkbase	
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document	
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document	
104	Cover Page Interactive Data File – formatted as Inline XBRL and contained in Exhibit 101	

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- * Filed herewith.
- ** Furnished herewith.
- † Indicates management contract or compensatory plan or arrangement.
- ∞ Indicates that the 2018 form was used in 2019, and 2020, except otherwise indicated.
- + The Registrant has redacted exhibit provisions or terms that are both not material and would likely cause competitive harm to the Registrant if publicly disclosed.
- ++ The Registrant has been granted confidential treatment for certain portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

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

As of December 31, 2022, Artivion, Inc., a Delaware corporation (the "Company"), had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): Common Stock.

Description of Common Stock

The following description of the Company's Common Stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to the Company's Certificate of Incorporation, as amended by the Certificate of Amendment dated January 18, 2022 (together, the "Charter"), and Amended and Restated Bylaws (the "Bylaws"), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K to which this description is also an exhibit.

Authorized Capital Stock

The Company's Charter authorizes the Company to issue 75,000,000 shares of common stock, par value \$0.01 per share (the "Common Stock"), and 5,000,000 shares of preferred stock, par value \$0.01 per share (the "Preferred Stock"). The outstanding shares of Common Stock are duly issued, fully paid, and nonassessable

Voting Rights

The holders of Common Stock are entitled to one vote for each share on all matters voted on by Company stockholders, including elections of directors, and, except as otherwise required by law or provided in any resolution adopted by the Company's Board of Directors with respect to any series of Preferred Stock, the holders of such shares possess all voting power.

Dividend Rights

Subject to the rights of holders of outstanding shares of Preferred Stock, if any, the holders of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by the Company's Board of Directors in its discretion out of funds legally available for the payment of dividends.

Liquidation Rights

Subject to any preferential rights of outstanding shares of Preferred Stock, holders of Common Stock will share ratably in all assets legally available for distribution to the Company's stockholders in the event of dissolution.

Other Rights and Preferences

The Common Stock has no sinking fund or redemption provisions or preemptive, conversion or exchange rights.

The rights, preferences and privileges of holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of Preferred Stock that the Company's Board of Directors may designate and issue in the future.

Transfer Agent and Registrar

The Transfer Agent and Registrar for the common stock is American Stock Transfer & Trust Company, LLC. It is located at 6201 15th Avenue, Brooklyn, NY 11219, and its telephone number is (718) 921-8124.

Listing

The Common Stock is listed on the New York Stock Exchange under the symbol "AORT."

Anti-Takeover Effect of Delaware Law and Certain Charter and Bylaw Provisions

The Company's Charter and Bylaws contain provisions that could have the effect of discouraging potential acquisition proposals or tender offers or delaying or preventing a change of control of the Company. These provisions include the following:

- special meetings of stockholders may be called only by a majority of the Board of Directors or by holders of a majority of the shares entitled to vote at the meeting;
- only business brought before an annual meeting by the Board of Directors or by a stockholder who complies with the procedures set forth in the Bylaws may be transacted at an annual meeting of stockholders;
- advance notice is required for specified stockholder actions, such as the nomination of directors and stockholder proposals; and
- the Company may issue, without stockholder approval, up to 5,000,000 shares of preferred stock, having such rights and preferences as may be determined by the Board of Directors, which could adversely affect the rights and powers of the holders of Common Stock.

The Company is subject to the provisions of Section 203 of the Delaware General Corporation Law ("DGCL"), an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. For purposes of Section 203, a "business combination" includes a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder, and an "interested stockholder" is a person who owns 15% or more of the voting stock of a corporation, or any affiliate or associate of a corporation who, within three years prior, did own 15% or more of the voting stock of that corporation.

Exclusive Forum

Under the Charter, unless the Company consents to an alternative forum, the Court of Chancery of the State of Delaware (the "Chancery Court") is the exclusive forum for (1) any derivative action brought on behalf of the Company, (2) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or employee of the Company to the Company or its stockholders, (3) any civil action to interpret, apply, or enforce any provision of the DGCL, (4) any civil action to interpret, apply, enforce, or determine the validity of the provisions of the Charter or Bylaws, or (5) any action asserting a claim governed by the internal affairs doctrine; provided, however, in the event that the Chancery Court lacks jurisdiction over such action, the exclusive forum for such action shall be another state or federal court located within the State of Delaware, in all cases, subject to such court having personal jurisdiction over the indispensable parties named as defendants.

Notwithstanding the foregoing, the choice of forum provision set forth in the Charter does not apply to any actions arising under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act. Unless the Company consents in writing to the selection of an alternative forum, the federal district courts of the United States shall, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act against the Company or any director or officer of the Company.

Name: %%FIRST_NAME MIDDLE_NAME LAST_NAME%-% Total No. of Units: %%TOTAL_SHARES_GRANTED%-%

ARTIVION RESTRICTED STOCK AWARD AGREEMENT

ARTIVION, INC. ("Artivion") is pleased to grant you the restricted stock award described below ("Stock Award"). This grant is made subject to the further terms and conditions set forth in this Agreement and the terms of the Artivion, Inc. 2020 Equity and Cash Incentive Plan (the "Plan").

Grant Date: %%OPTION DATE%-%.

Total Number of Shares of Stock Award: %%TOTAL_SHARES_GRANTED%-%

Vesting Schedule:

Restricted Stock Awards

Vest Date

%%SHARES PERIOD1%-%

%%VEST DATE PERIOD1%-%

By Participant's electronic acceptance and the electronic signature of the Artivion, Inc (the "Company") representative below, Participant and the Company agree that this Award is granted under and governed by the terms and conditions of the Plan and this Award Agreement, including exhibits hereto, all of which are made a part of this document. Should the Plan and this Award Agreement conflict, the Plan governs. Participant has reviewed the Plan and this Award Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Award Agreement and fully understands all provisions of the Plan and Award Agreement. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Company upon any questions relating to the Plan and Award Agreement. Participant further agrees to notify the Company upon any change in the residence address indicated below.

After reviewing the documents noted above, please accept this Stock Award online where indicated on ETrade.com and retain a copy for your files. Please note that your electronic acceptance of this Restricted Stock Award is required. The Restricted Stock Award will be cancelled if not accepted within 30 days of the Grant Date noted above.

GRANTED BY:
ARTIVION, INC.
//D. Ashley Lee//
CFO, COO
GRANTED TO:
%%FIRST_NAME_MIDDLE_NAME_LAST_NAME%-%
%%ADDRESS_LINE_1%-%
%%ADDRESS_LINE_2%-%

%%CITY STATE ZIPCODE%-%

%%SOCIAL_SECURITY_NUMBER%-%

ADDITIONAL TERMS AND CONDITIONS OF YOUR RESTRICTED STOCK AWARD

EFFECT OF TERMINATION OF SERVICE. You must be a member of the Artivion Board of Directors on the applicable vesting date to be entitled to the vesting of your Stock Award on such date. Notwithstanding the foregoing, if you cease to be a member of the Artivion Board of Directors as a result of your death or disability or because you have served out your full term but are not standing for re-election at the end thereof, your Stock Award shall immediately become fully vested on the date you cease to be a member of the Board, so long as such vesting remains under the limit set by the Plan on shares permitted to vest prior to 12 months after the date of grant. If you cease to be a member of the Artivion Board of Directors for any other reason, and your Stock Award has not vested as of the date of termination of Board service, your Stock Award shall automatically be forfeited and cancelled as of the date of such termination of Board service.

STOCK AWARD SHARE CERTIFICATES. Certificates or a book entry account representing the shares of Common Stock to be issued pursuant to the Stock Award shall be issued in your name and shall be held by Artivion until the Stock Award is vested or forfeited as provided herein. Following vesting of your Stock Award, upon your written request, Artivion shall promptly deliver the shares as to which the Stock Award has vested, free of the restrictions described in the following section. Your rights in your Stock Award are contingent upon your executing and returning to the Company a form of stock power with respect to the shares subject to your Stock Award.

RIGHTS WITH RESPECT TO STOCK AWARD PRIOR TO VESTING. You may not transfer your Stock Award or the shares to be issued hereunder prior to vesting. Once this Stock Award vests, you may receive transferable shares representing the vested portion. Prior to vesting, you are entitled to all other rights as a shareholder with respect to the shares underlying the Stock Award, including the right to vote such shares and to receive dividends and other distributions, if any, payable with respect to such shares after the date of grant.

NOTICES. All notices delivered pursuant to this Agreement shall be in writing and shall be (i) delivered by hand, (ii) mailed by United States certified mail, return receipt requested, postage prepaid, (iii) sent by an internationally recognized courier which maintains evidence of delivery and receipt, (iv) sent by fax to (770) 429-5250, or (v) sent by email to legal@Artivion.com. All notices or other communications shall be directed to the following addresses (or to such other addresses as such parties may designate by notice to the other parties):

To Artivion: Artivion, Inc.

1655 Roberts Blvd., NW Kennesaw, GA 30144 Attention: Assistant Secretary

To you: The address set forth in the Agreement

MISCELLANEOUS. Failure by you or Artivion at any time or times to require performance by the other of any provisions in the Agreement will not affect the right to enforce those provisions. Any waiver by you or Artivion of any condition or of any breach of any term or provision in this Agreement, whether by conduct or otherwise, in any one or more instances, shall apply only to that instance and will not be deemed to waive conditions or breaches in the future. If any court of competent jurisdiction holds that any term or provision of this Agreement is invalid or unenforceable, the remaining terms and provisions will continue in full force and effect, and the Agreement shall be deemed to be amended automatically to exclude the offending provision. This Agreement may be executed in multiple copies and each executed copy shall be an original of the Agreement. This Agreement shall be subject to and governed by the laws of the State of Georgia. No change or modification of this Agreement shall be valid unless it is in writing and signed by the party against which enforcement is sought, except where specifically provided to the contrary herein. This Agreement shall be binding upon, and inure to the benefit of, the permitted successors, assigns, heirs, executors, and legal representatives of the parties hereto. The headings of each section of this Agreement are for convenience only. This Agreement, together with the Plan, contains the entire Agreement of the parties hereto, and no representation, inducement, promise, or agreement or other similar understanding between the parties not embodied herein shall be of any force or effect, and no party will be liable or bound in any manner for any warranty, representation, or covenant except as specifically set forth herein or in the Plan.

SUMMARY OF 2022 COMPENSATION ARRANGEMENTS WITH NON-EMPLOYEE DIRECTORS (Effective as of December 31, 2022)

The following summarizes the compensation and benefits received by the non-employee Directors of Artivion as of December 31, 2022. It is intended to be a summary of compensation arrangements, and in no way is intended to provide any additional rights to any non-employee Director.

Annual Retainer and Committee Chair Fees

Each of the non-employee Directors of the Board of Directors of Artivion (the "Board") receives an annual cash retainer of \$55,000. Each committee chair also receives a fee in addition to the annual cash retainer in the amounts shown in the following table.

Annual Fees for Committee Chairs

Audit Committee	\$ 20,000
Compensation Committee	\$ 20,000
Corporate Governance Committee	\$ 10,000
Compliance Committee	\$ 10,000

The Lead Director also receives a \$40,000 retainer paid in cash. Currently, the Lead Director is also the Chair of the Corporate Governance Committee, and he is compensated for his position as Chair of that committee. Artivion pays all cash retainers on a monthly basis.

Each committee member also receives a fee, in addition to the annual cash retainer, in the amounts shown in the following table.

Annual Fees for Committee Members

Audit Committee	\$ 10,000
Compensation Committee	\$ 7,500
Corporate Governance Committee	\$ 5,000
Compliance Committee	\$ 5,000

Restricted Stock Grants

Non-employee Directors of Artivion are eligible for equity grants, which are generally made in June of each year. The annual equity portion of non-employee Director compensation for fiscal 2022 was paid in the form of a grant of 7,878 shares of restricted stock.\(^1\) These shares were issued following the annual meeting of stockholders and vest on the first anniversary of issuance. The size and terms of the annual equity grant are subject to annual reevaluation by the Compensation Committee. If a Director ceases to serve as a Director as a result of death or disability or chooses not to stand for reelection following the completion of a full term of service, the equity grant will become fully vested on the date the Director ceases to be a member of the Board for any other reason, and their equity grant has not fully vested as of the date of termination of Board service, the equity grant shall automatically be forfeited and cancelled as of the date of such termination of Board service. The Compensation Committee, however, has discretion under Artivion's Equity and Cash Incentive Plan to cause the equity grant to fully vest for certain conditions.

¹ Note that one Director, who was not appointed until September 2022, received a grant of 9,066 shares of restricted stock in November 2022 that vests on the first anniversary of issuance.

CERTAIN INFORMATION HAS BEEN OMITTED OR REDACTED FROM VERSION OF THIS EXHIBIT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION BECAUSE IT BOTH (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED



Amendment Form

Amendment No. 2

Amendment Submission Date: January 20, 2022

Sponsor: Artivion, Inc. (formerly CryoLife, Inc.)

Study Title: PROACT Xa - Prospective Randomized On-X Anticoagulation Clinical Trial

Sponsor Contact: Brittanny Boyer, Director, Aortic Repair Technologies

DCRI Contacts: Alma Chavez, Project Leader Clinical Operations

Dawn Goodwin, Sr. Grants and Proposals Analyst, Grants and Proposals Services

CryoLife, Inc. ("Sponsor") and Duke University ("Duke" or "DCRI") entered into a Clinical Research Agreement (the "Agreement"), effective October 10, 2019, to conduct the PROACT Xa - Prospective Randomized On-X Anticoagulation Clinical Trial. This Amendment No. 2 serves as an amendment to the Agreement and provides details related to the scope changes and associated budget adjustments.

Name Change: Sponsor has changed its name effective January 18, 2022, and shall henceforth be known as Artivion, Inc. for purposes of the Study and the Agreement.

Description of Scope Changes: The budget for this Amendment is detailed in Attachment 1: "DCRI Detailed Fees and Pass-through Cost Estimate." Attachment 1 to this Amendment No. 2 hereby replaces the budget table included in Amendment No. 1 titled "Start-Up Agreement 7th Extension thru Full Study Budget 11/1/2020" in its entirety.

Changes to Study Timeline: This Amendment to the Agreement includes an

]. The treatment/follow-up period was decreased to offset the additional months of enrollment.

Current Study Timeline in the Agreement:

Study Timeline (Amendment No. 1)			
General Study Milestones	Number of Months	Date	
Planning/Startup			
Enrollment			
Treatment/Follow-up			
Last CRF In-house/Database Lock			
Close Out/Archival/Stat Report			
Final Reporting			
TOTAL PROJECT DURATION:			

Revised Study Timeline:

Revised Study Timeline (Amendment No. 2)				
General Study Milestones	Number of Months	Date		
Planning/Startup				
Enrollment				
Treatment/Follow-up				
Last CRF In-house/Database Lock				
Close Out/Archival/Stat Report				
Final Reporting				
TOTAL PROJECT DURATION:				

Description of Budget Change Summary:

	Original SUA Through Amendment No. 1	Amendment No. 2	Revised Contract Value
DCRI Direct Fees			
Pass-through Costs			
Total			

Description of Scope Changes: The DCRI budget for Amendment is detailed in Attachment I: "DCRI Detailed Fees and Pass-through Cost Estimate" in the "Scope Change Justification" column.

The DCRI will invoice completed units on a monthly basis. All payments remain as agreed upon as in the Agreement unless otherwise stated.

DCRI will invoice completed units on a monthly basis pursuant to the terms of the Agreement, provided, however, no additional upfront payment shall be required with respect to the budget increases reflected in this Amendment No. 2.

Approval Signatures:	
Artivion, Inc.:	Duke University:
By:	By:
Title:	Title:
Date:	Date:

7156-CRYL-01-Amendment No. 2 to the CRA SPS#: 232473

Attachment 1: "DCRI Detailed Fees and Pass-through Cost Estimate."

[Omitted]

7156-CRYL-01-Amendment No. 2 to the CRA SPS#: 232473

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CERTAIN INFORMATION HAS BEEN OMITTED OR REDACTED FROM VERSION OF THIS EXHIBIT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION BECAUSE IT BOTH (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED



Amendment Form

Amendment Submission Date:

November 18, 2022

Sponsor:

Artivion, Inc.

Study Title:

PROACT Xa - Prospective Randomized On-X Anticoagulation Clinical Trial

Melissa Thalin, Director, New Indications, Clinical Research

3

DCRI Contacts: Alma Chavez, Project Leader Clinical Operations

Dawn Goodwin, Sr. Grants and Proposals Analyst, Grants and Proposals Services

Artivion, Inc. ("Sponsor") and Duke University ("Duke" or "DCRI") entered into a Clinical Research Agreement (the "Agreement"), effective October 10, 2019, to conduct the PROACT Xa - Prospective Randomized On-X Anticoagulation Clinical Trial. This Amendment No. 3 serves as an amendment to the Agreement and provides details related to the scope changes and associated timeline and budget adjustments resulting from the decision to terminate the Study as of September 23, 2022. This Amendment reflects the Parties written Wind Down Plan as of the date above.

Description of Scope Changes: The budget for this Amendment is detailed in Attachment 1: "DCRI Detailed Fees and Pass-through Cost Estimate," justification for the changes reflected herein are provided in the "Scope Change Justification" column.

Unused Study Materials: The Parties acknowledge Sponsor's desire to re-sell or return all unused Study Materials and as such, Sponsor shall, or shall cause its designee to, maintain and not scrap, reject, destroy, or otherwise dispose of all remaining Study Materials unless instructed otherwise by Sponsor in writing.

Principal Investigator Change: Effective November 14, 2022, John Alexander, MD, assumed the role of Coordinating Investigator for the Study, replacing Tracy Wang, MD.

Changes to Study Timeline: This Amendment reflects the final Wind Down Plan for the Study as of the date of this Amendment. The Study is anticipated to end [in accordance with the Revised Study Timeline below.

Page 1

Amendment No.

Current Study Timeline in the Agreement:

Study Timeline (Amendment No. 2)			
General Study Milestones	Number of Months	Date	
Planning/Startup			
Enrollment			
Treatment/Follow-up			
Last CRF In-house/Database Lock			
Close Out/Archival/Stat Report			
Final Reporting			
TOTAL PROJECT DURATION:			

Revised Study Timeline:

Revised Study Timeline (Amendment No. 3)				
General Study Milestones	Number of Months	Date		
Planning/Startup				
Enrollment				
Treatment/Follow-up				
Last CRF In-house/Database Lock				
Close Out/Archival/Stat Report				
Final Manuscript				
TOTAL PROJECT DURATION:				

Description of Budget Change Summary:

	Original SUA Through Amendment No. 2	Amendment No. 3	Revised Contract Value
DCRI Direct Fees			
Pass-through Costs			
Total			

The DCRI will invoice completed units on a monthly basis. All payments remain as agreed upon as in the Agreement unless otherwise stated.

Approval Signatures:	
Artivion, Inc.:	Duke University:
By:	Ву:
Title:	Title:
Date:	Date:

7156-CRYL-01-Amendment No. 3 to the CRA SPS#: 232473

Attachment 1: "DCRI Detailed Fees and Pass-through Cost Estimate."

[Omitted]

7156-CRYL-01-Amendment No. 3 to the CRA SPS#: 232473

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FOURTH AMENDMENT TO CREDIT AND GUARANTY AGREEMENT

THIS FOURTH AMENDMENT TO CREDIT AND GUARANTY AGREEMENT is dated as of December 19, 2022 (this "Fourth Amendment"), and entered into by and among Artivion, Inc. (f/k/a CryoLife, Inc.), a Delaware corporation (the "Borrower"), the Guarantor Subsidiaries party hereto, the Lenders party hereto and Deutsche Bank AG New York Branch, as Administrative Agent.

RECITALS:

WHEREAS, reference is hereby made to the Credit and Guaranty Agreement, dated as of December 1, 2017 (as amended by that certain First Amendment to Credit and Guaranty Agreement, dated as of October 26, 2018, as further amended by that certain Second Amendment to Credit and Guaranty Agreement, dated as of April 29, 2020, as further amended by that certain Third Amendment to Credit and Guaranty Agreement, dated as of June 2, 2021, and as further amended, restated, supplemented and/or otherwise modified from time to time prior to the Fourth Amendment Effective Date referred to below, the "Credit Agreement"), among the Borrower, the Guarantor Subsidiaries, the Lenders, the Administrative Agent, the Collateral Agent and the other parties named therein (capitalized terms used but not defined herein having the meaning provided in the Credit Agreement as amended by this Fourth Amendment (the "Amended Credit Agreement"));

WHEREAS, (i) the Borrower and the Administrative Agent have made an Early-Opt-In Election pursuant to Section 2.18(b) of the Credit Agreement and have notified the Lenders thereof (such notice, the "Early Opt-In Notice") and (ii) in accordance with the terms of Section 2.18(b) of the Credit Agreement and the definition of "Benchmark Replacement" in the Credit Agreement, the Term SOFR Reference Rate shall replace USD LIBOR (as defined in the Credit Agreement) as the applicable Benchmark under the Credit Agreement and Adjusted Term SOFR shall replace the Eurodollar Rate, in each with respect to all applicable Loans and Commitments, on and subject to the terms and conditions hereof and the Amended Credit Agreement; and

WHEREAS, the Administrative Agent has determined that certain Benchmark Replacement Conforming Changes (as defined in the Credit Agreement) are required pursuant to Section 2.18(b)(iii) of the Credit Agreement.

NOW, THEREFORE, in consideration of the premises and agreements, provisions and covenants herein contained, the parties hereto agree as follows:

A. Amendments to Credit Agreement.

- 1. On the Fourth Amendment Effective Date, the Credit Agreement (excluding, except as set forth in paragraph 2 below, all Schedules and Exhibits thereto, each of which shall remain as in effect immediately prior to the Fourth Amendment Effective Date) is hereby amended to delete the stricken text (indicated textually in the same manner as the following example: stricken text) and to add the double- underlined text (indicated textually in the same manner as the following example: underlined text), in each case in Exhibit A hereto.
- 2. Each of Exhibit A-1 and Exhibit A-2 to Credit Agreement is hereby amended and restated in its entirety as attached hereto as Exhibit B-1 and Exhibit B-2 hereto, respectively.
- **B.** Conditions Precedent. This Fourth Amendment shall become effective as of the first date (the "Fourth Amendment Effective Date") when each of the conditions set forth in this Section B shall have been satisfied:

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- 1. The Administrative Agent shall have received duly executed counterparts hereof that, when taken together, bear the signatures of (i) the Borrower, (ii) each of the Guarantor Subsidiaries and (iii) the Administrative Agent.
- 2. The Borrower shall have reimbursed or paid all reasonable and documented out-of-pocket expenses in connection with this Fourth Amendment and any other out-of-pocket expenses of the Administrative Agent, including the reasonable fees, charges and disbursements of counsel for the Administrative Agent.
- 3. Six (6) Business Days shall have elapsed since the Administrative Agent shall have delivered the Early Opt-in Notice to the Lenders and the Administrative Agent shall not have received, prior to 5:00 p.m. (New York City time) on the Business Day immediately prior to the Fourth Amendment Effective Date, a written notice from the Required Lenders objecting to the Early Opt-In Election described therein or the amendments set forth in this Fourth Amendment.
- 4. No Default or Event of Default shall have occurred and be continuing (both immediately before and immediately after giving effect to this Fourth Amendment and the transactions contemplated hereby).

C. Other Terms.

- Existing Eurodollar Rate Loans. Notwithstanding anything to the contrary contained in the Amended Credit Agreement, (i) each Eurodollar Rate Loan (as defined in the Credit Agreement) outstanding on the Fourth Amendment Effective Date (each, an "Existing Eurodollar Rate Loan") shall remain outstanding as such, until the expiration of the Interest Period (as defined in the Credit Agreement) applicable to such Existing Rate Eurodollar Loan, in accordance with, and subject to all of the terms and conditions of, the Credit Agreement, (ii) interest on such Existing Eurodollar Rate Loan shall continue to accrue and shall be payable in accordance with Section 2.8 of the Credit Agreement, and (iii) all other provisions of the Credit Agreement as in effect immediately prior to the Fourth Amendment Effective Date relating to such Existing Eurodollar Rate Loan shall continue in full force and effect solely with respect to such Existing Eurodollar Rate Loan. From and after the Fourth Amendment Effective Date, (i) the Borrower shall not be permitted to request that any Lender fund, and no Lender shall fund, any Eurodollar Rate Loan, (ii) no Existing Eurodollar Rate Loan may be continued as a Eurodollar Rate Loan and (iii) each Existing Eurodollar Rate Loan may be converted to a SOFR Loan (as defined in the Amended Credit Agreement) or a Base Rate Loan (as defined in the Amended Credit Agreement) in accordance with Section 2.9 of the Amended Credit Agreement as if such Existing Eurodollar Rate Loan was a SOFR Loan (as defined in the Amended Credit Agreement).
- 2. Credit Party Certifications. By execution of this Fourth Amendment, each of the undersigned hereby certifies, on behalf of the applicable Credit Party and not in his/her individual capacity, that as of the Fourth Amendment Effective Date:
 - (i) each Credit Party has the corporate or other organizational power and authority to execute and deliver this Fourth Amendment and carry out the terms and provisions of this Fourth Amendment and the Amended Credit Agreement and has taken all necessary corporate or other organizational action to authorize the execution and delivery of this Fourth Amendment and performance of this Fourth Amendment and the Amended Credit Agreement;
 - (ii) each Credit Party has duly executed and delivered this Fourth Amendment and each of this Fourth Amendment and the Amended Credit Agreement constitutes the legal, valid and binding obligation of such Credit Party, enforceable against such Credit Party in accordance with its terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally or by general equitable principles, regardless of whether considered in a proceeding in equity or at law and principles of good faith and fair dealing;
 - (iii) the execution, delivery and performance by each Credit Party of this Fourth Amendment and the consummation of the transactions contemplated by the Fourth Amendment and the Amended Credit Agreement do not and will not (i) (A) violate any of the Organizational Documents of such Credit Party or (B) otherwise require any approval of any stockholder, member or partner of such Credit Party, except for such approvals or consents which have been obtained or made; (ii) violate any provision of any law, rule, regulation, order, judgment or decree of any Governmental Authority applicable to or otherwise binding on such Credit Party, except to the extent such violation could not reasonably be expected to have a Material Adverse Effect; (iii) conflict with, result in a breach of or constitute (with due notice or lapse of time or both) a default under, or otherwise require any approval or consent of any Person under, (A) any Contractual Obligation of such Credit Party, except to the extent such conflict, breach or default could not reasonably be expected to have a Material Adverse Effect, or (B) any Material Indebtedness, and in each case, except for such approvals or consents which have been obtained or made; or (iv) result in or require the creation or imposition of any Lien upon any of the properties or assets of such Credit Party (other than any Liens created under any of the Credit Documents in favor of the Collateral Agent, on behalf of the Secured Parties, and Permitted Liens);

- (iv) the representations and warranties contained in the Amended Credit Agreement and the other Credit Documents are true and correct in all material respects on and as of the Fourth Amendment Effective Date (both before and after giving effect thereto) to the same extent as though made on and as of the Fourth Amendment Effective Date, except to the extent such representations and warranties expressly relate to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects on and as of such earlier date; and
- (v) no Default or Event of Default has occurred and is continuing or would result from the consummation of the transactions contemplated hereby.
- **3.** Amendment, Modification and Waiver. This Fourth Amendment may not be amended, modified or waived except by an instrument or instruments in writing signed and delivered on behalf of each of the parties hereto and in accordance with the provisions of Section 10.5 of the Amended Credit Agreement.
- **4. Entire Agreement**. This Fourth Amendment, the Amended Credit Agreement and the other Credit Documents constitute the entire agreement among the parties with respect to the subject matter hereof and supersede all other prior agreements and understandings, both written and verbal, among the parties or any of them with respect to the subject matter hereof.
- 5. GOVERNING LAW. THIS FOURTH AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER, INCLUDING THE VALIDITY, INTERPRETATION, CONSTRUCTION, BREACH, ENFORCEMENT OR TERMINATION HEREOF, AND WHETHER ARISING IN CONTRACT OR TORT OR OTHERWISE, SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.
- **6. Severability**. In case any provision in or obligation hereunder or any Note will be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, will not in any way be affected or impaired thereby. If any provision of this Fourth Amendment is so broad as to be unenforceable, the provision shall be interpreted to be only so broad as would be enforceable.
- 7. Counterparts. This Fourth Amendment may be executed in counterparts, each of which shall be deemed to be an original, but all of which shall constitute one and the same agreement. Delivery of a counterpart to this Fourth Amendment by electronic means shall be as effective as delivery of an original counterpart hereof.
- 8. Submission to Jurisdiction. All judicial proceedings brought against any Credit Party arising out of or relating hereto or any other Credit Document, or any of the Obligations, will be brought in any state or Federal court of competent jurisdiction in the State, County and City of New York. By executing and delivering this Fourth Amendment, each Credit Party, for itself and in connection with its properties, irrevocably (a) accepts generally and unconditionally the exclusive jurisdiction and venue of such courts; (b) waives any defense of forum non conveniens; (c) agrees that service of all process in any such proceeding in any such court may be made by registered or certified mail, return receipt requested, to the applicable Credit Party at its address provided in accordance with Section 10.1 of the Amended Credit Agreement; (d) agrees that service as provided in clause (c) above is sufficient to confer personal jurisdiction over the applicable Credit Party in any such proceeding in any such court, and otherwise constitutes effective and binding service in every respect; and (e) agrees that the Agents and Lenders retain the right to serve process in any other manner permitted by law or to bring proceedings against any Credit Party in the courts of any other jurisdiction.
- 9. Waiver of Jury Trial. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THE FOURTH AMENDMENT, THE CREDIT DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED THEREBY AND AGREES THAT ANY SUCH ACTION OR PROCEEDING WILL BE TRIED BEFORE A COURT AND NOT BEFORE A JURY. EACH OF THE PARTIES HERETO ACKNOWLEDGES THAT THIS WAIVER IS A MATERIAL INDUCEMENT TO ENTER INTO A BUSINESS RELATIONSHIP, THAT EACH HAS RELIED ON THE WAIVER IN ENTERING INTO THIS FOURTH AMENDMENT, AND THAT EACH WILL CONTINUE TO RELY ON THIS WAIVER IN EPRESENTS THAT EACH HAS HAD THE OPPORTUNITY OF REVIEWING THIS JURY WAIVER WITH LEGAL COUNSEL, AND THAT EACH KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS.
- 10. Reaffirmation. By executing and delivering a counterpart hereof, (i) each Credit Party hereby agrees that, as of the Fourth Amendment Effective Date and after giving effect to this Fourth Amendment, all Obligations of the Borrower shall be guaranteed pursuant to the Guaranty in accordance with the terms and provisions thereof and shall be secured pursuant to the Collateral Documents in accordance with the terms and provisions thereof; (ii) each Credit Party hereby (A) agrees that, notwithstanding the effectiveness of this Fourth Amendment, as of the Fourth Amendment Effective Date and after giving effect to this Fourth Amendment, the

Collateral Documents continue to be in full force and effect, (B) agrees as of the Fourth Amendment Effective Date that all of the Liens and security interests created and arising under each Collateral Document remain in full force and effect on a continuous basis, and the perfected status and priority of each such Lien and security interest continues in full force and effect on a continuous basis, unimpaired, uninterrupted and undischarged, as collateral security for its Obligations under the Credit Documents (as modified hereby) to which it is a party, in each case, to the extent provided in, and subject to the limitations and qualifications set forth in, such Credit Documents (as amended by this Fourth Amendment) and (C) as of the Fourth Amendment Effective Date affirms and confirms all of its obligations and liabilities under the Credit Agreement (as modified hereby) and each other Credit Document (including this Fourth Amendment), in each case after giving effect to this Fourth Amendment, including its guarantee of the Obligations and the pledge of and/or grant of a security interest in its assets constituting Collateral pursuant to the Collateral Documents to obligations, all as provided in the Collateral Documents, and acknowledges and agrees that as of the Fourth Amendment Effective Date such obligations, liabilities, guarantee, pledge and grant continue in full force and effect in respect of, and to secure, such Obligations under the Amended Credit Agreement and the other Credit Documents, in each case after giving effect to this Fourth Amendment; and (iii) each Guarantor agrees that nothing in the Credit Agreement, this Fourth Amendment or any other Credit Document shall be deemed to require the consent of such Guarantor to any future amendment to the Amended Credit Agreement.

- 11. Notice of Benchmark Replacement. The Administrative Agent hereby notifies the Borrower and the Lenders of (i) the implementation of a Benchmark Replacement (as defined in the Credit Agreement) and (ii) the effectiveness of Benchmark Conforming Changes (as defined in the Credit Agreement), in each case pursuant to this Fourth Amendment as of the Fourth Amendment Effective Date.
- 12. Miscellaneous. This Fourth Amendment shall constitute a Credit Document for all purposes of the Amended Credit Agreement and the other Credit Documents. The provisions of this Fourth Amendment are deemed incorporated as of the Fourth Amendment Effective Date into the Credit Agreement as if fully set forth therein. Except as specifically amended by this Fourth Amendment, (i) the Credit Agreement and the other Credit Documents shall remain in full force and effect and (ii) the execution, delivery and performance of this Fourth Amendment shall not constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of any Agent or Lender under, the Credit Agreement or any of the other Credit Documents.

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IN WITNESS WHEREOF, each of the undersigned has caused its duly authorized officer to execute and deliver this Fourth Amendment as of the date first set forth above.

BORROWER:

ARTIVION, INC.

By: <u>/s/ D. Ashley Lee</u>
Name: D. Ashley Lee Title: EVP & CFO



GUARANTOR SUBSIDIARIES:

CRYOLIFE INTERNATIONAL, INC. ON-X LIFE TECHNOLOGIES HOLDINGS, INC. ON-X LIFE TECHNOLOGIES, INC. AURAZYME PHARMACEUTICALS, INC.

By: Name: D. Ashley Lee
Title: EVP & CFO

[Signature Page to Artivion, Inc. (f/k/a CryoLife, Inc.) Fourth Amendment to Credit and Guaranty Agreement]

DEUTSCHE BANK AG NEW YORK BRANCH, as Administrative Agent

By:	
-	Name: Philip Tancorra
	Title: Vice President
	philip.tancorra@db.com 212-250-6576
Ву:	
	Name: Suzan Onal
	Title: Vice President
	suzan.onal@db.com
	212-250-3174

EXHIBIT A

Amended Credit Agreement

[Attached]

AMERICAS 118492174

CONFORMED THROUGH THIRD FOURTH AMENDMENT

\$255,000,000

CREDIT AND GUARANTY AGREEMENT

dated as of December 1, 2017 by and among

CRYOLIFE, INC., as Borrower,

CERTAIN SUBSIDIARIES OF THE BORROWER FROM TIME TO TIME PARTY HERETO,

as Guarantor Subsidiaries,

The Lenders From Time to Time Party Hereto, DEUTSCHE BANK AG NEW YORK

BRANCH,

as Administrative Agent and Collateral Agent,

CAPITAL ONE, NATIONAL ASSOCIATION,

as Syndication Agent and

FIFTH THIRD BANK and ING CAPITAL LLC, as Co-Documentation Agents

DEUTSCHE BANK SECURITIES INC., CAPITAL ONE, NATIONAL ASSOCIATION, and FIFTH THIRD BANK, as Joint Lead Arrangers and Joint Bookrunners

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CREDIT AND GUARANTY AGREEMENT

This CREDIT AND GUARANTY AGREEMENT, dated as of December 1, 2017 (this "Agreement"), is entered into by and among CRYOLIFE, INC., a Florida corporation (the "Borrower"), certain Subsidiaries of the Borrower from time to time party hereto, as Guarantor Subsidiaries, the Lenders from time to time party hereto, DEUTSCHE BANK AG NEW YORK BRANCH, as administrative agent (together with its permitted successors in such capacity, the "Administrative Agent") and as collateral agent (together with its permitted successors in such capacity, the "Collateral Agent"), CAPITAL ONE, NATIONAL ASSOCIATION, as syndication agent, and FIFTH THIRD BANK, and ING CAPITAL LLC as co-documentation agents.

RECITALS:

WHEREAS, capitalized terms used in these recitals will have the respective meanings set forth for such terms in Section 1.1;

WHEREAS, pursuant to the transactions undertaken in connection with that certain Securities Purchase Agreement, dated as of October 10, 2017, by and among the Borrower, CryoLife German Holdco GmbH, Jolly Buyer Acquisition GmbH, the securityholders of the Closing Date Target party thereto, the security representative party thereto and JOTEC AG, a Swiss AG (the "Closing Date Target" and, together with its subsidiaries, including JOTEC GmbH, a German Gesellschaft mit beschränkter Haftung, the "Acquired Business") (such agreement, including all exhibits, schedules and disclosure schedules thereto, as amended, restated, supplemented or otherwise modified prior to the Closing Date, the "Acquisition Agreement"), the Borrower will indirectly acquire in a "friendly" transaction at least 94% of the Capital Stock of the Closing Date Target (the "Acquisition");

WHEREAS, the Lenders have agreed to extend certain credit facilities to the Borrower, in an aggregate principal amount of \$255,000,000, consisting of (a) \$225,000,000 in aggregate principal amount of Revolving Credit Commitments:

WHEREAS, the proceeds of the Initial Term Loans and any Initial Revolving Borrowings will be used to consummate the Acquisition on the Closing Date and to consummate the other Transactions;

WHEREAS, the Borrower has agreed to secure all of its Obligations by granting to the Collateral Agent, for the benefit of the Secured Parties, a Lien on substantially all of its assets subject to certain exceptions set forth herein and in the Pledge and Security Agreement; and

WHEREAS, the Guarantor Subsidiaries have agreed to guarantee the obligations of the Borrower hereunder and to secure their respective Obligations by granting to the Collateral Agent, for the benefit of the Secured Parties, a Lien on substantially all of their respective assets subject to certain exceptions as set forth herein and in the Pledge and Security Agreement;

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, the parties hereto agree as follows:

SECTION 1. DEFINITIONS AND INTERPRETATION

1.1 Definitions. The following terms used herein, including in the preamble, recitals, exhibits and schedules hereto, will have the following meanings:

"Acceptable Discount Price" as defined in Section 2.25(b). "Acquired Business" as defined in

the recitals hereto.

"Acquisition" as defined in the recitals hereto.

"Acquisition Agreement" as defined in the recitals hereto.

"Acquisition Agreement Representations" means such of the representations and warranties made by the Closing Date Target and its Subsidiaries in the Acquisition Agreement to the extent a breach of such representations and warranties is materially adverse to the interests of the Lenders in their capacities as such (but only to the extent the Borrower (or its applicable Affiliate) has the right (determined without regard to any notice requirement) to terminate its (or its Affiliate's) obligations (or to refuse to consummate the Acquisition) under the Acquisition Agreement as a result of a breach of such representations).

"Additional Lender" means, at any time, any bank, other financial institution or institutional investor that, in any case, is not an existing Lender and that agrees to provide any portion of any (a) Incremental Loan in accordance with Section 2.24 or (b) Credit Agreement Refinancing Indebtedness pursuant to a Refinancing Amendment in accordance with Section 2.26; provided that each Additional Lender (other than any Person that is a

Lender, an Affiliate of a Lender or an Approved Fund of a Lender at such time) will be subject to the approval of the Administrative Agent and/or each Issuing Bank (such approval not to be unreasonably withheld, conditioned or delayed), in each case to the extent any such consent would be required from the Administrative Agent and/or each Issuing Bank under Section 10.6(c), respectively, for an assignment of Loans to such Additional Lender.

"Adjusted Term SOFR" means, for purposes of any calculation, the rate per annum equal to (a) Term SOFR for such calculation plus (b) the Term SOFR Adjustment; provided, however, that if Adjusted Term SOFR at any time would otherwise be less than zero, such rate shall be deemed to be zero (including for purposes of clause (c) in the definition of "Base Rate").

"Administrative Agent" as defined in the preamble hereto.

"Adverse Proceeding" means any action, suit, proceeding (whether administrative, judicial or otherwise), governmental investigation or arbitration (whether or not purportedly on behalf of the Borrower or any Subsidiary) at law or in equity, or before or by any Governmental Authority, domestic or foreign (including any Environmental Claims), whether pending or, to the knowledge of any Executive Officer of the Borrower, threatened against or affecting the Borrower or any Subsidiary or any property of the Borrower or any Subsidiary.

"Affected Financial Institution" means (a) any EEA Financial Institution or (b) any UK Financial Institution.

"Affected Lender" as defined in Section 2.18(b). "Affected Loans" as defined in

Section 2.18(b).

"Affiliate" means, as applied to any Person, any other Person directly or indirectly controlling, controlled by, or under common control with, that Person. For the purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as applied to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of that Person, whether through the ownership of voting securities or by contract or otherwise. For the avoidance of doubt, none of the Agents or their respective lender affiliates shall be deemed to be an Affiliate of the Borrower, any Subsidiary or any Unrestricted Subsidiary.

"Agency Fee Letter" means that certain Fee Letter, dated October 10, 2017, by and among the Borrower, DBNY, DBSI, Capital One and Fifth Third.

"Agents" means, collectively, the Administrative Agent, the Collateral Agent, each Joint Bookrunner, each Joint Lead Arranger and, to the extent applicable, each Co-Documentation Agent and the Syndication Agent.

"Aggregate Amounts Due" as defined in Section 2.17. "Aggregate Payments" as defined in

Section 7.2.

"Agreed Currency" means (a) Dollars, (b) the Euro and (c) any other Eligible Currency which the Borrower requests any Issuing Bank (and the applicable Issuing Bank agrees) to include as an Agreed Currency hereunder.

"Agreement" as defined in the preamble hereto.

"All-In Yield" means, as to any Indebtedness or Loans of any Class, the yield thereof, whether in the form of interest rate, margin, original issue discount, upfront fees, a Eurodollar Ratean Adjusted Term SOFR floor or Base Rate floor to the extent greater than 1.00% per annum or 2.00% per annum, respectively (with such increased amount being equated to interest margins for purposes of determining any increase to the Applicable Margin); provided that (a) original issue discount and upfront fees will be equated to interest rate assuming a 4-year life to maturity (or, if less, the stated life to maturity at the time of its incurrence of the applicable Indebtedness); (b) that "All-In Yield" will not include arrangement fees, structuring fees, underwriting fees, commitment fees, ticking fees, amendment fees, closing fees or any other similar fees payable to the Joint Lead Arrangers in connection with the Initial Revolving Commitments and Initial Term Loans or to one or more arrangers or lenders (or their respective affiliates) in connection with respect to any other applicable Indebtedness or commitments in respect thereof (regardless of how such fees are computed); and (c) if a Eurodollar Ratean Adjusted Term SOFR floor or Base Rate floor for the applicable Indebtedness or commitments in respect thereof being incurred is greater than the a Eurodollar RateAdjusted Term SOFR floor or Base Rate floor, respectively, for the Initial Term Loans, the difference between such floor for such applicable new Indebtedness or commitments and the Initial Term Loans will be equated to an increase in the Applicable Margin, and in such case the interest rate floor (expressed in the definition of Eurodollar RateAdjusted Term SOFR or Base Rate), but not the Applicable Margin, as applicable to the Initial Term Loans will be increased to the extent of such differential between interest rate floors.

"Anti-Corruption Laws" means Laws relating to anti-bribery or anti-corruption (governmental or commercial) which apply to the Credit Parties, their Subsidiaries or their Unrestricted Subsidiaries, including Laws that prohibit the corrupt payment, offer, promise, or authorization of the payment or transfer of anything of value (including gifts or entertainment), directly or indirectly, to any Government Official, any foreign government employee or commercial entity in order to obtain an improper business advantage; including the FCPA, the United Kingdom Bribery Act of 2010, and all national and international Laws enacted to implement the OECD Convention on Combating Bribery of Foreign Officials in International Business Transactions.

"Anti-Terrorism Laws" means any of the Laws relating to terrorism, economic sanctions, export controls or money laundering, including, but not limited to, (a) Executive Order No. 13224, (b) the PATRIOT Act, (c) the Laws comprising or implementing the Bank Secrecy Act, and (d) the export controls and economic and financial sanctions or trade embargoes enacted, imposed, administered and enforced from time to time by (i) the U.S. government, including those administered by OFAC, the U.S. Department of State or the U.S. Department of Commerce, (ii) the European Union or any of its member states, (iii) Her Majesty's Treasury of the United Kingdom or (iv) any other relevant sanctions authority of a jurisdiction where the Borrower and the Subsidiaries operate the Business.

"Applicable Commitment Fee Rate" means, initially, 0.50% per annum; provided that from and after the third Business Day after the date on which the Administrative Agent shall have received the applicable financial statements and a Compliance Certificate pursuant to Section 5.1(e) calculating the Total Net Leverage Ratio in respect of the Q2-2018 Test Period, the "Applicable Commitment Fee Rate" shall be the applicable rate set forth below under the caption "Commitment Fee Rate" based upon the Total Net Leverage Ratio as of the last day of the most recent Test Period as set forth in the most recent Compliance Certificate received by the Administrative Agent pursuant to Section 5.1(e):

Pricing Level	Total Net Leverage Ratio	Commitment Fee Rate
I	Greater than 3.00:1.00	0.500%
II	Equal to or below 3.00:1.00	0.375%

No change in the Applicable Commitment Fee Rate shall be effective until three (3) Business Days after the date on which the Administrative Agent shall have received the applicable financial statements and a Compliance Certificate pursuant to Section 5.1(e) calculating the Total Net Leverage Ratio. At any time the Borrower has not submitted to the Administrative Agent the applicable information as and when required under Section 5.1(e) or at any time a Default or Event of Default has occurred and is continuing, the Applicable Commitment Fee Rate shall be set at Pricing Level I. Within one (1) Business Day of receipt of the applicable information under Section 5.1(e), the Administrative Agent shall give each Revolving Lender telefacsimile or telephonic notice (confirmed in writing) of the Applicable Commitment Fee Rate in effect from such date. In the event that any financial statement or certificate delivered pursuant to Section 5.1 is determined to be inaccurate (at a time prior to the satisfaction of the Termination Conditions), and such inaccuracy, if corrected, would have led to the application of a higher Applicable Commitment Fee Rate for any period (a "Commitment Fee Applicable Period") than the Applicable Commitment Fee Rate applied for such Commitment Fee Applicable Period, then (a) the Borrower shall promptly (and in any event within five (5) Business Days) following such determination deliver to the Administrative Agent correct financial statements and certificates required by Section 5.1 for such Commitment Fee Applicable Period, (b) the Applicable Commitment Fee Rate for such Commitment Fee Applicable Period shall be determined as if the Total Net Leverage Ratio were determined based on the amounts set forth in such corrected financial statements and certificates and (z) the Borrower shall promptly (and in any event within ten (10) Business Days) following delivery of such corrected financial statements and certificates pay to the Administrative Agent the accrued additional fees owing as a result o

[&]quot;Applicable Discount Price" as defined in Section 2.25(b). "Applicable Margin" means:

- (a) with respect to Initial Term Loans, (i) prior to the First Amendment Effective Date, a percentage per annum equal to (x) for Eurodollar Rate Loans, 4.00% and (y) for Base Rate Loans, 3.00%, (ii) on and after the First Amendment Effective Date and prior to the Third Amendment Effective Date, a percentage per annum equal to (x) for Eurodollar Rate Loans, 3.25% and (y) for Base Rate Loans, 2.25% and, (iii) on and after the Third Amendment Effective Date and prior to the Fourth Amendment Effective Date, a percentage per annum equal to (x) for Eurodollar Rate Loans, 3.50% and (y) for Base Rate Loans, 2.50% and (iv) on and after the Fourth Amendment Effective Date, a percentage per annum equal to (x) for SOFR Loans, 3.50% and (y) for Base Rate Loans, 2.50%;
- (b) with respect any Term Loans (other than Initial Term Loans), as specified in the applicable Incremental Amendment, Extension Amendment or Refinancing Amendment; and
- (c) with respect to Revolving Loans, initially a percentage per annum equal to (i) for Eurodollar Rate Loans, 4.25% and (ii) for Base Rate Loans, 3.25%; provided that from and after the third Business Day after the date on which the Administrative Agent shall have received the applicable financial statements and a Compliance Certificate pursuant to Section 5.1(e) calculating the Total Net Leverage Ratio in respect of the Q2-2018 Test Period, the "Applicable Margin" for Revolving Loans shall be the applicable margin set forth below under the caption "Eurodollar Rate SOFR Margin" (for SOFR Loans) or "Base Rate Margin" (for Base Rate Loans), respectively, based upon the Total Net Leverage Ratio as of the last day of the most recent Test Period as set forth in the most recent Compliance Certificate received by the Administrative Agent pursuant to Section 5.1(e):

Pricing Level	Total Net Leverage Ratio	Eurodollar Rate SOFR Margin	Base Rate Margin
I	Greater than 3.00:1.00	4.25%	3.25%
II	Equal to or below 3.00:1.00	4.00%	3.00%

No change in the Applicable Margin for Revolving Loans shall be effective until three (3) Business Days after the date on which the Administrative Agent shall have received the applicable financial statements and a Compliance Certificate pursuant to Section 5.1(e) calculating the Total Net Leverage Ratio. At any time the Borrower has not submitted to the Administrative Agent the applicable information as and when required under Section 5.1(e) or at any time a Default or Event of Default has occurred and is continuing, the Applicable Margin for Revolving Loans shall be set at Pricing Level I. Within one (1) Business Day of receipt of the applicable information under Section 5.1(e), the Administrative Agent shall give each Revolving Lender telefacsimile or telephonic notice (confirmed in writing) of the Applicable Margin for Revolving Loans in effect from such date. In the event that any financial statement or certificate delivered pursuant to Section 5.1 is determined to be inaccurate (at a time prior to the satisfaction of the Termination Conditions), and such inaccuracy, if corrected, would have led to the application of a higher Applicable Margin for Revolving Loans for any period (an "RCF Applicable Period") than the Applicable Margin for Revolving Loans applied for such RCF Applicable Period, then (i) the Borrower shall promptly (and in any event within five (5) Business Days) following such determination deliver to the Administrative Agent correct financial statements and certificates required by Section 5.1 for such RCF Applicable Period, (ii) the Applicable Margin for Revolving Loans for such RCF Applicable Period shall be determined as if the Total Net Leverage Ratio were determined based on the amounts set forth in such corrected financial statements and certificates and (iii) the Borrower shall promptly (and in any event within ten (10) Business Days) following delivery of such corrected financial statements and certificates pay to the Administrative Agent the accrued additional interest owing as a re

IX. Notwithstanding anything to the contrary set forth herein, the provisions of this paragraph (but, for the avoidance of doubt, not the grid or language above the grid which may require the consent of the affected Lenders of the applicable Class) may be amended or waived with the consent of only the Borrower and the Required Revolving Lenders.

"Application" means an application, in such form as the applicable Issuing Bank may specify from time to time, requesting such Issuing Bank to Issue a Letter of Credit.

"Approved Electronic Communications" means any notice, demand, communication, information, document or other material that any Credit Party provides to the Administrative Agent pursuant to any Credit Document or the transactions contemplated therein which is distributed to the Administrative Agent or to the Lenders by means of electronic communications pursuant to Section 10.1(d).

- "Approved Fund" means (a) any investment company, fund, securitization vehicle, trust or conduit that is engaged in making, purchasing, holding or investing in commercial loans and similar extensions of credit in the ordinary course of its business and (b) any Person (other than a Natural Person) which temporarily warehouses loans for any Lender or any entity described in the preceding clause (a) and that in the case of each of the preceding clauses (a) and (b) with respect to any Lender, is administered or managed by (i) such Lender, (ii) an Affiliate of such Lender or (iii) an entity or an Affiliate of an entity that administers or manages such Lender.
- "Asset Sale" means a sale, lease or sub-lease (as lessor or sublessor), sale and lease-back, assignment, conveyance, exclusive license (as licensor or sublicensor), transfer or other disposition to, or any exchange of property with (each, a "disposition"), any Person in one transaction or a series of related transactions, of all or any part of the Borrower's or any Subsidiary's assets or properties of any kind, whether real, personal, or mixed and whether tangible or intangible, whether now owned or hereafter acquired, leased or licensed, including the Capital Stock of any Subsidiary, other than:
- (a) dispositions of inventory and goods in the ordinary course of business (including intercompany inventory sales in the ordinary course of business);
 - (b) dispositions of used, worn-out, obsolete, used or surplus property and property no longer used or useful in the Business;
- (c) dispositions of assets that are made subject to a Capital Lease or Purchase Money Indebtedness within 180 days after the acquisition, construction, lease or improvement of the asset financed;
 - (d) dispositions of property that constitutes a Casualty Event;
 - (e) dispositions of cash or Cash Equivalents (or Investments that were cash or Cash Equivalents when made);
- (f) dispositions of equipment or Real Estate Assets to the extent that (i) such property is exchanged for credit against the purchase price of similar replacement property or (ii) the net cash proceeds of such disposition are applied within 180 days of the receipt thereof to the purchase price of replacement property;
- (g) dispositions or discounts by the Borrower or any Subsidiary of accounts, receivables or notes receivable in connection with the collection or compromise thereof, including supplier financing arrangements without recourse to the Borrower or any Subsidiary that accelerate collection of receivables from clients or customers;
- (h) (i) non-exclusive licenses or sub-licenses of Intellectual Property in the ordinary course of business, (ii) the abandonment or other disposition of Intellectual Property that is in the reasonable good faith judgment of the Borrower, no longer economically practicable to maintain or useful in the conduct of the business of the Credit Parties taken as a whole and (iii) exclusive licenses of Intellectual Property where exclusivity is restricted to a limited field of use that does not prohibit the Borrower and its Subsidiaries from commercializing the Intellectual Property rights so licensed in applications outside the limited field of use or in an application presently commercialized by the Borrower and its Subsidiaries; provided that in the case of this clause (iii), (A) the Administrative Agent has a perfected first priority security interest in each such license and (B) no Default or Event of Default shall exist at the time any Credit Party or any of its Subsidiaries enter into such license;
- (i) leases, subleases, licenses or sub-licenses of real property or personal property (other than Intellectual Property) in the ordinary course of business;
- (j) dispositions of any business, asset or property between or among the Borrower and the Subsidiaries; *provided* that any such disposition outside the ordinary course of business (A) by any Subsidiary that is not a Guarantor Subsidiary to the Borrower or to another Guarantor Subsidiary or (B) by the Borrower or any Guarantor Subsidiary to a Subsidiary that is not a Guarantor Subsidiary is, in each case, on terms that are, taken as a whole, at least as favorable to the Borrower or such Guarantor Subsidiary, as the case may be, as the terms of an arm's length disposition of such business, asset or property, taken as a whole, between unaffiliated Persons; *provided*, *further*, that to the extent constituting an Investment, such Investment must be a permitted Investment in accordance with Section 6.6;
- (k) dispositions of other assets for aggregate consideration not to exceed (i) \$2,500,000 in the case of any single transaction or series of related transactions or (ii) \$5,000,000 in the aggregate during any Fiscal Year;
- (l) dispositions of non-core assets acquired in a Permitted Acquisition or other Investment permitted under Section 6.6 disposed of within eighteen (18) months following the consummation of such Permitted Acquisition or other Investment and in the aggregate amount not to exceed 25% of the cash purchase consideration paid in respect of such Permitted Acquisition or other Investment;

- (m) dispositions of real property and related assets in connection with relocation of Executive Officers or employees of the Borrower or any Subsidiary;
 - (n) unwinding of Rate Contracts;
 - (o) issuance of Capital Stock by a Subsidiary to the Borrower or any other Subsidiary;
 - (p) dispositions of Capital Stock held in any Unrestricted Subsidiary;
- (q) dispositions of Capital Stock in Joint Ventures and Joint Venture Subsidiaries pursuant to buy/sell arrangements set forth in joint venture agreements and similar binding agreements;
 - (r) dispositions of property pursuant to a Permitted Sale Leaseback Transaction; and
- (s) to the extent constituting dispositions, Liens permitted by Section 6.2, Restricted Junior Payments permitted by Section 6.4 and Investments permitted by Section 6.6.
- "Assignment Agreement" means an Assignment and Assumption Agreement substantially in the form of Exhibit E, with such amendments or modifications as may be approved by the Administrative Agent.
 - "Assignment Effective Date" as defined in Section 10.6(b).
- "Authorized Officer" means, as applied to any Person, any individual holding the position of chairman of the board (if an officer), chief executive officer, chief operating officer, chief financial officer, chief compliance officer, chief legal officer, president, vice president, treasurer and any other officer having substantially the same authority and responsibility as any of the foregoing.
 - "Available Amount" means, as at any date of determination, an amount equal to:
- (a) the sum (and, in the case of clauses (ii) through (vii) below, received or retained, as applicable, after the Closing Date and prior to such date of determination), without duplication, of:
 - (i) \$10,000,000;
 - (ii) the Cumulative Retained Excess Cash Flow as of such date;
 - (iii) the net cash proceeds received by the Borrower after the Closing Date (and prior to such date of determination) from issuances or sales of its Capital Stock (that is not Disqualified Capital Stock), other than to the extent such proceeds have been utilized under Section 6.4(a), 6.4(b) or 6.6(r);
 - (iv) the amount of any Waivable Mandatory Prepayment retained by the Borrower in accordance with the terms of this Agreement;
 - (v) the net cash proceeds received by the Borrower or any Subsidiary in connection with the sale, transfer or other disposition of any Investment (including its ownership interest in any Joint Ventures or Unrestricted Subsidiaries) during the period from and including the Business Day immediately following the Closing Date through and including the date of determination, in each case, to the extent that the original Investments were made in reliance on the Available Amount;
 - (vi) the Investments of the Borrower or any Subsidiary made in reliance on the Available Amount in any Unrestricted Subsidiary that has been re-designated as a Subsidiary or that has been merged or consolidated with or into the Borrower or any Subsidiary (up to the lesser of (A) the fair market value (as determined in good faith by the Borrower) of the investments of the Borrower or any Subsidiary in such Unrestricted Subsidiary at the time of such re-designation or merger or consolidation and (B) the fair market value (as determined in good faith by the Borrower) of the original investments by the Borrower or any Subsidiary in such Unrestricted Subsidiary); and
 - (vii) the returns (including repayments of principal and payments of interest), profits, distributions, returns of capital and similar amounts received in cash or Cash Equivalents by the Borrower or any Subsidiary on Investments made by the Borrower or any Subsidiary in reliance on the Available Amount pursuant to Section 6.6(1) (including as a result of any termination or unwinding of such Investments) to the extent not included in the calculation of Consolidated Adjusted EBITDA;

<u>minus</u>

(b) the sum, without duplication, of:

- (i) the aggregate amount of Restricted Junior Payments made after the Closing Date (and prior to such date of determination) pursuant to Section 6.4(f); and
- (ii) the aggregate amount of Investments made after the Closing Date (and prior to such date of determination) pursuant to Section 6.6(l), with each such Investment measured as of the date made and without giving effect to subsequent changes in value.
- "Available Foreign Currencies" means the Agreed Currencies other than Dollars.
- "Bail-In Action" means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of any liability of an Affected Financial Institution.
- "Bail-In Legislation" means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law, regulation rule or requirement for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through liquidation, administration or other insolvency proceedings).
 - "Bank Product Agreement" means any agreement evidencing Bank Product Obligations. "Bank Product Obligations" means all

obligations of every nature of the Borrower or any

Subsidiary from time to time owed to any Bank Product Provider in connection with any Bank Product, whether for principal, interest (including interest which, but for the filing of a petition in bankruptcy with respect to the Borrower or such Subsidiary, would have accrued on any Bank Product Obligation, whether or not a claim is allowed against the Borrower or such Subsidiary for such interest in the related bankruptcy proceeding), reimbursement, fees, expenses, indemnification or otherwise.

"Bank Product Provider" means a Lender or Agent, or any Affiliate of a Lender or Agent, in its capacity as such, in each case that provides Bank Products to the Borrower or any Subsidiary (or a Person who was a Lender or an Affiliate of a Lender at the time of execution and delivery of a Bank Product Agreement), whether or not such Person subsequently ceases to be a Lender, an Agent or an Affiliate of a Lender or Agent, in the case of any such Affiliate, that has executed and delivered to the Administrative Agent a letter agreement in form and substance reasonably acceptable to the Administrative Agent pursuant to which such Affiliate of such Lender or Agent appoints the Administrative Agent and the Collateral Agent as agents under the applicable Credit Documents.

"Bank Products" means all facilities or services related to (a) cash management and related services, including automated clearinghouse of funds, treasury, depository, overdraft, electronic funds transfer, cash pooling, controlled disbursements and other cash management arrangements, (b) commercial credit card and merchant card services, credit or debit cards, stored value cards and purchase cards and the processing of related sales or receipts and (c) E-payables and comparable services.

"Bankruptcy Code" means Title 11 of the United States Code entitled "Bankruptcy," as now and hereafter in effect, or any successor statute.

"Bankruptcy Proceeding" means any voluntary or involuntary proceeding commenced under the Bankruptcy Code.

"Base Rate" means, for any day, a rate per annum equal to the highest of (a) the rate of interest last announced or established by the Administrative Agent as the "prime" rate in the United States for Dollar loans or, if the Administrative Agent ceases to announce or establish such rate, the highest per annum interest rate published by the Board of Governors in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined by the Administrative Agent) or any similar release by the Board of Governors (as determined by the Administrative Agent), (b) the sum of 0.50% per annum and the Federal Funds Rate, and (c) the sum of (i) the Eurodollar Rate Adjusted Term SOFR calculated for each such day based on an Interest Period of one month determined two (2) Business Days prior to such day (but, for the avoidance of doubt, not less than one percent (1.00%) per annum with respect to the Initial Term Loans only), plus (ii) 1.00%; provided that the Base Rate shall never be less than zero percent (0.00%) with respect to Revolving Loans and shall never be less than two percent (2.00%) with respect to Initial Term Loans. Any change in the Base Rate due to a change in any of the foregoing will be effective on the effective date of such change in the "prime" rate, the Federal Funds Rate or Eurodollar Rate Adjusted Term SOFR for an Interest Period of one month.

"Base Rate Loan" means a Loan bearing interest at a rate determined by reference to the Base

Rate

"Base Rate Term SOFR Determination Day" has the meaning set forth in the definition of "Term SOFR".

"Big Boy Letter" as defined Section 2.25.

"Blocked Person" means any Person: (a) listed in the annex to, or otherwise subject to the provisions of, Executive Order No. 13224; (b) listed in any sanctions-related list of designated Persons maintained by the United States (including, but not limited to, OFAC Lists), the United Nations Security Council, the European Union or any of its member states, Her Majesty's Treasury of the United Kingdom, or any other relevant sanctions authority; (c) fifty percent (50%) or more, individually or in the aggregate, owned by any Person described in paragraphs (a) or (b) hereof; (d) that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224; or (e) that is the government of a Sanctioned Country.

"Board of Governors" means the Board of Governors of the United States Federal Reserve System, or any successor thereto.

"Borrower" as defined in the preamble hereto.

"Borrower Existing Debt" means indebtedness and other obligations that do not expressly survive termination and repayment, and which are outstanding immediately prior to the Closing Date, under that certain Third Amended and Restated Credit Agreement, dated as of January 20, 2016, as amended prior to the date hereof, among, inter alios, the Borrower, as a borrower representative, On-X Life Technologies Holdings, Inc., as a borrower, the other persons party thereto designated as credit parties, Healthcare Financial Solutions, LLC, as agent for all lenders and the other financial institutions from time to time party thereto, as lenders.

"Business" means, at any time, a collective reference to (a) the business activities engaged in or proposed to be engaged in by the Borrower and the Subsidiaries on the Closing Date, after giving effect to the Transactions, (b) all business activities that are similar, ancillary, incidental, complementary or related to the business activities identified in clause (a), and (c) all business activities that are reasonable or logical extensions of the business activities identified in clauses (a) and (b).

"Business Day" means (a) any day excluding Saturday, Sunday and any day which is a legal holiday under the laws of the State of New York or is a day on which banking institutions located in such state are authorized or required by law or other governmental action to close and (b) with respect to all notices, determinations, fundings and payments; provided that when used in connection with the Eurodollar Rate or any Eurodollar Rate Loans SOFR Loan, the term "Business Day" means shall also exclude any day which that is not a U.S. Government Securities Business Day described in clause (a) and which is also a day for trading by and between banks in Dollar deposits in the London interbank market.

"Calculation Date" means (a) the first Business Day of each month, (b) the date of issuance, amendment, renewal or extension of any Foreign Currency Letter of Credit, and (c) any other date selected by the Administrative Agent in its reasonable discretion.

"Cap" means, with respect to any provision of this Agreement as of any date of determination, any limitation based on a fixed Dollar amount or percentage of TTM Consolidated Adjusted EBITDA (or if both apply to such provision, whichever is higher determined as of such date); provided that, for the avoidance of doubt, Cap shall not include any limitation based on a ratio.

"Capital Lease" means, as applied to any Person, any lease of any property (whether real, personal or mixed) by that Person as lessee that, in conformity with GAAP as in effect on the Closing Date, is or should be accounted for as a capital lease on the balance sheet of that Person; provided that for all purposes hereunder the amount of obligations under any Capital Lease shall be the amount thereof accounted for as a liability in accordance with GAAP as in effect on the Closing Date and no effect shall be given to Accounting Standards Codification 842 requiring operating leases to be recharacterized or treated as capital leases.

"Capital One" means Capital One, National Association.

"Capital Stock" means any and all shares, interests, participations or other equivalents (however designated) of capital stock of a corporation, any and all equivalent ownership interests in a Person (other than a corporation), including partnership interests and membership interests, and any and all warrants, rights or options to purchase or other arrangements or rights to acquire any of the foregoing; provided that no Indebtedness of the Borrower will constitute Capital Stock by virtue of being convertible or exchangeable into Capital Stock prior to such conversion or exchange.

"Cash Collateralize" means to pledge and deposit with or deliver to the Administrative Agent, for the benefit of the relevant Issuing Bank and the Revolving Lenders, as collateral for the Letter of Credit Obligations, cash or deposit account balances in an amount equal to 103% of such outstanding Letter of Credit Obligation pursuant to documentation in form and substance reasonably satisfactory to the Administrative Agent and the relevant Issuing Bank. The term "Cash Collateral" shall have a meaning correlative to the foregoing and shall include the proceeds of such cash collateral and other credit support.

"Cash Equivalents" means, as at any date of determination:

- (a) Dollars, Canadian Dollars, Euros, Pounds Sterling, Swiss Francs and Australian Dollars (and, to the extent reasonably necessary to reimburse any Foreign Currency Letter of Credit, the applicable Available Foreign Currency);
- (b) local currencies held by the Borrower or any Subsidiary from time to time in the ordinary course of business or consistent with past practice and not for speculation;
- (c) marketable securities (i) issued or directly and unconditionally guaranteed or insured as to interest and principal by the United States Government or EEA Member Country or (ii) issued by any agency or instrumentality of the United States the obligations of which are backed by the full faith and credit of the United States, in each case maturing within one year after such date;
- (d) marketable direct obligations issued by any state, commonwealth or territory of the United States or any political subdivision of any such state, commonwealth or territory or any public instrumentality thereof, in each case maturing within one year after such date and having, at the time of the acquisition thereof, a rating of at least A-1 from S&P or at least P-1 from Moody's;
- (e) commercial paper maturing no more than one year from the date of creation thereof and having, at the time of the acquisition thereof, a rating of at least A-1 from S&P or at least P-1 from Moody's (or, if at any time neither Moody's nor S&P shall be rating such obligations, an equivalent rating from another nationally recognized statistical rating agency);
- (f) certificates of deposit, time deposits or bankers' acceptances maturing within one year after such date and issued or accepted (i) by any Lender or (ii) by any commercial bank organized under the laws of the United States, any State or Commonwealth thereof or the District of Columbia that (A) is at least "adequately capitalized" (as defined in the regulations of its primary Federal banking regulator) and (B) has Tier 1 capital (as defined in such regulations) of not less than \$100,000,000;
- (g) marketable short-term money market and similar highly liquid funds having a rating of at least P-1 or A-1 from either Moody's or S&P, respectively (or, if at any time neither Moody's nor S&P shall be rating such obligations, an equivalent rating from another nationally recognized statistical rating agency); and
 - (h) investment funds investing substantially all of their assets in securities of the types described in clauses (a) through (g) above.

In the case of Investments by any Foreign Subsidiary or Investments made in a jurisdiction outside the United States, Cash Equivalents shall also include (i) investments of the type and maturity described in clauses (a) through (h) above of foreign obligors, which Investments or obligors (or the parents of such obligors) have ratings described in such clauses or equivalent ratings from comparable foreign rating agencies and (ii) other short-term investments in accordance with normal investment practices for cash management in investments analogous to the foregoing investments in clauses (a) through (h) and in this paragraph.

"Casualty Event" means any event that gives rise to the receipt by the Borrower or any Subsidiary of any insurance proceeds or condemnation awards in respect of any equipment, fixed assets or real property.

"CFC" as defined in the definition of "Excluded Foreign Subsidiary". "Change of Control" means an event

or series of events by which

(a) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act, but excluding any employee benefit plan of such Person or its Subsidiaries and any Person acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that a person or group shall be deemed to have "beneficial ownership" of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time (such right, an "option right")), directly or indirectly, of thirty-five percent (35%) or more of the equity securities of the Borrower entitled to vote for members of the board of directors

or equivalent governing body of the Borrower on a fully-diluted basis (and taking into account all such securities that such person or group has the right to acquire pursuant to any option right);

- (b) the sale, lease or transfer, in one or a series of related transactions, of all or substantially all of the assets of the Borrower and its Subsidiaries, taken as a whole, to any Person that is not a Credit Party;
- (c) a "change of control" or similar provision under any agreement or instrument evidencing any Material Indebtedness of the Borrower or any Subsidiary has occurred obligating the Borrower or any Subsidiary to repurchase, redeem, repay or convert into cash all or any part of the Indebtedness provided for therein.
- "Class" means (a) with respect to the Lenders, each of the following classes of the Lenders: (i) the Lenders having Term Loan Exposure arising from the Initial Term Loans, (ii) the Lenders having Term Loan Exposure arising from any separately identifiable tranche of Incremental Term Loans, (iii) the Lenders having Term Loan Exposure arising from any separately identifiable tranche of Refinancing Term Loans, (iv) the Lenders having Term Loan Exposure arising from any separately identifiable tranche of Extended Term Loans and (v) the Lenders having Revolving Credit Exposure, and (b) with respect to Loans, each of the following classes of Loans: (i) Initial Term Loans, (ii) any separately identifiable tranche of Incremental Term Loans, (iii) any separately identifiable tranche of Extended Term Loans and (v) Revolving Loans.
 - "Closing Date" means December 1, 2017.
 - "Closing Date Certificate" means a Closing Date Certificate substantially in the form of Exhibit G.
 - "Closing Date Target" as defined in the recitals hereto.
 - "Co-Documentation Agents" means Fifth Third and ING Capital LLC, in their capacity as documentation agents under this Agreement.
- "Collateral" means, collectively, all of the real, personal and mixed property (including Capital Stock) in which Liens are granted or purported to be granted pursuant to the Collateral Documents as collateral security for the Obligations; provided that Collateral shall not include any Excluded Assets (as defined in the Pledge and Security Agreement) or any other property or assets specifically excluded from the scope of any grant clause under any other Collateral Document unless (as to any Credit Party) such Credit Party hereafter agrees in writing that any such Excluded Asset, asset or property shall constitute Collateral hereunder.
 - "Collateral Agent" as defined in the preamble hereto.
- "Collateral Documents" means the Pledge and Security Agreement, the Mortgages and all other instruments, documents and agreements delivered by any Credit Party pursuant to this Agreement or any of the other Credit Documents in order to grant to the Collateral Agent, for the benefit of the Secured Parties, a Lien on any real, personal or mixed property of that Credit Party as security for the Obligations.
- "Commitment" means any Revolving Credit Commitment, any Initial Term Loan Commitment and any Incremental Term Loan Commitment.
- "Commodity Exchange Act" means the Commodity Exchange Act (7 U.S.C. § 1 et seq.), as amended from time to time, and any successor statute.
 - "Company Material Adverse Effect" as defined in the Acquisition Agreement.
 - "Compliance Certificate" means a Compliance Certificate of the Borrower substantially in the form of Exhibit C.
- "Consolidated Adjusted EBITDA" means, for any Test Period, an amount determined for the Borrower and the Subsidiaries on a consolidated basis and without duplication equal to:
 - (a) Consolidated Net Income for such period, *plus*
- (b) the sum of, in each case (other than subclauses (x) and (xxi) below) to the extent deducted (and not added back or excluded) in the calculation of Consolidated Net Income, but without duplication:
 - (i) Consolidated Interest Expense for such Test Period;
 - (ii) consolidated tax expense for such Test Period based on income, profits or capital, including state, franchise, capital and similar taxes and withholding taxes paid or accrued during such period;

- (iii) amounts attributable to depreciation and amortization expense for such Test Period (including amortization of customer contracts, non-compete agreements or other intangible assets);
- (iv) non-cash charges or expenses reducing Consolidated Net Income for such Test Period (*provided*, in connection with any non-cash charge or expense that is an accrual of a reserve for a cash expenditure or payment required to be made, or anticipated to be made, in a future period, (1) the Borrower may determine not to add back such non-cash charge or expense in the current Test Period and (2) to the extent the Borrower decides to add back such non-cash charge or expense, the cash payment in respect thereof in such future period will be subtracted from Consolidated Adjusted EBITDA to such extent);
 - (v) costs, fees and expenses associated with the Transactions;
- (vi) costs, fees, charges and expenses arising in connection with the Acquisition and any transaction that is or would be a Permitted Acquisition, permitted Investment, disposition, incurrence or repayment of Indebtedness (including a refinancing, amendment or other modification thereof) and/or equity offering, in each case whether or not consummated and any amendment or modification to the terms of any such transactions (including such costs, fees, charges and expenses reimbursed or actually paid by a Person that is not the Borrower or a Subsidiary or covered by indemnification or reimbursement provisions), including entry into the Coolspine license prior to the Closing Date;
- (vii) restructuring, integration or similar charges, expenses or reserves, whether or not classified as restructuring charges or expenses under GAAP (including restructuring costs related to acquisitions and closure or consolidation of branches, facilities or locations, any lease termination settlements (or remaining rental expense until the end of the applicable lease term), and any expense related to any reconstruction, recommissioning or reconfiguration of fixed assets for alternate use);
 - (viii) any net loss from disposed operations;
- (ix) extraordinary, unusual or non-recurring costs, fees, charges and other expenses (including from natural disasters), including severance costs and expenses (including such fees, charges and expenses incurred by the Borrower or any Subsidiary that are reimbursed or actually paid by a Person that is not the Borrower or a Subsidiary or covered by indemnification or reimbursement provisions);
- (x) expenses, losses (including lost revenues) or charges incurred during such period in connection with Casualty Events to the extent that any such amount is covered by business interruption or other insurance and which either has been reimbursed or as to which the Borrower has made a determination that there exists reasonable evidence that such amount will be reimbursed by the insurer and only to the extent that such amount is (A) not denied by the applicable insurance carrier in writing and (B) in fact reimbursed within 180 days of the date of such determination (with a deduction for any amount so added back to the extent not so reimbursed within 180 days);
- (xi) expenses, charges and losses due to the effects of purchase accounting, as set forth in the Statement of Financial Accounting Standards 141(R), Business Combinations;
- (xii) the amount of any expenses paid on behalf of any member of the board of directors or reimbursable to such member of the board of directors;
- (xiii) costs or expenses incurred by the Borrower or any Subsidiary pursuant to an equity-based compensation plan, profits interest or stock option plan or any other management or employee benefit plan or arrangement or any stock subscription or shareholder plan:
- (xiv) expenses, charges and losses in the form of earn-out obligations and contingent consideration obligations (including to the extent accounted for as performance and retention bonuses, compensation or otherwise) and adjustments thereof and purchase price adjustments, in each case paid in connection with Permitted Acquisitions or other permitted Investments or acquisitions;
 - (xv) any minority interest expense;
 - (xvi) retention, recruiting, relocation and signing bonuses and expenses;
- (xvii) cash receipts (or any netting arrangements resulting in reduced cash expenditures) not representing Consolidated Net Income in any period to the extent non-cash gains relating to such income were deducted in the calculation of Consolidated Adjusted EBITDA pursuant to clause (c)(ii) of this definition for any previous period;

- (xviii) in connection with acquisitions of Foreign Subsidiaries, expenses recognized on conversion from IFRS to GAAP for items capitalized under IFRS but expensed under GAAP;
- (xix) charges, losses or expenses to the extent subject to indemnity or reimbursement by a third party to the extent actually reimbursed, or, so long as the Borrower has made a determination that a reasonable basis exists for indemnification or reimbursement and only to the extent that such amount is (A) not denied by the applicable indemnitor in writing within 180 days of the occurrence of such event and (B) in fact indemnified or reimbursed within 365 days of such determination (with a deduction in the applicable future period for any amount so added back to the extent not so indemnified or reimbursed within such 365 day period);
- (xx) costs relating to compliance with the Sarbanes-Oxley Act of 2002, as amended, and other expenses arising out of or incidental to the status of the Borrower as a reporting company, including costs, fees and expenses relating to compliance with provisions of the Securities Act and the Exchange Act and the rules of national securities exchange companies with listed equity securities;
- (xxi) the amount of "run-rate" cost savings, operating expense reductions and synergies projected by the Borrower in good faith to result from (A) actions taken, (B) actions relating to any acquisition, disposition or operational change committed to be taken or expected to be taken no later than 18 months after such acquisition, disposition or operational change and (C) actions relating to the Transactions and acquisitions that occurred prior to the Closing Date reasonably expected to be taken no later than 24 months after the Closing Date, in each case, which cost savings, operating expense reductions and synergies will be determined by the Borrower in good faith and calculated on a Pro Forma Basis as though such cost savings, operating expense reductions and synergies had been realized on the first day of the Test Period for which Consolidated Adjusted EBITDA is being determined;
 - (xxii) charges, costs, accruals, reserves or expenses attributable to the undertaking of items in clause (xxi) above;
- (xxiii) costs, charges, fees, and other amounts expensed at the time of entry into inbound exclusive licenses of Intellectual Property in connection with the acquisition of such license in an amount not to exceed \$5,000,000 in any Test Period;
- (xxiv) any other add-backs and adjustments set forth in the bank model delivered to the Administrative Agent and the Joint Lead Arrangers, dated September 27, 2017 (as amended prior to the Closing Date); and
- (xxv) costs, expenses, awards and the amount of any judgment actually paid during such period in connection with any litigation or other legal dispute, not to exceed \$2,000,000 in the Test Period, *minus*
- (c) the sum of, in each case to the extent included in the calculation of Consolidated Net Income, but without duplication:
- (i) extraordinary, unusual or non-recurring cash gains of such Person for such Test Period increasing Consolidated Net Income; and
- (ii) all non-cash items of such Person for such Test Period increasing Consolidated Net Income, including gains on cancellation of debt purchased at less than par (in each case of or by the Borrower and the Subsidiaries for such period), other than the accrual of revenue in the ordinary course and excluding any such items which represent the reversal in such Test Period of any accrual of, or cash reserve for, anticipated cash charges in any prior period to the extent such amount was deducted in determining Consolidated Adjusted EBITDA for such prior period;

provided that the amounts included in Consolidated Adjusted EBITDA for any Test Period pursuant to subclause (b)(xxi) above (other than with respect to the Transactions or amounts permitted in accordance with Regulation S-X), when aggregated with any adjustments pursuant to clause (b) of the definition of "Pro Forma", will not exceed 20% of Consolidated Adjusted EBITDA for such Test Period (prior to giving effect to amounts added-back pursuant to such subclause); provided, further, that for purposes of calculating Consolidated Adjusted EBITDA for any Test Period that includes any Fiscal Quarter from, and including, December 31, 2016 through September 30, 2017, Consolidated Adjusted EBITDA for such Fiscal Quarter will be deemed to be the amounts set forth in the table below, subject to Pro Forma adjustment as set forth herein in connection with any Specified Transaction:

Fiscal Quarter ended:	Consolidated Adjusted EBITDA
December 31, 2016	\$12,058,000
March 31, 2017	\$13,668,000
June 30, 2017	\$13,495,000
September 30, 2017	\$12,070,000

To the extent the determination of Consolidated Adjusted EBITDA of any other Person is required in connection with any Specified Transaction or Pro Forma calculations with respect thereto, the Borrower shall determine the Consolidated Adjusted EBITDA of such Person in a manner consistent with this definition but substituting such other Person and its Subsidiaries therein.

"Consolidated Current Assets" means, as at any date of determination, the total assets of the Borrower and the Subsidiaries on a consolidated basis that may properly be classified as current assets in conformity with GAAP, excluding cash and Cash Equivalents, deferred taxes, assets held for sale, loans (permitted) to third parties, pension assets, deferred bank fees and derivative financial instruments, and excluding the effects of adjustments pursuant to GAAP resulting from the application of recapitalization accounting or purchase accounting, as the case may be, in relation to any consummated acquisition.

"Consolidated Current Liabilities" means, as at any date of determination, the total liabilities of the Borrower and the Subsidiaries on a consolidated basis that may properly be classified as current liabilities in conformity with GAAP, excluding (a) the current portion of long term debt and deferred taxes, (b) the current portion of interest, (c) accruals of any costs or expenses related to restructuring reserves, (d) deferred revenue arising from cash receipts that are earmarked for specific projects,

(e) liabilities in respect of unpaid earn-outs or letters of credit and (f) the current portion of any other long-term liabilities, and, furthermore, excluding the effects of adjustments pursuant to GAAP resulting from the application of recapitalization accounting or purchase accounting, as the case may be, in relation to any consummated acquisition.

"Consolidated Excess Cash Flow" means for any Fiscal Year, with respect to the Borrower and the Subsidiaries on a consolidated basis, an amount, equal to:

- (a) the sum, without duplication, of:
- (i) the sum of (A) Consolidated Adjusted EBITDA for such Fiscal Year (for the avoidance of doubt, calculated on an actual and not on a Pro Forma Basis), <u>minus</u> (B) the aggregate cash component of all fees, costs, expenses, charges, proceeds or other amounts included in the calculation of Consolidated Adjusted EBITDA (pursuant to clause (b) of the definition thereof) for such Fiscal Year; <u>plus</u>
- (ii) all cash extraordinary, unusual and non-recurring gains excluded in the calculation of Consolidated Adjusted EBITDA (pursuant to clause (c)(i) of the definition thereof) for such Fiscal Year; plus
- (iii) decreases in the Consolidated Working Capital Adjustment for such Fiscal Year (other than any such decreases arising from acquisitions or dispositions by the Borrower and the Subsidiaries completed during such period or the application of purchase accounting);

minus

- (b) the sum, without duplication (and without duplication of amounts deducted pursuant to clause (a)(i)(B) above), of:
- (i) consolidated capital expenditures in accordance with GAAP or acquisitions of Intellectual Property accrued or paid in cash by the Borrower and the Subsidiaries during such period or prior to the ECF Payment Date or committed to be paid in cash prior to the ECF Payment Date, in each case to the extent funded with Internally Generated Cash; *plus*
- (ii) the amounts for such Fiscal Year of all repayments, repurchases, redemptions, retirements, defeasances or other discharges of Consolidated Total Debt funded with Internally Generated Cash (excluding (A) any such payments made in reliance on any basket calculated by reference to the Available Amount, (B) repayments of Revolving Loans or other revolving Indebtedness unless accompanied by a permanent reduction in the commitments thereunder and
- (C) purchases, prepayments and repayments of Term Loans and other Pari Passu Lien Indebtedness, to the extent the same reduce the amount of mandatory prepayments of Term Loans from Consolidated

Excess Cash Flow pursuant to Sections 2.14(d)(ii) and/or 2.14(d)(iii)), in each case paid in cash during such period; plus

- (iii) the amount of Restricted Equity Payments pursuant to Sections 6.4(a) and (c) made during such period or prior to the ECF Payment Date to the extent funded with Internally Generated Cash; *plus*
- (iv) the aggregate consideration paid in cash during such period or prior to the ECF Payment Date or committed to be paid in cash prior to the ECF Payment Date in connection with Permitted Acquisitions or other Investments permitted under Section 6.6 to the extent funded with Internally Generated Cash (excluding any intercompany Investments by and among the Borrower and its Subsidiaries and any such payments made in reliance on any basket calculated by reference to the Available Amount); <u>plus</u>
- (v) the amount of any payments in respect of purchase price adjustments, earn-outs or long-term liabilities of the Borrower and its Subsidiaries (A) made in cash by the Borrower or any Subsidiary after the Closing Date (1) during such period or (2) prior to the ECF Payment Date or (B) committed to be made in cash within one year after the end of such period (only to the extent made with Internally Generated Cash and excluding any such payments made in reliance on any basket calculated by reference to the Available Amount); <u>plus</u>
- (vi) increases in the Consolidated Working Capital Adjustment for such Fiscal Year (other than any such increases arising from acquisitions or dispositions by the Borrower and the Subsidiaries completed during such Fiscal Year or the application of purchase accounting); plus
- (vii) all non-cash expenses, charges and adjustments for such Fiscal Year added to Consolidated Adjusted EBITDA pursuant to clause (b) of the definition thereof; <u>plus</u>
- (viii) an amount equal to the aggregate net non-cash gain on dispositions of property by the Borrower and its Subsidiaries during such Fiscal Year (other than dispositions of property in the ordinary course of business) to the extent included in arriving at such Consolidated Adjusted EBITDA and the net cash loss on dispositions to the extent otherwise added to arrive at Consolidated Adjusted EBITDA; *plus*
- (ix) the aggregate amount of any premium, make-whole or penalty payments actually paid in cash by the Borrower and its Subsidiaries during such Fiscal Year that are made in connection with any prepayment of any principal of Indebtedness to the extent (x) such prepayment of principal reduced Consolidated Excess Cash Flow pursuant to clause (b)(ii) above or reduced the mandatory prepayment required by Section 2.14(d) and (y) such payment is made with Internally Generated Cash; plus
 - (x) the amount of cash Taxes paid or Tax reserves set aside or payable (without duplication) in such Fiscal Year; plus
- (xi) without duplication of amounts deducted from Consolidated Excess Cash Flow in prior periods, at the option of the Borrower, the aggregate consideration required to be paid in cash by the Borrower or any Subsidiary pursuant to binding contracts (the "Contract Consideration") entered into prior to or during such period relating to Investments permitted by Section 6.6 (including Permitted Acquisitions) or capital expenditures to be consummated or made during the period of four consecutive Fiscal Quarters following the end of such period to the extent intended to be financed with Internally Generated Cash, provided, that to the extent the aggregate amount utilized to consummate such transaction during such period of four consecutive Fiscal Quarters is less than the Contract Consideration, the amount of such shortfall shall be added to the calculation of Consolidated Excess Cash Flow at the end of such period of four consecutive Fiscal Quarters; plus
- (xii) the aggregate amount of expenditures actually made by the Borrower and its Subsidiaries in cash during such period to the extent such expenditures are not expensed during such period to the extent such expenditures were funded with Internally Generated Cash;

provided that, in the case of clauses (b)(i), (b)(iv), (b)(v) and (b)(x) above, (A) any amount committed to be paid or made within such time period that reduces Consolidated Excess Cash Flow in such Fiscal Year pursuant to such clause will not be deducted again in the calculation of Consolidated Excess Cash Flow for any subsequent Fiscal Year and (B) to the extent any such amount committed to be paid or made after the end of such Fiscal Year is not actually paid or made in cash within such time period, such unpaid amount will, to the extent applicable, be added to the calculation of Consolidated Excess Cash Flow for the immediately succeeding Fiscal Year.

For purposes of Section 2.14(d), "Consolidated Excess Cash Flow" will be deemed to be \$0 if the calculation above results in a negative number.

——"Consolidated Interest Expense" means, with respect to the Borrower and the Subsidiaries for any Test Period, the total consolidated interest expense for such Test Period determined on a consolidated basis in accordance with GAAP, plus, without duplication:

- (a) imputed interest on Capital Leases for such Test Period;
- (b) commissions, discounts and other fees, charges and expenses owed with respect to letters of credit securing financial obligations and bankers' acceptance financing for such Test Period;
- (c) amortization of debt issuance costs, debt discount, or premium and other debt or equity financing fees and expenses incurred for such Test Period including net costs under Rate Contracts or other derivative instruments entered into for the purpose of hedging interest rate risk and any commitment fees payable thereunder;
- (d) cash contributions to any employee stock ownership plan or similar trust made to the extent such contributions are used by such plan or trust to pay interest or fees to any Person (other than the Borrower or any wholly-owned Subsidiary) in connection with Indebtedness incurred by such plan or trust for such Test Period;
 - (e) the interest portion of any deferred payment obligations for such Test Period; and
- (f) all interest on any Indebtedness that is (i) Indebtedness of others secured by any Lien on property owned or acquired by the Borrower or any Subsidiary, whether or not the obligations secured thereby have been assumed, but limited to the fair market value of such property or (ii) contingent obligations in respect of Indebtedness of the Borrower or any Subsidiary;

provided that Consolidated Interest Expense shall be calculated after giving effect to Rate Contracts related to interest rates (including associated costs), but excluding unrealized gains and losses with respect to such Rate Contracts. For purposes of this definition, interest on Capital Leases will be deemed to accrue at the interest rate reasonably determined by an Authorized Officer of the Borrower to be the rate of interest implicit in such Capital Lease in accordance with GAAP as in effect on the Closing Date.

To the extent the determination of Consolidated Interest Expense of any other Person is required in connection with any Specified Transaction or Pro Forma calculations with respect thereto, the Borrower shall determine the Consolidated Interest Expense of such Person in a manner consistent with this definition but substituting such other Person and its Subsidiaries therein.

"Consolidated Net Income" means, for any Test Period an amount determined for the Borrower and the Subsidiaries on a consolidated basis and without duplication equal to:

- (a) the net income (or loss) of the Borrower and the Subsidiaries on a consolidated basis for such Test Period taken as a single accounting period determined in conformity with GAAP, <u>plus</u>
- (b) the income (or loss) of any Joint Venture or Unrestricted Subsidiary of the Borrower or any Subsidiary, solely, in the case of any income, to the extent of the amount of dividends or other distributions actually paid in cash to the Borrower or any Subsidiary by such Joint Venture or Unrestricted Subsidiary during such Test Period, *minus*
 - (c) to the extent included in clause (a) above, an amount equal to the sum of (without duplication):
 - (i) with respect to any Person that is not a wholly-owned Subsidiary of the Borrower but whose net income is consolidated in whole or in part with the net income of the Borrower, the income (or loss) of such Person solely to the extent attributable to that portion of the Capital Stock in such Person that is not owned, directly or indirectly, by the Borrower during such Test Period; *provided*, the Borrower's equity in the net income in such Person will be included in Consolidated Net Income up to the amount of dividends, distributions or other payments in respect of such equity that are paid in cash (or to the extent converted into cash) by such Person to the Borrower or any Subsidiary (and the Borrower's equity in the net loss of such Person shall be included to the extent of the aggregate Investment of the Borrower or any Subsidiary in such Person;
 - (ii) with respect to any Person that is not a wholly-owned Subsidiary of the Borrower but whose net income is consolidated in whole or in part with the net income of the Borrower, the income of such Person solely to the extent that the declaration or payment of dividends or similar distributions by such Person of that income is not permitted by operation of the terms of its Organizational Documents or any agreement, instrument or requirement of Law applicable to such Person during such Test Period; *provided* that Consolidated Net Income shall be increased by the amount of dividends or distributions or

other payments that are actually paid by such Person to the Borrower or any Subsidiary in respect of such Test Period;

- (iii) the income (or loss) of any Person (other than the Acquired Business in connection with the Acquisition) accrued prior to the date (A) such Person becomes a Subsidiary of the Borrower or is merged into or consolidated with the Borrower or any Subsidiary or (B) such Person's assets are acquired by the Borrower or any Subsidiary;
 - (iv) any after-tax gains or losses attributable to non-ordinary course dispositions of property;
- (v) earnings (or losses), including any non-cash impairment charge, resulting from any reappraisal, revaluation or write-up (or write-down) of assets during such Test Period;
- (vi) (A) unrealized gains and losses with respect to Rate Contracts for such Test Period and the application of Accounting Standards Codification 815 (Derivatives and Hedging) and (B) any after-tax effect of income (or losses) for such Test Period that result from the early extinguishment of (1) Indebtedness, (2) obligations under any Rate Contracts or (3) other derivative instruments;
- (vii) gains and losses due solely to fluctuations in currency values and the related tax effects determined in accordance with GAAP for such Test Period, and
- (viii) the effects of adjustments (including the effects of such adjustments pushed down to such Person and its Subsidiaries) in the inventory, property and equipment, software, goodwill, other intangible assets, in-process research and development, deferred revenue, debt and unfavorable or favorable lease line items in such Person's consolidated financial statements pursuant to GAAP for such Test Period resulting from the application of purchase accounting in relation to the Transactions or any acquisition consummated prior to the Closing Date and any Permitted Acquisition or other Investment or the amortization or write-off of any amounts thereof, net of taxes, for such Test Period.

To the extent the determination of Consolidated Net Income of any other Person is required in connection with any Specified Transaction or Pro Forma calculations with respect thereto, the Borrower shall determine the Consolidated Net Income of such Person in a manner consistent with this definition but substituting such other Person and its Subsidiaries therein.

"Consolidated Total Debt" means, as at any date of determination, the aggregate stated balance sheet amount of all Indebtedness of the Borrower and the Subsidiaries referred to in the following clauses of the definition of "Indebtedness": clauses (a) (including, for the avoidance of doubt, any Purchase Money Indebtedness), (b), (c), (f) (but only to the extent that any letter of credit has been drawn and not reimbursed) and (h) (to the extent relating to Indebtedness of the type described in clauses (a), (b), (c) and (f) of the definition thereof), in each case determined on a consolidated basis in accordance with GAAP; provided that Consolidated Total Debt shall not include Indebtedness in respect of obligations under Rate Contracts.

"Consolidated Working Capital" means, as at any date of determination, Consolidated Current Assets <u>minus</u> Consolidated Current Liabilities.

"Consolidated Working Capital Adjustment" means, for any Fiscal Year on a consolidated basis, the amount equal to Consolidated Working Capital as of the beginning of such Fiscal Year, <u>minus</u> Consolidated Working Capital as of the end of such Fiscal Year (which amount may be positive or negative); <u>provided</u> that, for purposes of this definition, Consolidated Working Capital as of the beginning of the Fiscal Year shall be adjusted to give effect to any working capital arising from acquisitions or dispositions by the Borrower and the Subsidiaries completed during such Fiscal Year (including the impact of any post-closing working capital adjustment).

"Contractual Obligation" means, as applied to any Person, any provision of any of the Securities issued by that Person or of any indenture, mortgage, deed of trust, contract, undertaking, agreement or other instrument to which that Person is a party or by which it or any of its properties is bound or to which it or any of its properties is subject.

"Contributing Guarantors" as defined in Section 7.2.

"Controlled Entity" means, as to any Person, any other Person that is in control of, or is controlled by, such Person. For purposes of this definition, "control" of a Person means the power, directly or indirectly, to direct or cause the direction of the management and policies of such Person whether by contract or otherwise. For the avoidance of doubt, "Controlled Entity" shall not include any distributors and sales agents of the Borrower or its Subsidiaries.

"Conversion/Continuation Date" means the effective date of a continuation or conversion, as the case may be, as set forth in the applicable Conversion/Continuation Notice.

- "Conversion/Continuation Notice" means a conversion/continuation notice substantially in the form of Exhibit A-2.
- "Convertible Senior Notes" means the 4.25% convertible senior notes issued by the Borrower on June 18, 2020 in an aggregate principal amount of \$100,000,000 with a maturity date of July 1, 2025
 - "Counterpart Agreement" means a counterpart agreement substantially in the form of Exhibit H.
 - "Covenant Waiver Period" means the period commencing on March 31, 2020 and ending on and including December 31, 2020.
- "Credit Agreement Refinancing Indebtedness" means secured or unsecured Indebtedness of the Borrower in the form of (a) Refinancing Revolving Commitments, Refinancing Term Commitments or Refinancing Term Loans or (b) other term loans or notes or revolving commitments governed by definitive documentation other than this Agreement; provided that:
- (a) such Indebtedness is incurred or otherwise obtained (including by means of the extension or renewal of existing Indebtedness) in exchange for, or to extend, renew, replace, or refinance, in whole or part, any Class of Term Loans, Revolving Loans or Revolving Credit Commitments ("Refinanced Indebtedness");
 - (b) such Indebtedness is in an original aggregate principal amount not greater than the Maximum Refinancing Amount;
- (c) any such Indebtedness will not mature prior to the final maturity date of the Refinanced Indebtedness, or have a shorter Weighted Average Life to Maturity than the Refinanced Indebtedness;
- (d) any mandatory prepayments (and, with respect to any Credit Agreement Refinancing Indebtedness comprising revolving loans, to the extent commitments thereunder are permanently reduced or terminated) of:
 - (i) any Credit Agreement Refinancing Indebtedness that comprises junior lien or unsecured notes or loans, or Pari Passu Lien Indebtedness governed by documentation other than this Agreement, may not be made except to the extent that prepayments are (A) permitted hereunder and (B) to the extent required hereunder or pursuant to the terms of any Pari Passu Lien Indebtedness, first made or offered to the Loans and any such Pari Passu Lien Indebtedness; and
 - (ii) any Credit Agreement Refinancing Indebtedness that is Pari Passu Lien Indebtedness will be made on a *pro rata* basis or less than *pro rata* basis with the Initial Term Loans or Initial Revolving Commitments, as applicable (but not greater than a *pro rata* basis except for prepayments with the proceeds of Credit Agreement Refinancing Indebtedness and in respect of an earlier maturing tranche);
 - (e) such Indebtedness is not incurred or guaranteed by any Person other than a Guarantor Subsidiary;
 - (f) if such Indebtedness is secured:
 - (i) such Indebtedness is not secured by any assets or property of the Borrower or any Subsidiary that does not constitute Collateral (subject to customary exceptions for cash collateral in favor of an agent, letter of credit issuer or similar "fronting" lender);
 - (ii) the security agreements relating to such Indebtedness are substantially similar to or the same as the Collateral Documents (as determined in good faith by the Borrower);
 - (iii) if such Indebtedness constitutes Pari Passu Lien Indebtedness, a Debt Representative acting on behalf of the holders of such Indebtedness has become party to or is otherwise subject to the provisions of a Pari Passu Lien Intercreditor Agreement;
 - (iv) if such Indebtedness is secured on a junior basis to the Term Loans, a Debt Representative, acting on behalf of the holders of such Indebtedness, has become party to or is otherwise subject to the provisions of a Junior Lien Intercreditor Agreement; and
 - (v) if such Indebtedness constitutes Refinancing Revolving Commitments in the form of Pari Passu Lien Indebtedness, such Indebtedness shall be subject to customary provisions governing the pro rata payment, borrowing, participation and commitment reduction of the Refinanced Indebtedness and such Refinancing Revolving Commitments, in each case on terms satisfactory to the Administrative Agent; and

(g) the other terms applicable to such Indebtedness are substantially identical to, or (taken as a whole as reasonably determined by the Borrower in good faith) no more favorable to the lenders or holders providing such Indebtedness than, those applicable to such Refinanced Indebtedness; provided that the Borrower will promptly deliver to the Administrative Agent final copies of the definitive credit documentation relating to such Indebtedness (unless the Borrower or the applicable Subsidiary is bound by a confidentiality obligation with respect thereto, in which case the Borrower will deliver a reasonably detailed description of the material terms and conditions of such Indebtedness in lieu thereof); provided, further, that this clause (g) will not apply to (A) terms addressed in the preceding clauses (a) through (f), (B) interest rate, fees, funding discounts and other pricing terms, (C) redemption, prepayment or other premiums, (D) optional prepayment terms (subject to clauses (d) and (f)(v) above) and (E) covenants and other terms that are (1) applied to the Initial Term Loans and Commitments existing at the time of incurrence of such Credit Agreement Refinancing Indebtedness (so that existing Lenders also receive the benefit of such provisions) and/or (2) applicable only to periods after the Latest Term Loan Maturity Date and the Revolving Credit Commitment Termination Date at the time of incurrence of such Indebtedness; provided, further, a certificate of the Borrower delivered to the Administrative Agent at least four (4) Business Days prior to the incurrence of such Indebtedness (or such shorter period as may be agreed by the Administrative Agent), together with a reasonably detailed description of the material covenants and events of default of such Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has reasonably determined in good faith that such terms and conditions satisfy the foregoing requirement shall be conclusive evidence that such terms and conditions sati

"Credit Date" means the date of a Credit Extension.

"Credit Document" means any of (a) this Agreement, (b) any Pari Passu Lien Intercreditor Agreement or Junior Lien Intercreditor Agreement, (c) the Notes, if any, (d) the Collateral Documents,

(e) the Agency Fee Letter and any documents or certificates executed by the Borrower in favor of an Issuing Bank relating to Letters of Credit, (f) the Intercompany Subordination Agreement, (g) any other subordination and intercreditor agreement entered into pursuant to the terms hereof and (h) any Incremental Amendment, Refinancing Amendment or Extension Amendment.

"Credit Extension" means the making of a Loan or the Issuing of a Letter of Credit.

"Credit Party" means the Borrower and each Guarantor Subsidiary.

"Cumulative Retained Excess Cash Flow" means, as at any date of determination, an amount (not less than zero) determined on a cumulative basis, equal to (a) the aggregate cumulative sum of the Retained ECF Percentage of Consolidated Excess Cash Flow for each Fiscal Year of the Borrower (commencing with the first full Fiscal Year ending after the Closing Date but not less than zero in any Fiscal Year), minus (b) the aggregate principal amount of all prepayments, repayments and purchases of Loans and other Pari Passu Lien Indebtedness applied pursuant to clauses (ii) and (iii) of Section 2.14(d) to reduce the calculation of the Consolidated Excess Cash Flow payment under Section 2.14(d) for all Fiscal Years ending after December 31, 2017 and prior to such date.

"DBNY" means Deutsche Bank AG New York Branch. "DBSI" means Deutsche Bank

Securities Inc.

"Debt Representative" means, with respect to any series of Pari Passu Lien Indebtedness, Junior Lien Indebtedness or other Indebtedness secured by a Lien permitted under Section 6.1, administrative agent, trustee, collateral agent, security agent or similar agent under the credit agreement, indenture, note purchase agreement or similar agreement or instrument pursuant to which such Indebtedness is incurred, issued or otherwise obtained, as the case may be, and each of their successors in such capacities.

"Default" means a condition or event that, after notice or lapse of time or both, would constitute an Event of Default.

"Default Excess" means, with respect to any Defaulting Lender, the excess, if any, of such Defaulting Lender's Pro Rata Share of the aggregate outstanding principal amount of Loans of all of the Lenders (calculated as if all Defaulting Lenders (including such Defaulting Lender) had funded all of their respective Defaulted Loans) over the aggregate outstanding principal amount of all Loans of such Defaulting Lender.

"Default Period" means, with respect to any Defaulting Lender, the period commencing on the date of the applicable Funding Default and ending on the earliest of the following dates: (a) the date on which all Commitments are cancelled or terminated and/or the Obligations are declared or become immediately due and payable, (b) with respect to any Funding Default (other than any such Funding Default arising pursuant to clause (e)

of the definition of "Defaulting Lender"), the date on which (i) the Default Excess with respect to such Defaulting Lender will have been reduced to zero (whether by the funding by such Defaulting Lender of any Defaulted Loans of such Defaulting Lender or by the non-*pro rata* application of any voluntary or mandatory prepayments of the Loans in accordance with the terms of Section 2.13 or Section 2.14 or by a combination thereof) and (ii) such Defaulting Lender will have delivered to the Borrower and the Administrative Agent a written reaffirmation of its intention to honor its obligations hereunder with respect to its Commitments, and (c) the date on which the Borrower, the Administrative Agent and the Required Lenders (or, solely to the extent all such Funding Defaults relate solely to Revolving Credit Commitments, the Required Revolving Lenders) waive all Funding Defaults of such Defaulting Lender in writing.

"Defaulted Loan" as defined in Section 2.22.

"Defaulting Lender" will mean any Lender that has (a) failed to fund its portion of any Loan, or any portion of its participation in any Letter of Credit within two (2) Business Days of the date on which it will have been required to fund the same, unless such Lender notifies the Borrower that such failure is the result of such Lender's determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, will be specifically identified in such writing) has not been satisfied, (b) notified the Borrower, the Administrative Agent, any Issuing Bank or any other Lender in writing that it does not intend to comply with any of its funding obligations under this Agreement or has made a public statement to the effect that it does not intend to comply with its funding obligations under this Agreement or under agreements in which it commits to extend credit generally unless such Lender notifies the Borrower that such failure is the result of such Lender's determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, will be specifically identified in such writing) has not been satisfied, (c) failed, within three (3) Business Days after written request by the Administrative Agent or the Borrower, to confirm that it will comply with the terms of this Agreement relating to its obligations to fund prospective Loans (unless such failure is the result of such Lender's good faith determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, will be specifically identified in writing to the Borrower prior to such failure) cannot be satisfied) and participations in then outstanding Letters of Credit; provided that any such Lender will cease to be a Defaulting Lender under this clause (c) upon receipt of such confirmation by the Administrative Agent and the Borrower, (d) otherwise failed to pay over to the Borrower, the Administrative Agent or any other Lender any other amount required to be paid by it hereunder within one (1) Business Day of the date when due, (e) (i) been adjudicated as, or determined by any Governmental Authority having regulatory authority over such Lender or its properties or assets to be, insolvent or (ii) become the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or custodian, appointed for it, or has taken any action in furtherance of, or indicating its consent to, approval of or acquiescence in any such proceeding or appointment, unless, in the case of any Lender referred to in this clause (e), the Borrower, the Administrative Agent and each Issuing Bank will be satisfied that such Lender intends, and has all approvals required to enable it, to continue to perform its obligations as a Lender hereunder or (f) become the subject of a Bail-In Action. For the avoidance of doubt, a Lender will not be deemed to be a Defaulting Lender solely by virtue of the Undisclosed Administration of such Lender or its Parent or of the ownership or acquisition of any Capital Stock in such Lender or its Parent by a Governmental Authority so long as such ownership interest does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender; *provided* that, as of any date of determination of whether any Lender is a Defaulting Lender hereunder will not take into account, and will not otherwise impair, any amounts funded by such Lender which have been assigned by such Lender to an SPC pursuant to Section 10.6. Any determination by the Administrative Agent that a Lender is a Defaulting Lender under any one or more of clauses (a) through (f) above will be conclusive and binding absent manifest error, and such Lender will be deemed to be a Defaulting Lender upon delivery of written notice of such determination by the Administrative Agent to the Borrower and each other Lender.

"Designated Non-Cash Consideration" means the fair market value of non-cash consideration received by the Borrower or any Subsidiary in connection with an Asset Sale pursuant to Section 6.8(e) that is designated as Designated Non-Cash Consideration pursuant to a certificate of an Executive Officer, setting forth the basis of such valuation (which amount will be reduced by the fair market value of the portion of the non-cash consideration converted to cash within one hundred eighty (180) days following the consummation of the applicable Asset Sale).

"Discount Price Range" as defined in Section 2.25(b).

"Discounted Prepayment" as defined in Section 2.25(a).

"Discounted Prepayment Amount" as defined in Section 2.25(b).

"Discounted Prepayment Notice" as defined in Section 2.25(b).

"Discounted Prepayment Offeror" as defined in Section 2.25(a).

"Discounted Prepayment Response Date" as defined in Section 2.25(b).

"Disqualified Capital Stock" means any Capital Stock which, by its terms (or by the terms of any security or other Capital Stock into which it is convertible or for which it is exchangeable), or upon the happening of any event or condition (a) matures or is mandatorily redeemable (other than solely in exchange for Capital Stock that is not otherwise Disqualified Capital Stock), pursuant to a sinking fund obligation or otherwise, (b) is redeemable at the option of the holder thereof (other than solely in exchange for Capital Stock that is not otherwise Disqualified Capital Stock), in whole or in part, (c) provides for the scheduled payment of dividends in cash, or (d) is or becomes convertible into or exchangeable for Indebtedness or any other Capital Stock that would constitute Disqualified Capital Stock, in each case, prior to the date that is ninety-one (91) days after the Latest Term Loan Maturity Date, except, in the case of clauses (a) and (b), if as a result of a change of control or asset sale, so long as any rights of the holders thereof upon the occurrence of such a change of control or asset sale event are subject to the prior payment in full in cash of all Obligations, the cancellation or expiration of all Letters of Credit and the termination of the Commitments; provided, if such Capital Stock is issued pursuant to a plan for the benefit of future, current or former employees, directors or officers of the Borrower or any Subsidiary or by any such plan to such employees, directors or officers, such Capital Stock will not constitute Disqualified Capital Stock solely because the Borrower or any Subsidiary may be required to repurchase such Capital Stock in order to satisfy applicable statutory or regulatory obligations or as a result of such employee's, director's or officer's termination, death or disability.

"Disqualified Lender" means (a) the bona fide competitors of the Borrower and the Subsidiaries identified in writing by the Borrower by name to the Joint Lead Arrangers on or prior to the Closing Date, or from time to time after the Closing Date to the Administrative Agent, (b) those particular banks, financial institutions and other institutional lenders identified in writing by the Borrower by name to the Joint Lead Arrangers on or prior to October 10, 2017, and (c) any reasonably identifiable (on the basis of its name or as identified in writing by the Borrower) affiliate of the entities described in the preceding clauses (a) and (b) or Persons that are identified as affiliates in writing by the Borrower to the Administrative Agent from time to time (other than any affiliates that are banks, financial institutions, bona fide debt funds or investment vehicles that are engaged in making, purchasing, holding or otherwise investing in commercial loans, bonds and similar extensions of credit in the ordinary course and a Person described in clause (a) or (b) does not have the power to direct the investment policies of such entity (other than a limited number of senior employees in connection with such person's internal legal, compliance and risk management and credit committee members) with respect to decisions involving any investment in debt of the Borrower or any of its Subsidiaries), provided, any Person that is a Lender and subsequently becomes a Disqualified Lender (but was not a Disqualified Lender on or prior to October 10, 2017 or at the time it became a Lender) will be deemed to not be a Disqualified Lender hereunder.

"Dollar Equivalent" means, at any time as to any amount denominated in any Agreed Currency other than Dollars, the equivalent amount in Dollars as determined by the Administrative Agent at such time on the basis of the Exchange Rate for the purchase of Dollars with such Agreed Currency, on the most recent Calculation Date for such currency.

"Dollars" and the sign "\$" mean the lawful money of the United States.

"Domestic Subsidiary" means any Subsidiary organized under the laws of the United States, any State or Commonwealth thereof or the District of Columbia.

"E-Fax" means any system used to receive or transmit faxes electronically.

"E-Signature" means the process of attaching to or logically associating with an Electronic Transmission an electronic symbol, encryption, digital signature or process (including the name or an abbreviation of the name of the party transmitting the Electronic Transmission) with the intent to sign, authenticate or accept such Electronic Transmission.

"E-System" means any electronic system approved by the Administrative Agent, including IntraLinks® and ClearPar® and any other Internet or extranet-based site, whether such electronic system is owned, operated or hosted by the Administrative Agent, any of its Related Persons or any other Person, providing for access to data protected by passcodes or other security system.

"ECF Payment Date" as defined in Section 2.14(d). "ECF Percentage" as defined in

Section 2.14(d).

"EEA Financial Institution" means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any

financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

- "EEA Member Country" means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.
- "EEA Resolution Authority" means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.
- "Electronic Transmission" means each document, instruction, authorization, file, information and any other communication transmitted, posted or otherwise made or communicated by e-mail or E-Fax, or otherwise to or from an E-System.
- "Eligible Assignee" means, in each case, subject to the proviso at the end of this definition, (a) any Lender, any Affiliate of any Lender and any Related Fund (any two or more Related Funds being treated as a single Eligible Assignee for all purposes hereof), (b) any Person (other than a Natural Person) in compliance with Section 10.6(c)(ii) or (c) any Approved Fund; provided that in no event will (i) a Disqualified Lender be an Eligible Assignee without the Borrower's consent and (ii) any Defaulting Lender or any Subsidiary of a Defaulting Lender, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons in this clause (ii), be an Eligible Assignee.
- "Eligible Currency" means any currency other than Dollars (a) that is readily available, (b) that is freely traded, (c) in which deposits are eustomarily offered to banks in the London interbank market [reserved], (d) that is convertible into Dollars in the international interbank market and (e) as to which a Dollar Equivalent may be readily calculated. If, after the designation by an Issuing Bank of any currency as an Agreed Currency, (i) currency control or other exchange regulations are imposed in the country in which such currency is issued with the result that different types of such currency are introduced, (ii) such currency is, in the reasonable determination of the applicable Issuing Bank, no longer readily available or freely traded or (iii) in the reasonable determination of the applicable Issuing Bank, a Dollar Equivalent amount of such currency is not readily calculable, the applicable Issuing Bank shall promptly notify the Administrative Agent and the Borrower, and such currency shall no longer be an Agreed Currency until such time as an Issuing Bank agrees to reinstate such currency as an Agreed Currency.
- "Employee Benefit Plan" means any "employee benefit plan" as defined in Section 3(3) of ERISA which is or was sponsored, maintained or contributed to by, or required to be contributed by, the Borrower, any Subsidiary or any of their respective ERISA Affiliates, or with respect to any Pension Plan or Multiemployer Plan, to which the Borrower or any of its Subsidiaries or any ERISA Affiliate thereof has within the preceding five plan years made contributions.
 - "EMU" means the Economic and Monetary Union as contemplated in the EU Treaty.
- "EMU Legislation" means the legislative measures of the EMU for the introduction of, changeover to, or operation of the Euro in one or more member states.
- "Environmental Claim" means any investigation, notice, notice of violation, claim, action, suit, proceeding, demand, abatement order or other order or directive (conditional or otherwise), by any Governmental Authority or any other Person, arising (a) pursuant to or in connection with any actual or alleged Environmental Liability or violation of any applicable Environmental Law; (b) in connection with any Hazardous Material or any actual or alleged Hazardous Materials Activity; or (c) in connection with any actual or alleged damage, injury, threat or harm to health, safety, natural resources or the environment.
- "Environmental Laws" means any and all current and future foreign or domestic, federal or state (or any subdivision of either of them) Laws, Governmental Authorizations, or any other requirements of Governmental Authorities relating to (a) the environment, natural resources and environmental matters, including those relating to any Hazardous Materials Activity; (b) the generation, use, storage, transportation or disposal of Hazardous Materials; or (c) occupational health and safety, land use or the protection of human, plant or animal health or welfare, in any such case, as of any date of determination, then in force and in any manner applicable to the Borrower or any of its Subsidiaries or any Facility.
- "Environmental Liabilities" means all Liabilities (including costs of Remedial Actions, natural resource damages and costs and expenses of investigation and feasibility studies, including the cost of environmental consultants and attorneys' costs) that may be imposed on, incurred by or asserted against any Credit Party or any Subsidiary of any Credit Party as a result of, or related to, (a) any actual or alleged violation of any applicable Environmental Law; (b) any Release or threatened Release; (c) any Remedial Action or Hazardous Materials Activity; or (d) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time, and any successor thereto.

"ERISA Affiliate" means, as applied to any Person, (a) any corporation which is a member of a controlled group of corporations within the meaning of Section 414(b) of the Internal Revenue Code of which that Person is a member; (b) any trade or business (whether or not incorporated) which is a member of a group of trades or Business under common control within the meaning of Section 414(c) of the Internal Revenue Code of which that Person is a member; and (c) any member of an affiliated service group within the meaning of Section 414(m) or (o) of the Internal Revenue Code of which that Person, any corporation described in clause (a) above or any trade or business described in clause (b) above is a member. Any former ERISA Affiliate of the Borrower or any Subsidiary will continue to be considered an ERISA Affiliate of the Borrower or such Subsidiary with respect to liabilities arising after such period for which the Borrower or such Subsidiary could be liable under the Internal Revenue Code or ERISA.

"ERISA Event" means (a) a "reportable event" within the meaning of Section 4043 of ERISA and the regulations issued thereunder with respect to any Pension Plan (excluding those for which the provision for 30-day notice to the PBGC has been waived by regulation in effect on the Closing Date);

(b) the failure to meet the minimum funding standard of Section 412 of the Internal Revenue Code or Section 302 or 303 of ERISA with respect to any Pension Plan (whether or not waived in accordance with Section 412(c) of the Internal Revenue Code) or the failure to make by its due date a required installment under Section 430(j) of the Internal Revenue Code with respect to any Pension Plan or the failure to make any required contribution to a Multiemployer Plan; (c) the provision by the administrator of any Pension Plan pursuant to Section 4041(a)(2) of ERISA of a notice of intent to terminate such plan in a distress termination described in Section 4041(c) of ERISA; (d) the withdrawal by the Borrower, any Subsidiary or any of their respective ERISA Affiliates from any Pension Plan with two or more non-related contributing sponsors or the termination of any such Pension Plan resulting in liability to the Borrower, any Subsidiary or any of their respective ERISA Affiliates pursuant to Section 4063 or 4064 of ERISA; (e) the institution by the PBGC of proceedings to terminate any Pension Plan or Multiemployer Plan, or the occurrence of any event or condition which could reasonably constitute grounds under ERISA for the termination of, or the appointment of a trustee to administer, any such plan; (f) the imposition of any liability under Title IV of ERISA on the Borrower, any Subsidiary or any of their respective ERISA Affiliates with respect to the termination of any Pension Plan; (g) the withdrawal of the Borrower, any Subsidiary or any of their respective ERISA Affiliates in a complete or partial withdrawal (within the meaning of Sections 4203 and 4205 of ERISA) from any Multiemployer Plan if there is any potential liability therefor, or the receipt by the Borrower, any Subsidiary or any of their respective ERISA Affiliates of notice from any Multiemployer Plan that it is in insolvency pursuant to Section 4245 of ERISA, or that it intends to terminate or has terminated under Section 4041A or 4042 of ERISA; (h) t

"EU Bail-In Legislation Schedule" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

"EU Treaty" means the Treaty on European Union.

"Euro" means the single currency of the Participating Member States introduced in accordance with the provisions of Article 109(i)4 of the EU Treaty.

"Eurodollar Rate" means, for any Interest Period, the higher of (a) with respect to the Initial Term Loans only, 1.00% per annum and (b) the rate per annum obtained by dividing (i) the ICE Benchmark Administration London Interbank Offered Rate on the applicable Reuters screen page (or such other commercially available source providing such quotations of LIBOR as designated by the Administrative Agent from time to time) at approximately 11:00 a.m., London time, two (2) Business Days prior to the commencement of such Interest Period, for Dollar deposits (for delivery on the first day of such Interest Period) with a term equivalent to such Interest Period by (ii) an amount equal to (A) one minus (B) the applicable Statutory Reserves; provided, however, that if the Eurodollar Rate at any time would otherwise be less than zero, such rate shall be deemed to be zero (including for purposes of clause (c) in the definition of "Base Rate").

"Eurodollar Rate Loan" means a Loan bearing interest at a rate determined by reference to the Eurodollar Rate (as defined in this Agreement prior to giving effect to the Fourth Amendment).

"Event of Default" as defined in Section 8.1.

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time, and any successor statute.

"Exchange Rate" means, on any day, for purposes of determining the Dollar Equivalent of any Eligible Currency, the rate at which such other currency may be exchanged into Dollars at the time of determination on such day on the Bloomberg WCR Page for such currency. If such rate does not appear on any Bloomberg WCR Page, the Exchange Rate shall be determined by reference to such other publicly available service for displaying exchange rates as may be selected by the Administrative Agent, or, in the event no such service is selected, such Exchange Rate shall instead be the arithmetic average of the spot rates of exchange of the Administrative Agent in the market where its foreign currency exchange operations in respect of such currency are then being conducted, at or about such time as the Administrative Agent shall elect after determining that such rates shall be the basis for determining the Exchange Rate, on such date for the purchase of Dollars for delivery two Business Days later; provided that, if at the time of any such determination, for any reason, no such spot rate is being quoted, the Administrative Agent, after consultation with the Borrower, may use any reasonable method it deems in good faith appropriate to determine such rate, and such determination shall be presumed correct absent manifest error.

"Excluded Foreign Subsidiary" means (a) any Subsidiary that is (i) a Foreign Subsidiary which is a "controlled foreign corporation" within the meaning of Section 957 of the Internal Revenue Code (each, a "CFC") or (ii) any direct or indirect Subsidiary (including, without limitation, a "disregarded entity" for federal income tax purposes) substantially all the assets of which are Capital Stock of, or Capital Stock and indebtedness of, one or more Subsidiaries that are CFCs ("Foreign Subsidiary Holding Company") or other Foreign Subsidiary Holding Companies, (b) any direct or indirect Subsidiary of a CFC or a Foreign Subsidiary Holding Company and (c) CryoLife Europa Ltd., a private limited company incorporated under the laws of England and Wales (so long as it, or its successor, remains a Foreign Subsidiary).

"Excluded Real Estate Assets" means, with respect to any Credit Party, (a) any fee interest in owned real property not constituting a Material Real Estate Asset, (b) any leasehold interest (including any ground lease interest) in real property and (c) any fixtures affixed to any real property to the extent

(i) such real property does not constitute Collateral and/or (ii) such real property is not otherwise an Excluded Asset (as defined in the Pledge and Security Agreement) and a security interest in such fixtures may not be perfected by a UCC-1 financing statement in the jurisdiction of organization of the applicable Credit Party.

"Excluded Subsidiary" means (a) each Immaterial Subsidiary, (b) each Unrestricted Subsidiary, (c) each Excluded Foreign Subsidiary, (d) each Subsidiary to the extent that (and only for so long as) such Subsidiary is prohibited by any applicable Law from guaranteeing the Obligations, (e) each Subsidiary if, and for so long as, the guarantee of the Obligations by such Subsidiary would require the consent, approval, license or authorization of a Governmental Authority or under any binding Contractual Obligation (or, if such Subsidiary is not a wholly-owned Subsidiary, under its Organizational Documents) with any Person other than the Borrower or any Subsidiary existing on the Closing Date (or, if later, the date such Subsidiary is acquired (so long as such Contractual Obligation is not incurred in contemplation of such acquisition), except to the extent and until such consent, approval, license or authorization has actually been obtained, (f) each Subsidiary that is a not-for-profit organization, (g) each Subsidiary with respect to which, as reasonably determined by the Borrower in good faith, the guarantee by such Subsidiary would reasonably be expected to result in material adverse tax consequences to the Borrower or any Subsidiary, and (h) each Subsidiary with respect to which, as reasonably determined by the Borrower and the Administrative Agent the cost, burden and/or potential tax liability of providing a guarantee outweigh the marginal benefits to be obtained by the Lenders; in each case of this definition, unless such Subsidiary is designated as a Guarantor pursuant to the definition of "Guarantors."

"Excluded Swap Obligation" means, with respect to any Guarantor, any Swap Obligation if, and to the extent that, all or a portion of the Guaranty of such Guarantor of, or the grant by such Guarantor of a security interest to secure, such Swap Obligation (or any Guaranty thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Guarantor's failure for any reason to constitute an "eligible contract application of official interplatation of any interest) by virtue of sater (data into its any leason to Constitute an engine contract participant" (determined after giving effect to any applicable keep well, support or other agreement for the benefit of such Guarantor and any and all guarantees of such Guarantor's Swap Obligations by other Credit Parties) as defined in the Commodity Exchange Act and the regulations thereunder (determined after giving effect to Section 7.14) at the time the Guaranty of such Guarantor, or a grant by such Guarantor of a security interest, becomes effective with respect to such Swap Obligation. If a Swap Obligation arises under a master agreement governing more than one swap, such exclusion will apply only to the portion of such Swap Obligation that is attributable to swaps for which the Guaranty or security interest is or becomes excluded in accordance with the first sentence of this definition.

'Excluded Tax" means any of the following Taxes imposed on or with respect to any Recipient or required to be withheld or deducted from a payment to a Recipient (a) Taxes imposed on or measured by net income (however denominated, and including branch profits taxes) and franchise taxes imposed in lieu of net income taxes, in each case (i) imposed as a result of such Recipient being organized under the Laws of, or having its principal

office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) imposed on any Recipient as a result of a present or former connection between such Recipient and the jurisdiction of the Governmental Authority imposing such Tax or any political subdivision or taxing authority thereof or therein (other than such connection arising solely from any such Recipient having executed, delivered or performed its obligations or received a payment under, received or perfected a security interest under, or enforced, any Credit Document); (b) U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Recipient with respect to an applicable interest in a Loan or Commitment pursuant to a Law in effect on the date on which such Recipient (i) acquires such interest in the Loan or Commitment or otherwise becomes a party to this Agreement (other than, with respect to a Lender, pursuant to an assignment request by the Borrower under Section 2.23) or (ii) changes its lending office, except in each case, to the extent that, pursuant to Section 2.20, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office; (c) Taxes that are attributable to the failure by any Recipient to deliver the documentation required to be delivered pursuant to Section 2.20(f) or Section 2.20(g); and (d) Taxes imposed under FATCA.

"Executive Officer" means, as applied to any Person, any individual holding the position of chairman of the board of directors, chief executive officer, president, chief financial officer, chief operating officer, chief compliance officer, chief legal officer and any other executive officer having substantially the same authority and responsibility as any of the foregoing.

Executive Order No. 13224" means Executive Order No. 13224 of September 23, 2001 Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism.

"Export Controls" means any applicable laws, regulations, and orders related to the regulation of imports, exports, re-exports, transfers, releases, shipments, transmissions, or any other provision or receipt of goods, technology, technical data, software, or services, including the Export Administration Regulations (15 C.F.R. § 730-774), the Arms Export Control Act (22 U.S.C. § 2778), the International Traffic in Arms Regulations (22 C.F.R. § 120-130), the Tariff Act of 1930 and regulations administered and enforced by U.S. Customs and Border Protection and U.S. Immigration and Customs Enforcement, and any other laws, regulations, and orders of a similar nature.

"Extended Revolving Credit Commitment" as defined in Section 10.5(g).

"Extended Term Lender" as defined in Section 10.5(g).

"Extended Term Loans" as defined in Section 10.5(g).

"Extension" as defined in Section 10.5(g).

"Extension Amendment" as defined in Section 10.5(g).

"Extension Offer" as defined in Section 10.5(g).

"Facility" means any real property (including all buildings, fixtures or other improvements located thereon) now, hereafter or heretofore owned, leased, operated or used by the Borrower, any Subsidiary or any of their respective predecessors or Affiliates.

"Fair Share" as defined in Section 7.2.

"Fair Share Contribution Amount" as defined in Section 7.2.

"FATCA" means Sections 1471 through 1474 of the Internal Revenue Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b)(1) of the Internal Revenue Code, any intergovernmental agreement entered into in connection with the implementation of such Sections of the Internal Revenue Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to such intergovernmental agreement.

"FCPA" means the U.S. Foreign Corrupt Practices Act (15 U.S.C. §§78dd-1 et seq.). "FDA" means the United States Food and Drug

Administration and any successor thereto. "FDA Laws" as defined in Section 5.7.

"Federal Funds Rate" means for any day, the rate per annum (expressed, as a decimal, rounded upwards, if necessary, to the next higher 1/100 of 1%) equal to the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System on such day, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day; provided that (a) if such day is not a Business Day, the Federal Funds Rate for such day will be such rate on such transactions on the next preceding Business Day as so published on the next succeeding Business Day and (b) if no such rate is so published on such next succeeding Business Day, the Federal Funds Rate for such day will be the average rate charged to the Administrative Agent, in its capacity as a Lender, on such day on such transactions as determined by the Administrative Agent.

"Federal Health Care Program" has the meaning specified in Section 1128B(f) of the SSA and includes the Medicare, Medicaid and TRICARE programs.

"Federal Health Care Program Laws" as defined in Section 4.24(c). "Fifth Third" means Fifth Third Bank.

"Financial Officer Certification" means, with respect to the financial statements for which such certification is required, the certification of the chief financial officer, treasurer, controller or other officer with equivalent duties of the Borrower that such financial statements fairly present, in all material respects, the financial condition of the Borrower and the Subsidiaries as at the dates indicated and the results of their operations and their cash flows for the periods indicated, subject to changes resulting from audit and normal year-end adjustments and the absence of footnotes.

"Financial Covenant" means the maximum First Lien Net Leverage Ratio covenant set forth in Section 6.7.

"Financial Covenant Cross Default" as defined in section 8.1(c).

"Financial Covenant Test Criteria" as defined in Section 6.7. "Financial Covenant Test Date" as

defined in Section 6.7. "Financial Plan" as defined in Section 5.1(c).

"First Amendment" shall mean that certain First Amendment to Credit and Guaranty Agreement, dated as of October 26, 2018, among the Borrower, the Guarantor Subsidiaries, the Administrative Agent and the Lenders party thereto.

"First Amendment Effective Date" shall have the meaning provided in the First Amendment. "First Lien Net Leverage Ratio" means,

as of any date, the ratio of (a) the sum of Consolidated

Total Debt that is secured by a Lien on any asset or property of the Borrower or any Subsidiary (excluding any Junior Lien Indebtedness that is subject to a Junior Lien Intercreditor Agreement), *minus* all Unrestricted Cash as of such date to (b) Consolidated Adjusted EBITDA for the most recently ended Test Period, all of the foregoing determined on a Pro Forma Basis.

"Fiscal Quarter" means, with respect to any Person, the fiscal quarter of such Person. In the case of the Borrower, Fiscal Quarter means a fiscal quarter of any Fiscal Year of the Borrower. A Fiscal Quarter of the Borrower may be designated by reference to the last day thereof (i.e., the "December 31, 2017 Fiscal Quarter" refers to the Fiscal Quarter ended on December 31, 2017, the last day of the Borrower's fourth Fiscal Quarter for Fiscal Year 2017) or by reference to the applicable Fiscal Quarter of a Fiscal Year (i.e., the "Q4-2017 Fiscal Quarter" also refers to the Borrower's fourth Fiscal Quarter for Fiscal Year 2017). To the extent that the Fiscal Quarters of any Person (other than the Borrower) are different than the Fiscal Quarters of the Borrower, the Borrower shall determine in good faith a methodology to align such other Person's Fiscal Quarters with the corresponding Fiscal Quarters of the Borrower. For purposes of this Agreement, except to the extent expressly stated otherwise, references to any "Fiscal Quarter" will mean a Fiscal Quarter of the Borrower.

"Fiscal Year" means, with respect to any Person, the fiscal year of such Person. In the case of the Borrower, Fiscal Year means the fiscal year of the Borrower and the Subsidiaries ending on December 31 of each calendar year. A Fiscal Year of the Borrower may be designated by reference to the last day thereof (i.e., the "December 31, 2017 Fiscal Year" refers to the Fiscal Year ended on December 31, 2017) or by reference to the calendar year in which such Fiscal Year ends (i.e., the "Fiscal Year 2017" also refers to the Fiscal Year ended on December 31, 2017). To the extent that the Fiscal Years of any Person (other than the Borrower) are different than the Fiscal Years of the Borrower, the Borrower shall determine in good faith a methodology to align such other Person's Fiscal Years with the corresponding Fiscal Years of the Borrower. For purposes of this Agreement, except to the extent expressly stated otherwise, references to any "Fiscal Year" will mean a Fiscal Year of the Borrower.

"Flood Insurance Laws" means collectively, (a) the National Flood Insurance Act of 1968, (b) the Flood Disaster Protection Act of 1973, (c) the National Flood Insurance Reform Act of 1994 (which comprehensively revised the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973), (d) the Flood Insurance Reform Act of 2004 and (e) the Biggert-Waters Flood Insurance Reform Act of 2012, each as now or hereafter in effect or any successor statute thereto and any and all official rulings and interpretation thereunder or thereof.

"Foreign Casualty Event" as defined in Section 2.15(f).

"Foreign Currency Letter of Credit" means a Letter of Credit denominated in any Available Foreign Currency.

"Foreign Disposition" as defined in Section 2.15(f).

"Foreign Mandatory Prepayment Event" as defined in Section 2.15(f).

"Foreign Plan" means any employee benefit plan, program, policy, arrangement or agreement maintained or contributed to by the Borrower or any of its Subsidiaries with respect to employees employed outside the United States.

"Foreign Subsidiary" means any Subsidiary that is not a Domestic Subsidiary.

"Foreign Subsidiary Holding Company" as defined in the definition of "Excluded Foreign Subsidiary".

"Fourth Amendment" means that certain Fourth Amendment to Credit and Guaranty Agreement, dated as of December 19, 2022, among the Borrower, the Guarantor Subsidiaries and the Administrative Agent.

"Fourth Amendment Effective Date" shall have the meaning provided in the Fourth Amendment.

"Funded Debt" means all Indebtedness of the Borrower and the Subsidiaries for borrowed money that matures more than one year from the date of its creation or matures within one year from such date that is renewable or extendable, at the option of such Person, to a date more than one year from such date or arises under a revolving credit or similar agreement that obligates the lender or lenders to extend credit during a period of more than one year from such date, including Indebtedness in respect of the Loans.

"Funding Default" as defined in Section 2.22.

"Funding Guarantor" as defined in Section 7.2.

"Funding Notice" means a notice substantially in the form of Exhibit A-1.

"GAAP" means, subject to the limitations on the application thereof set forth in Section 1.2 and in the definition of Capital Lease, United States generally accepted accounting principles in effect as of the date of determination thereof; *provided* that the following exceptions to such generally accepted accounting principles will apply:

- (a) property, plant and equipment with an original unit cost that is less than \$5,000 are fully expensed at time of purchase;
- (b) fixed assets acquired or disposed of are depreciated using the half-month convention during the month of acquisition or disposal, rather than depreciated for the number of days the asset is in service during that month;
- (c) for purposes of determining whether the financial statements are materially accurate, the Borrower maintains a list of post-closing adjustments that are identified prior to publishing the financial statements, and either (i) if the post-closing adjustments are not considered material, the financial statements are not adjusted for the post-closing adjustments or (ii) if the post-closing adjustments are considered material, the Borrower records the post-closing adjustments and the financial statements are revised; and
- (d) at the end of a reporting period, the Borrower records certain expense accruals based on management estimates when supplier invoices are not available to support the exact amount of the expense accrual.

"Government Official" means (a) any official, officer, employee or representative of, or any Person acting in an official capacity for or on behalf of, any Governmental Entity, (b) any political party or party official or candidate for political office or (c) any official, officer, employee, or any Person acting in an official capacity for or

on behalf of, any company, business, enterprise or other entity owned (in whole or in substantial part) controlled by or Affiliated with a Governmental Entity.

"Governmental Acts" means any act or omission, whether rightful or wrongful, of any present or future de jure or de facto government or Governmental Authority.

"Governmental Authority" means any federal, state, municipal, national or other government, governmental department, commission, board, bureau, court, agency or instrumentality or political subdivision thereof or any entity, officer or examiner exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to any government or any court, in each case whether associated with a state of the United States, the United States, or a foreign entity or government in a jurisdiction where the Borrower and the Subsidiaries operate the Business, including any supra-national bodies (such as the European Union or the European Central Bank).

"Governmental Authorization" means any permit, license, authorization, plan, directive, consent order or consent decree of or from any Governmental Authority.

"Governmental Entity" means any (a) international, multinational, foreign, federal, state, local, municipal, or other government or political subdivision, (b) governmental or quasi-governmental entity of any nature (including any governmental agency, branch, department, commission, board, bureau, official, or entity and any court or other tribunal) or (c) body exercising, or entitled to exercise any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature, including any arbitral tribunal.

"Granting Lender" as defined in Section 10.6(k). "Grantor" as defined in the Pledge and Security

Agreement.

"Guaranteed Obligations" means all Obligations; provided that, with respect to any Guarantor, "Guaranteed Obligations" shall exclude all Excluded Swap Obligations of such Guarantor.

"Guarantor" means the Borrower (solely with respect to the Guaranteed Obligations in respect of any Bank Product Agreement or Secured Rate Contract entered into by any other Credit Party and not with respect to its direct Obligations as a primary obligor under the Credit Documents) and each Guarantor Subsidiary, and, in each case, their respective successors and assigns.

"Guarantor Subsidiary" means each direct and indirect Subsidiary of the Borrower (other than an Excluded Subsidiary) that has provided or is required to provide a Guaranty hereunder.

"Guaranty" means the guaranty of each Guarantor set forth in Section 7.

"Hazardous Materials" means any chemical, material, substance or waste, exposure to which, or the Release of which, either is prohibited, limited or regulated by any Governmental Authority or may give rise to Environmental Liability.

"Hazardous Materials Activity" means any activity, event or occurrence involving any Hazardous Materials, including the use, manufacture, possession, storage, holding, presence, existence, location, Release, threatened Release, discharge, placement, generation, transportation, processing, construction, treatment, abatement, removal, remediation, disposal, disposition or handling of any Hazardous Materials, and any corrective action or response action with respect to any of the foregoing.

"Highest Lawful Rate" means the maximum lawful interest rate, if any, that at any time or from time to time may be contracted for, charged, or received under the laws applicable to any Lender which are presently in effect or, to the extent allowed by law, under such applicable laws which may hereafter be in effect and which allow a higher maximum non-usurious interest rate than applicable laws now allow.

"HIPAA" means the Health Insurance Portability and Accountability Act of 1996.

"Historical Audited Financial Statements" means, as of the Closing Date, the audited consolidated balance sheets and related statements of income and cash flows of each of the Borrower and the Acquired Business as of the Fiscal Years ended December 31, 2015 and December 31, 2016

"Historical Financial Statements" means, collectively, the Historical Audited Financial Statements and the Historical Unaudited Financial Statements.

"Historical Unaudited Financial Statements" means, as of the Closing Date, the unaudited consolidated balance sheets and related statements of income and cash flows of each of the Borrower and the Acquired Business as of the Fiscal Quarters ended March 31, 2017, June 30, 2017 and September 30, 2017.

"Immaterial Subsidiary" means on any date, any Subsidiary of the Borrower that has less than 2.5% of consolidated total assets on a Pro Forma Basis and generates less than 2.5% of annual consolidated revenues of the Borrower and the Subsidiaries as reflected in the most recent financial statements delivered pursuant to Section 5.1(a) prior to such date (or, at any time prior to the first date that financial statements have been or are required to be delivered pursuant to Section 5.1(a), as reflected in the Historical Audited Financial Statements for the Fiscal Year ended December 31, 2016); provided that if, at any time, Domestic Subsidiaries that are not Guarantors solely because they meet the thresholds set forth above comprise in the aggregate more than (when taken together with the consolidated total assets of the Subsidiaries of such Domestic Subsidiaries at the last day of the most recent Test Period) 5.0% of consolidated total assets of the Borrower and the Subsidiaries as of the end of the most recently ended Test Period or more than (when taken together with the revenues of the Subsidiaries of such Domestic Subsidiaries For such Test Period) 5.0% of the consolidated revenues of the Borrower and the Subsidiaries for such Domestic Subsidiaries for such Test Period, then the Borrower shall, not later than forty-five (45) days after the date by which financial statements for such Test Period were required to be delivered pursuant to this Agreement (or such longer period as the Administrative Agent may agree in its reasonable discretion), cause one or more Domestic Subsidiaries to comply with the provisions of Section 5.10 with respect to any such Subsidiaries so that the foregoing condition ceases to be true.

"Increased Cost Lender" as defined in Section 2.23. "Incremental Amendment" as defined in

Section 2.24(e). "Incremental Amount" as defined in Section 2.24(c).

- "Incremental Equivalent Debt" means Indebtedness of any one or more Credit Parties in the form of term loans or notes that constitute Pari Passu Lien Indebtedness or Junior Lien Indebtedness or that are unsecured; provided that:
- (a) the aggregate principal amount of all Incremental Equivalent Debt on any date such Indebtedness is incurred will not, together with any Incremental Revolving Facilities and/or Incremental Term Facilities incurred, exceed the Incremental Amount (on the same basis as the Borrower may incur Incremental Facilities pursuant to the fourth and fifth sentences of Section 2.24(c), but substituting "Incremental Equivalent Debt" for "Incremental Facility" therein);
- (b) any Incremental Equivalent Debt will not mature prior to the Latest Term Loan Maturity Date, or have a shorter Weighted Average Life to Maturity than the Initial Term Loans;
- (c) any Incremental Equivalent Debt that is secured (i) will not be secured by any property or assets of the Borrower or any Subsidiary other than the Collateral and (ii) will be subject to a Pari Passu Lien Intercreditor Agreement or a Junior Lien Intercreditor Agreement, as applicable;
- (d) any Incremental Equivalent Debt (i) constituting Pari Passu Lien Indebtedness may participate on a *pro rata* basis or less than *pro rata* basis (but not greater than a *pro rata* basis, except for prepayments with the proceeds of a Permitted Refinancing and in respect of an earlier maturing tranche) with the then-existing Term Loans in any mandatory prepayments hereunder, and (ii) constituting Junior Lien Indebtedness or that is unsecured may not participate in any voluntary or mandatory prepayments, except to the extent that such prepayments are offered, to the extent required under this Agreement or any Pari Passu Lien Indebtedness, first *pro rata* to the Term Loans and any applicable Pari Passu Lien Indebtedness;
- (e) Incremental Equivalent Debt will not be guaranteed by any Person other than the Credit Parties;
- (f) with respect to any Incremental Equivalent Debt that constitutes MFN Eligible Debt, the MFN Adjustment will apply to such Incremental Equivalent Debt (but the MFN Adjustment will not apply to any other Incremental Equivalent Debt);
- (g) subject to provisions of Section 1.5 if an LCA Election has been made, no Default or Event of Default will have occurred and be continuing on the date such Incremental Equivalent Debt is incurred or would occur immediately after giving effect thereto; and
- (h) the other terms applicable to such Indebtedness are substantially identical to, or (taken as a whole as determined by the Borrower in good faith) no more favorable to the lenders providing such Incremental Equivalent Debt than, those applicable to the Initial Term Loans or otherwise reasonably satisfactory to the Administrative Agent; *provided* that this clause (h) will not apply to (i) interest rate, fees, funding discounts and other pricing terms, (ii) redemption, prepayment or other premiums, (iii) optional prepayment terms, and (iv) covenants and other terms that are (A) applied to the Term Loans existing at the time of incurrence of such Incremental Equivalent Debt (so

that existing Lenders also receive the benefit of such provisions) and/or (B) applicable only to periods after the Latest Term Loan Maturity Date at the time of incurrence of such Indebtedness; provided further, a certificate of the Borrower delivered to the Administrative Agent at least four (4) Business Days prior to the incurrence of such Indebtedness (or such shorter period as may be agreed by the Administrative Agent), together with a reasonably detailed description of the material covenants and events of default of such Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has reasonably determined in good faith that such terms and conditions satisfy the foregoing requirement shall be conclusive evidence that such terms and conditions satisfy the foregoing requirement unless the Administrative Agent notifies the Borrower within such four (4) Business Day period that it disagrees with such determination (including a reasonably detailed description of the basis upon which it disagrees).

"Incremental Facility" as defined in Section 2.24(a).

"Incremental Fixed Amount" means, as of the date of measurement, the sum of (a)

\$45,000,000, *minus* (b) the aggregate principal amount of Incremental Term Loans and Incremental Revolving Facilities previously incurred in reliance on this definition, *minus* (c) the aggregate principal amount of all Incremental Equivalent Debt previously incurred in reliance on this definition, *plus* (d) the aggregate principal amount of any voluntary prepayments of Term Loans (in each case, including those made through discounted debt buy-backs by the Borrower or any Subsidiary in an amount equal to the discounted amount actually paid in respect of such buy-back), *plus* (e) the aggregate principal amount of voluntary permanent reductions of Revolving Credit Commitments; *provided* that, in the case of each of clauses (d) and (e), solely to the extent not funded with the proceeds of Funded Debt.

"Incremental Loans" as defined in Section 2.24(a).

- "Incremental Ratio Amount" means an aggregate principal amount of Indebtedness that, after the incurrence thereof on Pro Forma Basis and excluding the cash proceeds to the Borrower or any Subsidiary therefrom that are actually applied or intended to be applied to a particular use or transaction as of the date of incurrence thereof (but otherwise giving effect to the use of such proceeds so applied or intended to be applied), and subject to Section 1.5, would not result in:
- (a) with respect to any Incremental Facility or Incremental Equivalent Debt to be incurred as Pari Passu Lien Indebtedness, the First Lien Net Leverage Ratio being equal to or greater than 3.60:1.00;
- (b) with respect to any Incremental Equivalent Debt to be incurred as Junior Lien Indebtedness, the Secured Net Leverage Ratio being equal to or greater than 5.25:1.00; and
- (c) with respect to any Incremental Equivalent Debt to be incurred as unsecured Indebtedness, the Total Net Leverage Ratio being equal to or greater than 5.25:1.00.

"Incremental Revolving Facilities" as defined in Section 2.24(a). "Incremental Revolving Facility Lender" as

defined in Section 2.24(i). "Incremental Revolving Loans" as defined in Section 2.24(a). "Incremental Term

Facilities" as defined in Section 2.24(a). "Incremental Term Loans" as defined in Section 2.24(a).

- "Incremental Term Loan Commitment" means the commitment of a Lender to make or otherwise fund an Incremental Term Loan and "Incremental Term Loan Commitments" means such commitments of all Lenders in the aggregate.
- "Incremental Term Loan Exposure" means, with respect to any Lender, as of any date of determination, the outstanding principal amount of the Incremental Term Loans of such Lenders; *provided*, at any time prior to the making of the Incremental Term Loans, the Incremental Term Loan Exposure of any Lender will be equal to such Lender's Incremental Term Loan Commitment.

"Indebtedness," as applied to any Person, means, without duplication, (a) all indebtedness for borrowed money; (b) all obligations evidenced by bonds, debentures, notes or similar instruments; (c) that portion of obligations with respect to Capital Leases that is properly classified as a liability on a balance sheet in conformity with GAAP as in effect of the date hereof; (d) any obligation or contingent obligation owed for all or any part of the deferred purchase price of property or services, which purchase price is (i) due more than six months from the date of incurrence of the obligation in respect thereof or (ii) evidenced by a note or similar written instrument (excluding

(A) any such obligations incurred under ERISA, (B) accounts payable, payroll and other liabilities and accrued expenses incurred in the ordinary course of business that are not overdue by more than one hundred eighty (180) days from the date of incurrence of the obligations in respect thereof, (C) accruals for payroll and other liabilities in the ordinary course of business and (D) escrows, hold-backs and similar obligations; (e) earn-outs, milestone payments and similar obligations; (f) the face amount of any letter of credit issued for the account of that Person or as to which that Person is otherwise liable for reimbursement of drawings; (g) Disqualified Capital Stock; (h) the direct or indirect guaranty of obligations, of the type in clauses (a)-(g) of this definition, of any other Person; (i) obligations, of the type in clauses (a)-(g) of this definition, that are secured by a Lien on any property or asset owned or held by that Person regardless of whether such obligations are owed by or recourse to such Person; and (j) obligations of such Person in respect of any derivative transaction, including any Rate Contract, whether entered into for hedging or speculative purposes. Notwithstanding the foregoing, for all purposes of this Agreement: (i) Indebtedness of any Person will include the Indebtedness of any partnership or joint venture (other than a joint venture that is itself a corporation or limited liability company) in which such Person is a general partner or a joint venturer, except to the extent such Person's liability for such Indebtedness is otherwise limited and only to the extent such Indebtedness would be included in the calculation of Consolidated Total Debt; (ii) with respect to clause (f) above, to the extent any letter of credit issued for the benefit of the Borrower or any Subsidiary (a "Primary LC") is supported (including any "back-to-back" arrangement) by a another letter of credit (including any Letter of Credit hereunder) also issued for the benefit of the Borrower or any Subsidiary (the "Supporting LC"), to the extent that both such Primary LC and the relevant Supporting LC would constitute "Indebtedness" for any purpose under this Agreement, then the Primary LC and the relevant Supporting LC shall be deemed to be a single obligation in an amount equal to the amount of Indebtedness attributable to the Primary LC (and any corresponding amount of the Supporting LC that also would then constitute "Indebtedness" will be disregarded); (iii) with respect to clause (i) above, the amount of Indebtedness of any Person will be deemed to be equal to the lesser of (1) the aggregate unpaid amount of such Indebtedness and (2) the fair market value (as determined by such Person in good faith) of the property encumbered thereby as determined by such Person in good faith; (iv) the amount of any obligation under any Rate Contract on any date shall be deemed to be the Swap

Termination Value thereof as of such date; and (v) with respect to clause (j) above, in no event will obligations under any Rate Contract be deemed "Indebtedness" for the purpose of calculating any ratio contemplated by this Agreement.

"Indemnified Liabilities" means, collectively, any and all liabilities (including Environmental Liabilities), obligations, losses, damages (including natural resource damages), penalties, claims (including Environmental Claims), actions, judgments, suits, costs (including the costs of any Remedial

Action), expenses and disbursements of any kind or nature whatsoever (including the reasonable and documented in reasonable detail fees and disbursements of counsel for Indemnitees in connection with any investigative, administrative or judicial proceeding or hearing commenced or threatened by any Person, whether or not any such Indemnitee will be designated as a party or a potential party thereto, and any fees or expenses incurred by Indemnitees in enforcing this indemnity), whether direct, indirect or consequential and whether based on any federal, state or foreign laws, statutes, rules or regulations (including securities and commercial laws, statutes, rules or regulations and applicable Environmental Laws), on common law or equitable cause or on contract or otherwise, that may be imposed on, incurred by, or asserted against any such Indemnitee, in any manner relating to or arising out of (a) this Agreement or the other Credit Documents or the transactions contemplated hereby or thereby (including the Lenders' agreement to make Credit Extensions or the use or intended use of the proceeds thereof, or any enforcement of any of the Credit Documents (including any sale of, collection from, or other realization upon any of the Collateral or the enforcement of the Guaranty)); (b) the Agency Fee Letter and any Contractual Obligation entered into in connection with any Approved Electronic Communications; (c) any Environmental Claim or any Hazardous Materials Activity relating to or arising from, directly or indirectly, any past or present activity, operation, land ownership, or practice of the Borrower or any Subsidiary; or (d) any actual or prospective investigation, litigation or other proceeding relating to any of the foregoing, whether or not brought by any such Indemnitee or any of its Related Person, holder or creditor is a party thereto, and whether or not based on any securities or commercial law or regulation or any other Law or theory thereof, including common law, equity, contract, tort or otherwise.

"Indemnified Taxes" means (a) all Taxes other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Credit Party under any Credit Document, and (b) to the extent not otherwise described in (a), Other Taxes.

"Indemnitee" as defined in Section 10.3.

"Initial Credit Extension" as defined in Section 3.1.

"Initial Revolving Borrowing" means one or more borrowings of Revolving Loans on the Closing Date in amounts not to exceed up to \$5,000,000 to pay Transaction Costs.

"Initial Revolving Commitment" means the commitment of a Lender set forth on Appendix A-2 to make or otherwise fund any Revolving Loan and to acquire participations in Letters of Credit hereunder, and "Initial Revolving Commitments" means such commitments of all of the Lenders in the aggregate. The amount of each Lender's Initial Revolving Commitment, if any, is subject to any adjustment or reduction pursuant to the terms and conditions hereof. The aggregate amount of the Initial Revolving Commitments as of the Closing Date is \$30,000,000.

"Initial Term Loan" means a Term Loan made by a Lender to the Borrower on the Closing Date pursuant to Section 2.1.

"Initial Term Loan Commitment" means the commitment of a Lender to make or otherwise fund an Initial Term Loan and "Initial Term Loan Commitments" means such commitments of all of the Lenders in the aggregate. The amount of each Lender's Initial Term Loan Commitment, if any, is set forth on Appendix A-1 or in the applicable Assignment Agreement, subject to any adjustment or reduction pursuant to the terms and conditions hereof. The aggregate amount of the Initial Term Loan Commitments as of the Closing Date is \$225,000,000.

"Initial Term Loan Exposure" means, with respect to any Lender, as of any date of determination, the outstanding principal amount of the Initial Term Loans of such Lender; provided, at any time prior to the making of the Initial Term Loans, the Initial Term Loan Exposure of any Lender will be equal to such Lender's Initial Term Loan Commitment.

"Intellectual Property" means all rights, priorities and privileges relating to intellectual property, whether arising under United States, state, multinational or foreign laws or otherwise, including, without limitation: copyrights (including copyrights in software) whether registered or unregistered and all applications therefor, patents and certificates of invention, or similar industrial property rights, and applications therefor, software, trademarks (whether registered or unregistered and applications therefor), goodwill associated with trademarks, service-marks, domain names, technology, know-how and processes, formulas, trade secrets and all rights to sue at law or in equity for any infringement or other impairment thereof, including the right to receive all proceeds and damages therefrom.

"Intercompany Subordination Agreement" means the Intercompany Subordination Agreement to be executed by the Borrower and the Subsidiaries substantially in the form of Exhibit J.

"Interest Payment Date" means with respect to (a) any Base Rate Loan, the last Business Day of each calendar quarter, commencing on the first such date to occur after the borrowing of such Loan and the final maturity date or conversion date of such Loan; and (b) any Eurodollar Rate SOFR Loan, the last day of each Interest Period applicable to such Loan; provided that in the case of each Interest Period of longer than three months "Interest Payment Date" will also include each date that is three months, or an integral multiple thereof, after the commencement of such Interest Period.

"Interest Period" means, in connection with a Eurodollar RateSOFR Loan, an interest period of one-, three- or six-months (or, if available, twelve-months with the consent each applicable Lender or shorter periods with the consent of the Administrative Agent) (in each case, subject to the availability thereof), as selected by the Borrower in the applicable Funding Notice or Conversion/Continuation Notice, (a) initially, commencing on the Credit Date or Conversion/Continuation Date thereof, as the case may be; and (b) thereafter, commencing on the day on which the immediately preceding Interest Period expires; provided that (i) if an Interest Period would otherwise expire on a day that is not a Business Day, such Interest Period will expire on the next succeeding Business Day unless no further Business Day occurs in such month, in which case such Interest Period will expire on the immediately preceding Business Day; (ii) any Interest Period that begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) will, subject to clauses (iii) and (iv) of this definition, end on the last Business Day of a calendar month; (iii) no Interest Period with respect to any portion of any Class of Term Loans will extend beyond such Class's Term Loan Maturity Date; and (iv) no Interest Period with respect to any portion of the Revolving Loans will extend beyond the Revolving Credit Commitment Termination Date applicable to such Revolving Loans; and (v) no tenor that has been removed from this definition pursuant to Section 2.18(b)(iv) shall be available for specification in a Funding Notice or Conversion/Continuation Notice unless reinstated pursuant to Section 2.18(b).

"Interest Rate Determination Date" means, with respect to any Interest Period, the date that is two (2) Business Days prior to the first day of such Interest Period.

"Internal Revenue Code" means the Internal Revenue Code of 1986, as amended.

"Internally Generated Cash" means, with respect to any Person, funds of such Person and its Subsidiaries not constituting (a) proceeds of the issuance of (or contributions in respect of) Capital Stock

of such Person, (b) proceeds of the incurrence of Indebtedness (other than the incurrence of Revolving Loans) by such Person or any of its Subsidiaries or (c) proceeds of dispositions (other than dispositions of inventory in the ordinary course of business) and Casualty Events.

"Investment" means (a) any direct or indirect purchase or other acquisition by the Borrower or any Subsidiary of, or of a beneficial interest in, any of the Securities of any other Person; (b) any direct or indirect redemption or retirement, for value, by any Subsidiary from any Person (other than the Borrower or a Subsidiary), of any Capital Stock of such Subsidiary; (c) any direct or indirect loan, advance or capital contribution by the Borrower or any Subsidiary to any other Person, including all indebtedness and accounts receivable from that other Person that are not current assets or did not arise from sales to that other Person in the ordinary course of business and (d) any acquisition, whether by purchase, merger or otherwise, of all or a material portion of the assets of, or a division, unit, business line or product line of, any other Person. The amount of any Investment will be the original cost of such Investment phus the cost of all additions thereto, without any adjustments for increases or decreases in value, or write-ups, write-downs or write-offs with respect to such Investment.

"Issuance Notice" means an Issuance Notice substantially in the form of Exhibit A-3.

"Issue" means, with respect to any Letter of Credit, to issue, extend the expiration date of, renew (including by failure to object to any automatic renewal on the last day such objection is permitted), increase the face amount of, or reduce or eliminate any scheduled decrease in the face amount of, such Letter of Credit, or to cause any Person to do any of the foregoing. The terms "Issued", "Issuance" and "Issuing" have correlative meanings.

"Issuing Bank" means each of (a) DBNY, Capital One and Fifth Third, each in its capacity as an issuer of Letters of Credit hereunder and (b) any (i) Lender, (ii) Affiliate of a Lender and (iii) other bank or legally authorized Person, in each case under this clause (b), that agrees to act in such capacity and reasonably acceptable to the Borrower and the Administrative Agent, in such Person's capacity as an issuer of Letters of Credit hereunder, in each case with their respective permitted successors and assigns.

"Joint Bookrunners" means DBSI, Capital One and Fifth Third, in their capacity as joint bookrunners.

"Joint Lead Arrangers" means DBSI, Capital One and Fifth Third, in their capacity as joint lead arrangers.

- "Joint Venture" means (a) any Person which would constitute an "equity method investee" of the Borrower or any Subsidiary and (b) any Person in whom the Borrower or any of the Subsidiaries beneficially owns any Capital Stock that is not a Subsidiary (other than an Unrestricted Subsidiary); provided that in no event will any Subsidiary of any Person be considered a Joint Venture of such Person.
- "Joint Venture Subsidiary" means any Subsidiary that is not wholly-owned, directly or indirectly, by the Borrower and the business and management thereof is jointly controlled by the holders of the Capital Stock in such Subsidiary pursuant to customary joint venture arrangements.
 - "Judgment Currency" as defined in Section 10.26(a).
- "Junior Financing" means any Junior Lien Indebtedness, any Subordinated Debt and any Indebtedness of the Borrower or its Subsidiaries that is unsecured.
- "Junior Lien Indebtedness" means any Indebtedness of any Credit Party that is secured by Liens on Collateral that rank junior in priority to the Liens that secure the Obligations.
- "Junior Lien Intercreditor Agreement" means an intercreditor agreement, in form and substance reasonably acceptable to the Borrower, the Collateral Agent and the applicable Debt Representatives for Junior Lien Indebtedness permitted hereunder.
 - "L/C Reimbursement Agreement" as defined in Section 2.4(a).
- "Latest Term Loan Maturity Date" means, as at any date of determination, the latest maturity or expiration date applicable to any Term Loan (including any Incremental Term Loan), as extended in accordance with this Agreement from time to time.
- "Laws" means, collectively, all applicable international, foreign, federal, state, commonwealth and local statues, treaties, rules, guidelines, regulations, ordinances, codes, common law and administrative or judicial precedents or authorities, in each case whether now or hereafter in effect, including the interpretation thereof by a Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law. The term Laws includes without limitation the FDA Laws and the Federal Health Care Program Laws.
 - "LCA Election" as defined in Section 1.5. "LCA Test Date" as defined in

Section 1.5

- "Lender" means, collectively, (a) each Person listed on the signature pages hereto as a Lender holding a Commitment or a Loan and (b) any other Person (other than a Natural Person) that becomes a party hereto pursuant to an Assignment Agreement and holds a Commitment or a Loan. Notwithstanding the foregoing, any Disqualified Lender that purports to become a Lender hereunder, and to which the Borrower has not consented in writing to allow to become a Lender hereunder, shall be deemed for all purposes to be a Defaulting Lender (except for purposes of Cash Collateralization to the extent required by Section 2.22) until such time as such Disqualified Lender no longer owns any Loans or Commitments and shall not be entitled to receive confidential information or attend Lender meetings.
- "Lending Office" means, with respect to any Lender, the office or offices of such Lender specified as its "Lending Office" beneath its name on Appendix B hereto or in the administrative questionnaire delivered by such Lender to the Borrower and the Administrative Agent, or, in each case, such other office or offices of such Lender as it may from time to time notify the Borrower and the Administrative Agent.
 - "Letter of Credit" means a standby letter of credit Issued or to be Issued by an Issuing Bank pursuant to this Agreement.
- "Letter of Credit Obligations" means all outstanding obligations incurred by any Issuing Bank or any Lender at the request of the Borrower, whether direct or indirect, contingent or otherwise, due or not due, in connection with the Issuance or any other amendment to Letters of Credit by any Issuing Bank or the purchase of a participation as set forth in Section 2.4(e) with respect to any Letter of Credit. The amount of such Letter of Credit Obligations will equal the maximum amount that may be payable by the Issuing Banks and the Lenders thereupon or pursuant thereto; provided that such calculation will, with respect to Foreign Currency Letters of Credit, be made using the Dollar Equivalent of any Foreign Currency Letters of Credit (or obligations owing with respect thereto) denominated in Available Foreign Currencies.
- "Letter of Credit Sub-limit" means, as of any date of determination, an amount equal to the lower of (a) \$6,000,000 and (b) the aggregate amount of the Revolving Credit Commitments as of such date.

"Letter of Credit Usage" means, as at any date of determination, the sum of (a) the maximum aggregate amount which is, or at any time thereafter may become, available for drawing under all Letters of Credit then outstanding, and (b) the aggregate amount of all drawings under Letters of Credit honored by the Issuing Banks and not theretofore reimbursed by or on behalf of the Borrower; provided that such calculation will, with respect to Foreign Currency Letters of Credit, be made using the Dollar Equivalent of any Foreign Currency Letters of Credit (or amounts owing with respect thereto) denominated in Available Foreign Currencies.

"Liabilities" means all claims, actions, suits, judgments, damages, losses, liability, obligations, responsibilities, fines, penalties, sanctions, costs, fees, taxes, commissions, charges, disbursements and expenses (including those incurred upon any appeal or in connection with the preparation for and/or response to any subpoena or request for document production relating thereto), in each case of any kind or nature (including interest accrued thereon or as a result thereto and fees, charges and disbursements of financial, legal and other advisors and consultants), whether joint or several, whether or not indirect, contingent, consequential, actual, punitive, treble or otherwise.

"Lien" means (a) any lien, mortgage, pledge, assignment, security interest, charge or encumbrance of any kind (including any agreement to give any of the foregoing, any conditional sale or other title retention agreement, and any lease in the nature thereof) and any option, trust or other preferential arrangement having the practical effect of any of the foregoing and (b) in the case of Securities, any purchase option, call or similar right of a third party with respect to such Securities; *provided* that in no event shall an operating lease in and of itself be deemed a Lien.

"Limited Condition Acquisition" means any Permitted Acquisition or other Investment permitted hereunder by the Borrower and/or one or more Subsidiaries the consummation of which is not conditioned on the availability of, or on obtaining, third party financing.

"Liquidity" means, as of any date of determination, the sum of (i) the average daily aggregate amount of unrestricted cash and Cash Equivalents maintained by the Borrower and the other Credit Parties for the preceding period of three (3) Business Days then ending as reflected on the balance sheet of the Borrower and the other Credit Parties as of the close of business on each Business Day during such period plus (ii) the average maximum amount of Revolving Loans that could have been advanced as of the close of business on each Business Day during such period.

"Loan" means an Initial Term Loan, an Incremental Term Loan, an Extended Term Loan, a Refinancing Term Loan or a Revolving Loan (including any Incremental Revolving Loan).

"Margin Stock" means "margin stock" as such term is defined in Regulation U of the Board of Governors as in effect from time to time.

"Material Adverse Effect" means a material adverse effect on (a) the business, operations, properties, assets or financial condition of the Borrower and the Subsidiaries, taken as a whole; (b) the ability of any Credit Party to fully and timely perform its payment Obligations; (c) the legality, validity, binding effect or enforceability against a Credit Party of a Credit Document to which it is a party; or (d) the rights, remedies and benefits available to, or conferred upon, any Agent and any Lender or any Secured Party under any Credit Document.

"Material Indebtedness" means Indebtedness with an aggregate principal amount (including undrawn commitments) in excess of \$5,000,000.

"Material Real Estate Asset" means any fee-owned Real Estate Asset having a fair market value (as reasonably determined by the Borrower) equal to or in excess of \$1,500,000 (or, with respect to any such Real Estate Asset located in an area identified by the Federal Emergency Management Agency (or any successor agency) as a "special flood hazard area", \$2,500,000).

"Maximum Refinancing Amount" means, with respect to any Credit Agreement Refinancing Indebtedness, Permitted Refinancing or other refinancing, the principal amount (including interest paid in kind or otherwise capitalized to principal) and/or undrawn commitments, as applicable, of such Refinanced Indebtedness plus the sum of (a) the amount of all accrued and unpaid interest on such Refinanced Indebtedness, (b) the amount of any premiums (including tender premiums), make-whole amounts or penalties on such Refinanced Indebtedness, (c) the amount of all fees (including arrangement, commitment, structuring, underwriting, ticking, amendment, closing and other similar fees), commissions, costs, expenses and other amounts associated with such Refinancing Indebtedness and (e) the amount of all original issue discount and upfront fees associated with such Refinancing Indebtedness ("Refinancing Amount"); provided that to the extent on the date of such Permitted Refinancing the Borrower has capacity under the clause of Section 6.1 pursuant to which such Refinanced Indebtedness was initially incurred (or to which such Refinanced Indebtedness at such time has been classified, as applicable) to incur additional principal amount of the same type as the Refinanced Indebtedness ("Additional Incurrence Capacity"), then the Borrower and the

Subsidiaries may incur Refinancing Indebtedness in an aggregate principal amount not to exceed the maximum Additional Incurrence Capacity if greater than the Refinancing Amount; *provided*, *further*, that the amount of Refinancing Indebtedness incurred in reliance on the Additional Incurrence Capacity will be considered to have been incurred under the clause of Section 6.1 pursuant to which such Refinanced Indebtedness was initially incurred (or to which such Refinanced Indebtedness at such time has been classified, as applicable).

"MFN Adjustment" means, with respect to the incurrence of any MFN Eligible Debt, in the event that the All-In Yield applicable to such MFN Eligible Debt exceeds the All-In Yield of the Initial Term Loans at the time of such incurrence by more than 50 basis points, then the interest rate margins for the Initial Term Loans will automatically be increased on the date of incurrence of such MFN Eligible Debt to the extent necessary so that the All-In Yield of the Initial Term Loans is equal to the All-In Yield of such MFN Eligible Debt minus 50 basis points (provided that any increase in All-In Yield of the Initial Term Loans due to the increase in a Eurodollar Ratean Adjusted Term SOFR or Base Rate floor on such MFN Eligible Debt will be effected solely through an increase in any Eurocurrency Adjusted Term SOFR or Base Rate floor applicable to the Initial Term Loans).

"MFN Eligible Debt" means any Indebtedness that is incurred as (a) Incremental Term Loans or

(b) Incremental Equivalent Debt or Permitted Ratio Debt that is, in each case, Pari Passu Lien Indebtedness in the form of term loans.

"Minimum Liquidity Reporting Date" as defined in Section 6.7(b), "Minimum Liquidity Requirement" as

defined in Section 6.7(b).

"Moody's" means Moody's Investor Services, Inc., or any successor thereto.

"Mortgage" means a mortgage, deed of trust, deed to secure debt or other document creating a Lien on any Real Estate Asset or any interest in any Real Estate Asset, as applicable, made in favor of the Collateral Agent for the benefit of the Secured Parties in form reasonably acceptable to the Administrative Agent.

"Multiemployer Plan" means any Employee Benefit Plan which is a "multiemployer plan" as defined in Section 3(37) of ERISA.

"NAIC" means The National Association of Insurance Commissioners and any successor thereto.

"Narrative Report" means, with respect to the financial statements for which such narrative report is required, a narrative report describing the results of operations and financial condition of the Borrower and the Subsidiaries for the applicable Fiscal Quarter or Fiscal Year and for the period from the beginning of the Fiscal Year in which such Fiscal Quarter occurs to the end of such Fiscal Quarter.

"Natural Person" means a natural person, or a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of, a natural person.

"Net Cash Proceeds" means:

(a) with respect to any Asset Sale subject to Section 2.14(a) or Casualty Event subject to Section 2.14(b), an amount equal to: (i) cash payments (including any cash received by way of release from escrow or deferred payment pursuant to, or by monetization of, a note receivable or otherwise, but only as and when so received) received by the Borrower or any Subsidiary from such Asset Sale, *minus*(ii) any bona fide direct costs incurred in connection with such Asset Sale, including (A) Taxes payable in connection with such Asset Sale (including taxes imposed on the distribution or repatriation of such Net Cash Proceeds), (B) payment of the outstanding principal amount of, premium or penalty, if any, interest and breakage costs on any Indebtedness (other than the Loans) that is secured by a Lien on the stock or assets in question (and, to the extent such stock or assets constitute Collateral, which Lien is senior to the Lien of the Agent) and that is required to be repaid under the terms thereof as a result of such Asset Sale, (C) a reserve for any purchase price adjustment or indemnification payments (fixed or contingent) established in accordance with GAAP or attributable to seller's indemnities and representations and warranties to purchaser in respect of such Asset Sale undertaken by the Borrower or any Subsidiary in connection with such Asset Sale, (D) the out-of-pocket expenses, costs and fees (including with respect to legal, investment banking, brokerage, advisor and accounting and other professional fees, sales commissions and disbursements, survey costs, title insurance premiums and related search and recording charges, transfer taxes and deed or mortgage recording taxes or following a Casualty Event, restoration costs) in each case actually incurred in connection with such sale or disposition and payable to a Person that is not an Affiliate of the Borrower, (E) in the case of any Asset Sale or Casualty Event by a non-wholly-owned Subsidiary, the *pro rata* portion of the Net Cash Proceeds thereof attr

the sale price of such asset or assets established in accordance with GAAP and (2) any liabilities associated with such asset or assets and retained by the Borrower or any Subsidiary after such sale or other disposition thereof, including pension and other post-employment benefit liabilities and liabilities related to environmental matters or against any indemnification obligations associated with such transaction, it being understood that "Net Cash Proceeds" shall include the amount of any reversal (without the satisfaction of any applicable liabilities in cash in a corresponding amount) of any reserve described in this subclause (F)) and (G) with respect to any Asset Sale of the Perclot license, technology and/or related rights, research and development and other costs (including initial technology acquisition costs) with respect thereto expensed prior to the Closing Date in an amount not to exceed \$30,000,000; and

(b) with respect to the sale, incurrence or issuance of any Indebtedness by the Borrower or any Subsidiary, the excess, if any, of (i) the sum of all cash and Cash Equivalents received in connection with such incurrence or issuance, over (ii) the sum of all Taxes paid or reasonably estimated to be payable as a result thereof, all fees (including investment banking fees, attorneys' fees, accountants' fees, underwriting fees and discounts), commissions, costs and other out-of-pocket expenses and all other customary expenses, in each case incurred by the Borrower or such Subsidiary in connection with such sale, incurrence or issuance.

"Non-Consenting Lender" as defined in Section 2.23.

"Non-Credit Party" means any Subsidiary that is not a Credit Party.

"Non-U.S. Lender" means a Lender (including any Issuing Bank) that is not a United States person as defined in Section 7701(a)(30) of the Internal Revenue Code.

"Nonpublic Information" means material information with respect to the Borrower or any Subsidiary or their respective securities which has not been disseminated in a manner making it available to investors generally, within the meaning of Regulation FD.

"Note" means a Term Loan Note or a Revolving Loan Note.

"Notice" means a Funding Notice, an Application, an Issuance Notice or a Conversion/Continuation Notice.

"Obligations" means all obligations of every nature of each Credit Party from time to time owed to any Agent (including any former Agent), any Lender, any Issuing Bank, any Indemnitee or any other Secured Party under any Credit Document (including, without limitation, Letter of Credit Obligations), any obligations owed to any Secured Swap Provider under any Secured Rate Contract, or any obligations owed to any Bank Product Provider in respect of Bank Product Obligations under any Bank Product Agreement, in each case, whether for principal, premium, interest (including interest premiums, fees and other amounts incurred during the pendency of any bankruptcy, insolvency, receivership or similar proceeding, whether or not due and payable and whether or not allowed or allowable in such proceeding), reimbursement of amounts drawn under Letters of Credit payments for early termination of Secured Rate Contracts, fees, expenses, indemnification or otherwise. For the avoidance of doubt, "Obligations" will include obligations arising under any Incremental Term Loan or any Extended Term Loan.

"Obligee Guarantor" as defined in Section 7.6.

"OFAC" means the U.S. Department of Treasury's Office of Foreign Assets Control.

"OFAC Lists" means, collectively, the SDN List and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any applicable executive orders.

"Organizational Documents" means (a) with respect to any corporation, its certificate or articles of incorporation or organization, as amended, and its by-laws, as amended, (b) with respect to any limited partnership, its certificate of limited partnership, as amended, and its partnership agreement, as amended, (c) with respect to any general partnership, its partnership agreement, as amended, and (d) with respect to any limited liability company, its articles of organization, as amended, and its operating agreement, as amended. In the event any term or condition of this Agreement or any other Credit Document requires any Organizational Document to be certified by a secretary of state or similar governmental official, the reference to any such "Organizational Document" will only be to a document of a type customarily certified by such governmental official.

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Credit Document, except any such Taxes that are imposed as a result of a present or former connection between a Recipient and the jurisdiction imposing such Tax other than connections arising from such Recipient having

executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Credit Document or sold or assigned an interest in any Loan or Credit Document imposed with respect to an assignment (other than an assignment made pursuant to Section 2.23).

"Parent" means, with respect to any Person, any other Person of which the first Person is a direct or indirect Subsidiary.

"Pari Passu Lien Indebtedness" means any Indebtedness of any Credit Party that is secured by Liens on Collateral that rank pari passu in priority with the Liens on Collateral that secure the Obligations.

"Pari Passu Lien Intercreditor Agreement" means an intercreditor agreement among the Collateral Agent and one or more Debt Representatives for Pari Passu Lien Indebtedness permitted hereunder in form and substance reasonably acceptable to the Borrower, the Collateral Agent and the applicable Debt Representatives for such Pari Passu Lien Indebtedness.

"Participant Register" as defined in Section 10.6(g).

"Participating Member State" means each state as described in any EMU Legislation.

"PATRIOT Act" means the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. 107-56, signed into law October 26, 2001, as amended from time to time.

"Payment Office" means the office of the Administrative Agent set forth on Appendix B hereto, or such other office or Person as the Administrative Agent may hereafter designate in writing as such to the other parties hereto.

"PBGC" means the Pension Benefit Guaranty Corporation or any successor thereto.

"Pension Plan" means any Employee Benefit Plan, other than a Multiemployer Plan, which is subject to Section 412 of the Internal Revenue Code or Section 302 of ERISA.

"Perfection Certificate" shall mean a certificate in the form of Exhibit K or any other form approved by the Administrative Agent, as the same shall be supplemented from time to time.

"Periodic Term SOFR Determination Day" shall have the meaning set forth in the definition of "Term SOFR".

"Permitted Acquisition" means the purchase or other acquisition of property and assets or the business of any Person or of assets constituting a business unit, a line of business or division of such Person, a facility or Capital Stock in a Joint Venture or other Capital Stock in another Person that, upon the consummation thereof, will be a Subsidiary (including as a result of a merger or consolidation) or, in the case of a purchase or acquisition of assets (other than Capital Stock), will be owned by the Borrower and/or any one or more Subsidiaries; provided that:

- (a) subject to the provisions of Section 1.5 to the extent an LCA Election has been made with respect to such acquisition, immediately prior to and after giving effect thereto, no Default or Event of Default has occurred and is continuing;
- (b) the Person, assets or division acquired are in the same business as the Business engaged in by the Borrower and the Subsidiaries on the Closing Date, after giving effect to the Transactions, or other similar, ancillary or related, or reasonable or logical extensions of such, Business;
- (c) to the extent any acquired Person is required to become a Guarantor, the Borrower takes all actions required by Sections 5.10 and 5.11, as applicable, within the time periods specified thereunder; *provided* that the Borrower and the Guarantor Subsidiaries shall not make Permitted Acquisitions of Persons that do not become Guarantor Subsidiaries (or pay for the purchase of assets that are acquired directly by Non-Credit Parties) for aggregate consideration, together with any Investments made in reliance on the proviso in Section 6.6(b) (in each case determined as of the date of making any such Investment, and after giving effect to clause (1) in the last paragraph of Section 6.6), in excess of the greater of (i) \$15,000,000 and (ii) an amount equal to 17.5% of TTM Consolidated Adjusted EBITDA.

"Permitted Liens" as defined in Section 6.2.

"Permitted Ratio Debt" means Indebtedness of the Borrower and/or any one or more Subsidiaries; provided that:

- (a) subject to the provisions of Section 1.5 to the extent an LCA Election has been made with respect to a Permitted Acquisition or other permitted Investment to be funded with the proceeds of such Indebtedness, immediately before and after giving effect thereto and to the use of the proceeds thereof no Default or Event of Default has occurred and is continuing or would result therefrom;
- (b) immediately after giving effect to the issuance, incurrence, or assumption of such Indebtedness and excluding the cash proceeds to the Borrower or any Subsidiary therefrom that are actually applied or intended to be applied to a particular use or transaction as of the date of incurrence thereof (but otherwise giving effect to the use of such proceeds so applied or intended to be applied):
 - (i) with respect to any Permitted Ratio Debt to be incurred as Pari Passu Lien Indebtedness, the First Lien Net Leverage Ratio being equal to or less than 3.60:1.00;
 - (ii) with respect to any Permitted Ratio Debt to be incurred as Junior Lien Indebtedness, the Secured Net Leverage Ratio being equal to or less than 5.25:1.00; and
 - (iii) with respect to any Permitted Ratio Debt to be incurred as unsecured Indebtedness, the Total Net Leverage Ratio being equal to or less than 5.25:1.00;
- (c) to the extent that such Indebtedness is incurred by a Credit Party, such Indebtedness does not mature prior to the Latest Term Loan Maturity Date at the time such Indebtedness is incurred, or have a shorter Weighted Average Life to Maturity than, the Term Loans at the time such Indebtedness is incurred:
- (d) if such Indebtedness is (i) Pari Passu Lien Indebtedness, then (A) a Debt Representative acting on behalf of the holders of such Indebtedness has become party to or is otherwise subject to the provisions of a Pari Passu Lien Intercreditor Agreement and (B) any mandatory prepayments of such any Permitted Ratio Debt shall be made on a *pro rata* basis or less than *pro rata* basis with mandatory prepayments of the Term Loans, and (ii) Junior Lien Indebtedness, then a Debt Representative, acting on behalf of the holders of such Indebtedness, has become party to or is otherwise subject to the provisions of a Junior Lien Intercreditor Agreement;
- (e) the interest rate, fees, and original issue discount for any Indebtedness will be as determined by the Borrower and the Persons providing such Indebtedness; provided that the MFN Adjustment will apply to any such Indebtedness that constitutes MFN Eligible Debt; and
- (f) the other terms applicable to such Indebtedness are substantially identical to, or (taken as a whole as determined by the Borrower in good faith) no more favorable to the lenders or holders providing such Permitted Ratio Debt than, those applicable to the Initial Term Loans; provided that this clause (f) will not apply to (A) interest rate, fees, funding discounts and other pricing terms, (B) redemption, prepayment or other premiums, (C) optional prepayment terms, and (D) covenants and other terms that are (1) applied to the Term Loans existing at the time of incurrence of such Permitted Ratio Debt (so that existing Lenders also receive the benefit of such provisions) and/or (2) applicable only to periods after the Latest Term Loan Maturity Date at the time of incurrence of such Indebtedness; provided further, a certificate of the Borrower delivered to the Administrative Agent at least four (4) Business Days prior to the incurrence of such Indebtedness (or such shorter period as may be agreed by the Administrative Agent), together with a reasonably detailed description of the material covenants and events of default of such Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has reasonably determined in good faith that such terms and conditions satisfy the foregoing requirement shall be conclusive evidence that such terms and conditions satisfy the foregoing requirement unless the Administrative Agent notifies the Borrower within such four (4) Business Day period that it disagrees with such determination (including a reasonably detailed description of the basis upon which it disagrees).
- "Permitted Refinancing" means, with respect to any specified Indebtedness of any Person ("Refinanced Indebtedness"), any modification, refinancing, refunding, replacement, renewal, extension, defeasance or discharge (the Indebtedness incurred to effect such modification, refinancing, refunding, replacement, renewal, extension, defeasance or discharge, "Refinancing Indebtedness") of such Refinanced Indebtedness; provided that:
- (a) the principal amount (and/or undrawn commitments, as applicable) of such Refinancing Indebtedness is not greater than the Maximum Refinancing Amount;
- (b) except with respect to Indebtedness of the Borrower and the Subsidiaries incurred pursuant to Section 6.1(c) or (d), has a scheduled final maturity that is no sooner than, and a Weighted

Average Life to Maturity that is no shorter than, the final scheduled final maturity date and Weighted Average Life to Maturity of such Refinanced Indebtedness:

- (c) the only obligors in respect of such Refinancing Indebtedness are the obligors on such Refinanced Indebtedness; *provided* that, in the case of a Permitted Refinancing that occurs in connection with a Permitted Acquisition or other Investment permitted pursuant to Section 6.6, additional Persons that are created or acquired as part of such Permitted Acquisition or Investment may be added as obligors to the Refinancing Indebtedness:
- (d) the other terms applicable to such new Indebtedness are substantially identical to, or (taken as a whole as determined by the Borrower in good faith) no more favorable to the lenders or holders providing such Indebtedness than, those applicable to such Refinanced Indebtedness; provided that this clause (d) will not apply to (i) interest rate, fees, funding discounts and other pricing terms, (ii) redemption, prepayment or other premiums, (iii) optional prepayment terms, and (iv) covenants and other terms that are (A) applied to the Term Loans existing at the time of incurrence of such Refinancing Indebtedness (so that existing Lenders also receive the benefit of such provisions) and/or (B) applicable only to periods after the Latest Term Loan Maturity Date at the time of incurrence of such Indebtedness; provided further that the Borrower will deliver to the Administrative Agent final copies of the definitive credit documentation relating to such Indebtedness (unless the Borrower or applicable Subsidiary is bound by a confidentiality obligation with respect thereto, in which case the Borrower will deliver a reasonably detailed description of the material terms and conditions of such Indebtedness in lieu thereof);
 - (e) to the extent such Refinanced Indebtedness is Subordinated Debt, such Refinancing Indebtedness is Subordinated Debt; and
- (f) to the extent such Refinanced Indebtedness is secured by Liens on any property or assets of the Borrower or any Subsidiary, such Refinancing Indebtedness is either (i) unsecured, (ii) secured by Liens on property and assets that are not Collateral, or (iii) secured by Liens on Collateral; provided that, in the case of this clause (iii), if (A) such Refinanced Indebtedness is Junior Lien Indebtedness, the Refinancing Indebtedness also is Junior Lien Indebtedness on intercreditor terms at least as favorable to the Lenders as those contained in the intercreditor documentation governing the Refinanced Indebtedness and (B) such Refinanced Indebtedness is Pari Passu Lien Indebtedness, the Refinancing Indebtedness is either Pari Passu Lien Indebtedness or Junior Lien Indebtedness, in either case on intercreditor terms at least as favorable to the Lenders as those contained in the intercreditor documentation governing the Refinanced Indebtedness (as reasonably determined by the Borrower in good faith);

provided further, in the case of clauses (d), (e) and (f) of this definition, a certificate of the Borrower delivered to the Administrative Agent at least four (4) Business Days prior to the incurrence of such Refinancing Indebtedness (or such shorter period as may be agreed by the Administrative Agent), together with a reasonably detailed description of the material covenants and events of default of such Refinancing Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has reasonably determined in good faith that such terms and conditions satisfy the requirements of such clause shall be conclusive evidence that such terms and conditions satisfy the foregoing requirements unless the Administrative Agent notifies the Borrower within such four (4) Business Day period that it disagrees with such determination (including a reasonably detailed description of the basis upon which it disagrees).

"Permitted Sale Leaseback Transaction" means a transaction whereby the Borrower or any of its Subsidiaries sells or transfers, or agrees to sell or transfer, property (whether real, personal or mixed) and subsequently the Borrower or one of its Subsidiaries becomes liable as lessee or as guarantor or other surety with respect to any lease (whether an operating lease or a Capital Lease) of the property which was sold or transferred or any other property which the Borrower or any of its Subsidiaries intends to use for substantially the same purpose or purposes as the property which was sold or transferred; provided, that (i) at the time of such transaction, no Event of Default shall exist or result from such transaction, and (ii) the fair market value of all property so sold by the Credit Parties and their Subsidiaries shall not exceed \$5,000,000 in the aggregate during the term of this Agreement.

"Person" means and includes Natural Persons, corporations, limited partnerships, general partnerships, limited liability companies, limited liability partnerships, joint stock companies, Joint Ventures, associations, companies, trusts, banks, trust companies, land trusts, business trusts or other organizations, whether or not legal entities, and Governmental Authorities.

"Platform" as defined in Section 5.1(o).

"Pledge and Security Agreement" means the Pledge and Security Agreement to be executed by the Borrower and each Guarantor substantially in the form of Exhibit I.

"Potential Transfers" means the transfers (in one or more transactions) by the Borrower of 100% of the equity interests in either, or both, of CryoLife France, SAS and CryoLife Europa Ltd. to CryoLife Germany Holdco GmbH to any of its direct or indirect subsidiaries.

"Prepayment Deferred Amount" as defined in Section 2.15(f).

"Pro Forma" or "Pro Forma Basis" means, with respect to the calculation of the First Lien Net Leverage Ratio, the Secured Net Leverage Ratio, the Total Net Leverage Ratio or for any other pro forma calculation called

for by this Agreement to be made Pro Forma or on a Pro Forma Basis, as of any time, that pro forma effect will be given to the Transactions, any Permitted Acquisition, or any other Specified Transaction (including any such transaction prior to the Closing Date), as follows:

- (a) with respect to any incurrence, assumption, guarantee, redemption or permanent repayment of Indebtedness, such ratio will be calculated giving pro forma effect thereto as if such incurrence, assumption, guarantee, redemption or permanent repayment of Indebtedness had occurred on the first day of such Test Period;
- (b) with respect to the Transactions, acquisitions prior to the Closing Date, any Permitted Acquisition or other permitted Investment or the redesignation of an Unrestricted Subsidiary, such ratio or other calculation will be calculated giving pro forma effect thereto as if such action occurred on the first day of such Test Period in a manner consistent, where applicable, with the pro forma adjustments (along with the limitations pertaining thereto) set forth in the definition of "Consolidated Adjusted EBITDA" (including for the amount of "run-rate" cost savings, operating expense reductions and synergies projected by the Borrower in good faith to result from (i) actions taken, (ii) actions relating to any acquisition, disposition or operational change committed to be taken or expected to be taken no later than 18 months after the end of such acquisition, disposition or operational change and (iii) actions related to the Transactions and acquisitions that occurred prior to the Closing Date reasonably expected to be taken no later than 24 months after the Closing Date, in each case, which cost savings, operating expense reductions and synergies will be calculated as though such cost savings, operating expense reductions and synergies had been realized on the first day of the Test Period for which Consolidated Adjusted EBITDA is being determined; *provided* that the amounts so added back (other than with respect to the Transactions or amounts permitted under Regulation S-X), when aggregated with amounts added back pursuant to subclause (b)(xxi) of the definition of "Consolidated Adjusted EBITDA", shall not exceed 20% of Consolidated Adjusted EBITDA for such Test Period (prior to giving effect to amounts so added back));
- (c) with respect to any merger, sale, transfer or other disposition, and the designation of an "Unrestricted Subsidiary", such ratio will be calculated giving pro forma effect thereto as if such action had occurred on the first day of such Test Period; and
- (d) all Indebtedness assumed to be outstanding pursuant to preceding clause (a) shall be deemed to have borne interest at (i) in the case of fixed rate indebtedness, the rate applicable thereto, or (ii) in the case of floating rate Indebtedness, (A) with respect to any portion of the relevant Test Period that such Indebtedness was outstanding, the actual rates applicable thereto and (B) with respect to any portion of the relevant Test Period that such Indebtedness was not in fact outstanding (or if such Indebtedness was not outstanding at any time during the relevant Test Period), the rate applicable thereto as of the applicable date of determination as if such rate had been the applicable rate for such portion of the Test Period (or the entire Test Period), in any such case under this clause (ii), after giving effect to the operation of any Rate Contracts applicable to such floating rate Indebtedness).

Notwithstanding the foregoing, for purposes of the calculation of (i) First Lien Net Leverage Ratio as used in Section 6.7 and (ii) Total Net Leverage Ratio as used in the determination of the ECF Percentage pursuant to Section 2.14(d) and the definitions of "Applicable Commitment Fee Rate" and "Applicable Margin", in each case, such calculation shall be made on the last day of the applicable Test Period (or, in the case of the ECF Percentage, the last day of the applicable Fiscal Year), and no Pro Forma effect shall be given to any Specified Transaction that is consummated after the last day of such Test Period (or such Fiscal Year, as applicable).

"Pro Rata Share" means (a) with respect to all payments, computations and other matters relating to the Initial Term Loan of any Lender, the percentage obtained by dividing (i) the Initial Term Loan Exposure of that Lender by (ii) the aggregate Initial Term Loan Exposure of all of the Lenders; (b) with respect to all payments, computations and other matters relating to the Incremental Term Loan Exposure of all of the Lenders; (c) with respect to all payments, computations and other matters relating to the Extended Term Loan Exposure of all of the by dividing (i) the Term Loan Exposure of that Lender arising from Extended Term Loans of such Lender by (ii) the aggregate Term Loan Exposure of all of the Lenders arising from the Extended Term Loans; (d) with respect to all payments, computations and other matters relating to the Refinancing Term Loan of any Lender, the percentage obtained by dividing (i) the Term Loan Exposure of that Lender arising from Refinancing Term Loans of such Lender by (ii) the aggregate Term Loan Exposure of all of the Lenders arising from the Refinancing Term Loans; (e) with respect to all payments, computations and other matters relating to the Revolving Credit Issued or participations purchased therein by any Lender, the percentage obtained by dividing (i) the Revolving Credit Exposure of that Lender by (ii) the aggregate Revolving Credit Exposure of all of the Lenders; and (f) with respect to all payments, computations and other matters relating to the Term Loan Exposure of all of the Lenders; and (f) with respect to all payments, computations and other matters relating to the Term Loan Exposure of that Lender by (ii) the aggregate Term Loan of any Lender, the percentage obtained by dividing (i) the Term Loan Exposure of that Lender by (ii) the aggregate Term Loan Exposure of all of the Lenders. For all other purposes with respect to each Lender, "Pro Rata Share" means the percentage obtained by dividing (A) an amount equal to the sum of the Term Loan Exposure and the aggregate Revolv

option in Section 2.22(e), such payment shall be made to the Administrative Agent for further payment only to the applicable Defaulting Lender, and no other Lender or Secured Party shall be entitled to a Pro Rata Share of such payment.

"Projections" as defined in Section 4.6.

"Public Information" means material information with respect to the Borrower or any Subsidiary or their respective securities that is not Nonpublic Information.

"Public Lender" as defined in Section 5.1(o).

"Purchase Money Indebtedness" means Indebtedness of the Borrower or any Subsidiary incurred for the purpose of financing all or any part of the purchase price or cost of acquisition, repair, construction or improvement of property or assets used or useful in the business of the Borrower and the Subsidiaries, taken as a whole.

"Qualified ECP Guarantor" means, in respect of any Swap Obligation, each Credit Party that has assets exceeding 10,000,000 at the time the relevant Guaranty or grant of the relevant security interest becomes effective with respect to such Swap Obligation or such other Person as constitutes an "eligible contract participant" under the Commodity Exchange Act or any regulations promulgated thereunder and can cause another Person to qualify as an "eligible contract participant" at such time by entering into a keepwell under Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

"Qualifying Term Loans" as defined in Section 2.25(c).

"Rate Contracts" means (a) any and all rate swap transactions, basis swaps, credit derivative transactions, forward rate transactions, interest rate options, commodity swaps, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward bond or forward bond price or forward bond index transactions, forward foreign exchange transactions, currency swap transactions, cross-currency rate swap transactions, currency options, derivative transactions, insurance transactions, cap transactions, floor transactions, collar transactions, spot contracts, or any other similar transactions or any combination of any of the foregoing whether relating to interest rates, commodities, investments, securities, currencies or any other reference measure (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement, and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement, or any other master agreement (any such master agreement, together with any related schedules, a "Master Agreement"), including any such obligations or liabilities under any Master Agreement.

"Real Estate Asset" means, at any time of determination, any interest (fee, leasehold or otherwise) then owned by any Credit Party in any real property.

"Recipient" means (a) the Administrative Agent or (b) any Lender, as applicable.

"Refinanced Indebtedness" means, (a) with respect to any Credit Agreement Refinancing Indebtedness, as defined in the definition thereof, (b) with respect to any Permitted Refinancing, as defined in the definition thereof and (c) with respect to any other refinancing, the obligations being refinanced.

"Refinancing Amendment" means an amendment to this Agreement in form and substance reasonably satisfactory to the Administrative Agent and the Borrower executed by each of (a) the Borrower, (b) the Administrative Agent and (c) each Additional Lender and Lender that agrees to provide any portion of the Credit Agreement Refinancing Indebtedness being incurred pursuant thereto, in accordance with Section 2.26.

"Refinancing Indebtedness" means, (a) with respect to any Loans or Revolving Credit Commitments, Credit Agreement Refinancing Indebtedness, (b) with respect to any Permitted Refinancing, as defined in the definition thereof and (c) with respect to any other refinancing, the new obligations being incurred the proceeds of which will be used to refinance other obligations.

"Refinancing Commitments" means any Refinancing Term Commitments or Refinancing Revolving Commitments.

"Refinancing Loans" means any Refinancing Term Loans or Refinancing Revolving Loans. "Refinancing Revolving Commitments"

means one or more Classes of commitments in respect

of Revolving Loans hereunder that result from a Refinancing Amendment.

"Refinancing Revolving Loans" means one or more Classes of Revolving Loans that result from a Refinancing Amendment.

- "Refinancing Term Commitments" means one or more Classes of Term Loan commitments hereunder that result from a Refinancing Amendment.
 - "Refinancing Term Loans" means one or more Classes of Term Loans that result from a Refinancing Amendment.
 - "Register" as defined in Section 2.7(b).
- "Registrations" means authorizations, approvals, licenses, permits, certificates, or exemptions issued by any Governmental Authority (including pre-market approval applications, premarket notifications, investigational device exemptions, product recertifications, manufacturing approvals and authorizations, CE Marks, pricing and reimbursement approvals, labeling approvals or their foreign equivalent) held by the Borrower or their Subsidiaries immediately prior to the Closing Date, that are required for the research, development, manufacture, distribution, marketing, storage, transportation, use and sale of the products of the Borrower and its Subsidiaries.
 - "Regulation D" means Regulation D of the Board of Governors, as in effect from time to time. "Regulation FD" means Regulation FD as

promulgated by the U.S. Securities and Exchange

Commission under the Securities Act and Exchange Act as in effect from time to time.

- "Reimbursement Date" as defined in Section 2.4(d).
- "Related Fund" means, with respect to any Lender that is an investment fund, any other investment fund that invests in commercial loans and that is managed or advised by the same investment advisor as such Lender or by an Affiliate of such investment advisor.
- "Related Person" means, with respect to any Person, each Affiliate of such Person and each director, officer, employee, partner, agent, trustee, representative, attorney, accountant and each insurance, environmental, legal, financial and other advisor and other consultants and agents of or to such Person or any of its Affiliates.
- "Release" means any release, spill, emission, leaking, pumping, pouring, injection, escaping, deposit, disposal, discharge, dispersal, dumping, leaching or migration of any Hazardous Material into the indoor or outdoor environment (including the abandonment or disposal of any barrels, containers or other closed receptacles containing any Hazardous Material).
- "Remedial Action" means all actions required pursuant to applicable Environmental Laws to (a) clean up, remove, treat or in any other way address any Hazardous Material in the indoor or outdoor environment, (b) prevent or minimize any Release so that a Hazardous Material does not migrate or endanger or threaten to endanger public health or welfare or the indoor or outdoor environment or (c) perform pre-remedial studies and investigations and post-remedial monitoring and care with respect to any Hazardous Material.
- "Repricing Event" shall mean (a) the incurrence by the Borrower or any Subsidiary of any Indebtedness (including any new or additional Term Loans under this Agreement, whether incurred directly or by way of the conversion of the Term Loans into a new tranche of replacement Term Loans under this Agreement) (i) having an All-In Yield that is less than the All-In Yield for the Initial Term Loans of the respective Type of Loan (as determined by the Administrative Agent), and (ii) the proceeds of which are used to prepay (or, in the case of a conversion, deemed to prepay or replace), in whole or in part, the outstanding principal of the Initial Term Loans or (b) any effective reduction in the All-In Yield applicable to the Initial Term Loans by way of amendment, waiver or otherwise; *provided* that a Repricing Event shall not include any event described in clause (a) or (b) above that is not consummated for the primary purpose of lowering the All-In Yield applicable to the Initial Term Loans (as determined in good faith by the Borrower) or is consummated in connection with a Change of Control or Transformative Acquisition.
- "Required Initial Term Loan Lenders" means, as of any date of determination, one or more of the Lenders having or holding Initial Term Loan Exposure and representing more than 50% of the aggregate Initial Term Loan Exposure of all of the Lenders; provided that the Initial Term Loan Exposure of or held by any Defaulting Lender shall be excluded for purposes of making a determination of Required Initial Term Loan Lenders.
- "Required Lenders" means, as of any date of determination, one or more of the Lenders having or holding Term Loan Exposure and/or Revolving Credit Exposure and representing more than 50% of the sum of (a) the aggregate Term Loan Exposure of all of the Lenders, and (b) the aggregate Revolving Credit Exposure of all of the Lenders; *provided* that the Term Loan Exposure and the Revolving Credit Exposure of or held by any Defaulting Lender shall be excluded for purposes of making a determination of Required Lenders.

- "Required Prepayment Date" as defined in Section 2.15(e).
- "Required Revolving Lenders" means, as of any date of determination, Revolving Lenders having or holding more than 50% of the aggregate Revolving Credit Exposure of all Revolving Lenders; *provided* that the Revolving Credit Exposure of or held by any Defaulting Lender shall be excluded for purposes of making a determination of Required Revolving Lenders.
 - "Reset Date" as defined in Section 1.6(c).
 - "Resolution Authority" means an EEA Resolution Authority or, with respect to any UK Financial Institution, a UK Resolution Authority.
 - "Responsible Officer" means the chief executive officer, president or chief financial officer of the Borrower.
- "Restricted Debt Payment" means any payment of principal of, or any payment of any premium, if any, or interest on, or fees on, or indemnities or expenses owing to any holder of, or redemption, purchase, retirement, defeasance (including in substance or legal defeasance), sinking fund or similar payment, in each case prior to the stated maturity or due date thereof, with respect to any Junior Financing.
- "Restricted Equity Payment" means (a) any dividend or other distribution, direct or indirect, on account of any shares of any class of stock of the Borrower now or hereafter outstanding, except a dividend payable solely in Capital Stock of the Borrower (other than Disqualified Capital Stock) including share exchanges; (b) any redemption, retirement, sinking fund or similar payment, purchase or other acquisition for value, direct or indirect, of any shares of any class of stock of the Borrower now or hereafter outstanding, other than in exchange for Capital Stock of the Borrower (other than Disqualified Capital Stock); and (c) any payment made to retire, or to obtain the surrender of, any outstanding warrants, options or other rights to acquire shares of any class of stock of the Borrower now or hereafter outstanding, other than in exchange for Capital Stock of the Borrower (other than Disqualified Capital Stock).
 - "Restricted Junior Payment" means any Restricted Equity Payment and any Restricted Debt Payment.
- "Retained ECF Percentage" means, with respect to any Fiscal Year, (a) 100% <u>minus</u> (b) the ECF Percentage with respect to such Fiscal Year.
- "Revolving Credit Commitment" means (a) the Initial Revolving Commitments and (b) each additional commitment of a Lender to make or otherwise fund any Revolving Loan (including any Incremental Revolving Loan and any Refinancing Revolving Loan) and to acquire participations in Letters of Credit hereunder, and "Revolving Credit Commitments" means such commitments of all of the Lenders in the aggregate. The amount of each Lender's Revolving Credit Commitment is set forth on Appendix A-2, or, if applicable, in (i) the applicable Assignment Agreement, (ii) the Incremental Amendment evidencing an Incremental Revolving Facility, (iii) the Refinancing Amendment evidencing Refinancing Revolving Commitments, or (iv) the Extension Amendment evidencing any Extended Revolving Credit Commitments, in each case is subject to any adjustment or reduction pursuant to the terms and conditions hereof.
- "Revolving Credit Commitment Period" means the period from and including the Closing Date to but excluding the Revolving Credit Commitment Termination Date.
- "Revolving Credit Commitment Termination Date" means the earliest to occur of (a) June 1, 2025, as extended in accordance with this Agreement from time to time solely with respect to any Extended Revolving Credit Commitments, as applicable; *provided* that if any Convertible Senior Notes remain outstanding on December 31, 2024, the Revolving Credit Commitment Termination Date shall be December 31, 2024 or such other date falling on the earlier of (x) 182 days prior to the then applicable maturity date in respect of the Convertible Senior Notes and (y) June 1, 2025, (b) the date the Revolving Credit Commitments are permanently reduced to zero pursuant to Section 2.13(b), and (c) the date of the termination of the Revolving Credit Commitments pursuant to Section 8.1.
- "Revolving Credit Exposure" means, with respect to any Lender as of any date of determination, (a) prior to the termination of the Revolving Credit Commitments, that Lender's Revolving Credit Commitment; and (b) after the termination of the Revolving Credit Commitments, the sum of (i) the aggregate outstanding principal amount of the Revolving Loans of that Lender, (ii) in the case of an Issuing Bank, the aggregate Letter of Credit Usage in respect of all Letters of Credit Issued by that Lender (net of any participations by the Lenders in such Letters of Credit (iii) the aggregate amount of all participations by that Lender in any outstanding Letters of Credit or any unreimbursed drawing under any Letter of Credit (it being understood that such calculation will, with respect to Foreign Currency Letters of Credit, be made using the Dollar Equivalent of any such amounts).
- "Revolving Credit Limit" means, as of any date of determination, the aggregate amount of the Revolving Credit Commitments as of such date.

"Revolving Lender" means a Lender that has a Revolving Credit Commitment or, after the termination thereof, Revolving Credit Exposure.

"Revolving Loan" means a Loan made by a Lender to the Borrower pursuant to Section 2.2(a).

"Revolving Loan Note" means a promissory note in the form of $\underline{\text{Exhibit B-2}}$, as it may be amended, supplemented or otherwise modified from time to time.

"S&P" means S&P Global Ratings, or any successor entity thereto.

"Sanctioned Country" means, at any time, any country or territory, or whose government is, the subject or target of any comprehensive economic or financial sanctions or trade embargoes under Anti-Terrorism Laws (including, but not limited to, the Crimea region of Ukraine, Cuba, Iran, North Korea, Sudan and Syria).

"SDN List" means the Specially Designated Nationals and Blocked Persons List maintained by OFAC.

"Second Amendment Effective Date" means April 29, 2020.

"Secured Net Leverage Ratio" means, as of any date, the ratio of (a) the sum of (i) Consolidated Total Debt that is secured by a Lien on any asset or property of the Borrower or the Subsidiaries outstanding as of such date, <u>minus</u> (ii) all Unrestricted Cash as of such date to (b) Consolidated Adjusted EBITDA for the most recently ended Test Period, all of the foregoing determined on a Pro Forma Basis.

"Secured Party" means the Administrative Agent, the Collateral Agent, each other Agent (including any former Agent), each Lender, each Issuing Bank, each other Indemnitee solely to the extent of any outstanding claim under Section 10.2 or for Indemnified Liabilities of such Indemnitee pursuant to and in accordance with Section 10.3, each Secured Swap Provider and each Bank Product Provider.

"Secured Rate Contract" means any Rate Contract between (a) the Borrower and/or any Subsidiary and the counterparty thereto, which has been provided by the Administrative Agent, a Lender or an Affiliate of the Administrative Agent or a Lender (or a Person who was the Administrative Agent, a Lender or an Affiliate of the Administrative Agent at the time of execution and delivery of a Rate Contract) or (b) subject to the limitations set forth in the Collateral Documents, any other financial institution to the extent such Rate Contract is designated by the Borrower to the Administrative Agent as a "Secured Rate Contract".

"Secured Swap Provider" means (a) an Agent or a Lender or an Affiliate of an Agent or a Lender (or a Person who was an Agent or a Lender or an Affiliate of an Agent or a Lender at the time of execution and delivery of a Rate Contract) who has entered into a Secured Rate Contract with the Borrower and/or any Subsidiary or (b) any other Person with whom the Borrower and/or any Subsidiary has entered into a Secured Rate Contract and any assignee thereof.

"Securities" means any Capital Stock, voting trust certificates, certificates of interest or participation in any profit-sharing agreement or arrangement, bonds, debentures, notes, or other evidences of indebtedness, secured or unsecured, convertible, subordinated or otherwise, or in general any instruments commonly known as "securities" or any certificates of interest, shares or participations in temporary or interim certificates for the purchase or acquisition of, or any right to subscribe to, purchase or acquire, any of the foregoing.

"Securities Act" means the Securities Act of 1933, as amended from time to time, and any successor statute.

"SOFR" means a rate equal to the secured overnight financing rate as administered by the SOFR Administrator,

"SOFR Administrator" means the Federal Reserve Bank of New York (or a successor administrator of the secured overnight financing rate).

"SOFR Borrowing" means, as to any borrowing, the SOFR Loans comprising such borrowing.

"SOFR Loan" means a Loan that bears interest at a rate based on Adjusted Term SOFR, other than pursuant to clause (c) of the definition of "Base Rate".

"Solvent" means, with respect to the Borrower and its Subsidiaries, that as of the date of determination, (a) the sum of the debt (including contingent liabilities) of the Borrower and its Subsidiaries, taken as a whole, does not exceed the fair value of the present assets of the Borrower and its Subsidiaries, taken as a whole, is not less than the amount that will be required to pay the probable liabilities (including contingent liabilities) of the Borrower and its Subsidiaries, taken as a whole, on their debts as they become absolute and matured; (c) the capital of the Borrower and its Subsidiaries, taken as a whole, is not unreasonably small in relation to the business of the Borrower or its Subsidiaries, taken as a whole, contemplated as of the date hereof; and (d) the Borrower and its Subsidiaries, taken as a whole, are able to pay their debts (including current obligations and contingent liabilities) as such debts mature and do not intend to incur, or believe that they will incur, debts (including current obligations and contingent liabilities) beyond their ability to pay such debt as they mature in the ordinary course of business. For the purposes hereof, the amount of any contingent liability at any time shall be computed as the amount that, in light of all of the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability (irrespective of whether such contingent liabilities meet the criteria for accrual under Financial Accounting Standards Board Accounting Standards Codification 450 (Topic 450, "Contingencies")).

"SPC" as defined in Section 10.6(k).

"Specified Letter of Credit Commitment" shall mean, with respect to any Issuing Bank, (a) in the case of each Issuing Bank that is an Issuing Bank on the Closing Date, the percentage of the Letter of Credit Sub-limit set forth opposite such Issuing Bank's name on Appendix A-2 as such Issuing Bank's "Specified Letter of Credit Commitment" or such other percentage as the Borrower and such Issuing Bank may agree in writing from time to time, and (b) in the case of any other Issuing Bank that becomes party hereto pursuant to an Assignment Agreement, the Letter of Credit Sub-limit so assigned to such new Issuing Bank as is specified in such Assignment Agreement (or, if no such Letter of Credit Sub-limit is specified therein, the percentage of the Letter of Credit Sub-limit that equals the product of (i) the aggregate amount of the Revolving Credit Commitments and Revolving Loans assigned thereunder <u>divided</u> by (ii) the aggregate amount of all Revolving Credit Commitments and Revolving Loans then outstanding.

"Specified Representations" means the representations and warranties relating to the Borrower and the Subsidiary Guarantors set forth in Sections 4.1(a), 4.1(b)(ii), 4.2, 4.3(a)(i)(A), 4.4, 4.12, 4.13, 4.16, 4.17(b), 4.17(c), 4.19 and 4.20.

"Specified Transaction" means any Permitted Acquisition, any permitted Investment or other acquisition (including acquisition of a book of business), any issuance, incurrence, assumption, guarantee, redemption or permanent repayment of indebtedness (including indebtedness issued, incurred or assumed as a result of, or to finance, any relevant transaction), the creation of any Lien, any designation or re-designation of an "Unrestricted Subsidiary," any merger or other fundamental change, all sales, transfers and other dispositions of any Subsidiary, line of business or division or any Restricted Junior Payment.

"Statutory Reserves" means, for any day during any Interest Period for any Eurodollar Rate Loan, the aggregate maximum rate (expressed as a decimal) at which reserves (including any marginal, supplemental, special or emergency reserves) are required to be maintained with respect thereto during such Interest Period under regulations issued by the Board of Governors against Eurocurrency funding liabilities (currently referred to as "Eurocurrency liabilities" (as such term is used in Regulation D)). Such reserves shall include those imposed under Regulation D. Eurodollar Rate Loans will be deemed to constitute "Eurodollar Liabilities" (as defined in Regulation D) and to be subject to such reserve requirements without benefit of or credit for proration, exceptions or offsets which may be available from time to time to any Lender under Regulation D:

"Subordinated Debt" means, collectively, any Incremental Equivalent Debt, Permitted Ratio Debt or other Indebtedness, in each case permitted to be incurred hereunder, that is subject to a Subordination Agreement made by the holders or lenders of such Indebtedness (or a Debt Representative with respect thereto) in favor of the Obligations. For the avoidance of doubt, no Indebtedness will be construed to be Subordinated Debt due to the fact that such Indebtedness is unsecured or secured by Liens that rank junior in priority to any other Liens.

"Subordination Agreement" means, collectively, each agreement with respect to Indebtedness (other than the Obligations) that provides that such Indebtedness is expressly subordinated in right of payment to the payment of the Obligations. For the avoidance of doubt, neither the subordination of the priority of any Lien securing any Indebtedness (other than the Obligations), nor the fact that any Indebtedness is unsecured, shall be construed to be the subordination of such Indebtedness in right of payment to the Obligations.

"Subsidiary" means, with respect to any Person, any corporation, partnership, limited liability company, association, joint venture or other business entity of which more than 50% of the total voting power of shares of stock or other ownership interests entitled (without regard to the occurrence of any contingency) to vote in the election of the Person or Persons (whether directors, managers, trustees or other Persons performing similar functions) having the power to direct or cause the direction of the management and policies thereof is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person or a combination thereof; *provided* that in determining the percentage of ownership interests of any Person controlled

by another Person, no ownership interest in the nature of a "qualifying share" of the former Person will be deemed to be outstanding. For purposes of this Agreement, except to the extent expressly stated otherwise, (a) references to any "Subsidiary" will mean a Subsidiary of the Borrower and (b) with respect to the Borrower or any of its direct or indirect subsidiaries, references to "Subsidiary" will not include any Unrestricted Subsidiary; provided, however, that purposes of all representations and warranties, negative covenants and affirmative covenants relating to Anti-Terrorism Laws and Anti-Corruption Laws (including, but not limited to, Sections 2.6(d), 4.17(b), 4.17(c), 5.1(k), 5.7(a) and 5.8) references to "Subsidiary" will include all Unrestricted Subsidiaries.

"Swap Obligation" means, with respect to any Guarantor, any obligation to pay or perform under any agreement, contract or transaction that constitutes a "swap" within the meaning of section 1a(47) of the Commodity Exchange Act.

"Swap Termination Value" means, in respect of any one or more Rate Contracts, after taking into account the effect of any legally enforceable netting agreement relating to such Rate Contracts, (a) for any date on or after the date such Rate Contracts have been closed out and termination value(s) determined in accordance therewith, such termination value(s), and (b) for any date prior to the date referenced in clause (a), the amount(s) determined as the mark-to-market value(s) for such Rate Contracts, as determined based upon one or more mid-market or other readily available quotations provided by any recognized dealer in such Rate Contracts (which may include a Lender or any Affiliate of a Lender)

"Syndication Agent" means Capital One, in its capacity as syndication agent under this Agreement.

"Tax" means any present or future tax, levy, impost, duty, assessment, charge, fee, deduction or withholding (including backup withholding) of any nature and whatever called, levied, collected, withheld or assessed by any Governmental Authority, together with any interest thereon, additions to tax or penalties imposed with respect thereto.

"Term Lender" means a Lender with a Term Loan Commitment or an outstanding Term Loan.

"Term Loan" means, individually and collectively, the Initial Term Loans, the Incremental Term Loans, if any, Extended Term Loans, if any, and Refinancing Term Loans, if any.

"Term Loan Commitment" means, collectively, the Initial Term Loan Commitments, the Incremental Term Loan Commitments (if any) and commitments to make Refinancing Term Loans, if any, and Extended Term Loans, if any.

"Term Loan Exposure" means, with respect to any Lender, as of any date of determination, the outstanding principal amount of the Term Loans of such Lender; *provided* that, at any time prior to the making of the Term Loans, the Term Loan Exposure of any Lender will be equal to such Lender's Term Loan Commitment.

"Term Loan Maturity Date" means (a) for the Initial Term Loans, the earlier of (i) June 1, 2027, as extended in accordance with this Agreement from time to time; provided that if any Convertible Senior Notes remain outstanding on April 1, 2025, the Term Loan Maturity Date shall be April 1, 2025 or such other date falling on the earlier of (x) 91 days prior to the then applicable maturity date in respect of the Convertible Senior Notes or (y) June 1, 2027 (or as extended in accordance with this Agreement from time to time), and (ii) the date that all such Initial Term Loans will become due and payable in full hereunder, whether by acceleration or otherwise; (b) for any Incremental Term Loans, the earlier of (i) the date identified in the applicable Incremental Amendment, as extended in accordance with this Agreement from time to time, and (ii) the date that all such Incremental Term Loans will become due and payable in full hereunder, whether by acceleration or otherwise; (c) for any Extended Term Loans, the earlier of (i) the final maturity date as specified in the applicable Extension Amendment and (ii) the date such Extended Term Loans will become due and payable in full hereunder, whether by acceleration or otherwise; and (d) with respect to any Refinancing Term Loans, the earlier of (i) the final maturity date as specified in the applicable Refinancing Amendment and (ii) the date such Refinancing Term Loans will become due and payable in full hereunder, whether by acceleration or otherwise.

"Term Loan Note" means a promissory note in the form of Exhibit B-1, as it may be amended, supplemented or otherwise modified from time to time.

"Term SOFR" means,

(a) for any calculation with respect to a SOFR Loan, the Term SOFR Reference Rate for a tenor comparable to the applicable Interest Period on the day (such day, the "Periodic Term SOFR Determination Day") that is two (2) U.S. Government Securities Business Days prior to the first day of such Interest Period, as such rate is published by the Term SOFR Administrator; provided, however, that if as of 5:00 p.m. (New York City time) on any Periodic Term SOFR Determination Day the Term SOFR Reference Rate for the applicable tenor has not been published by the Term SOFR Administrator and a Benchmark Replacement Date with respect to the Term

SOFR Reference Rate has not occurred, then Term SOFR will be the Term SOFR Reference Rate for such tenor as published by the Term SOFR Administrator on the first preceding U.S. Government Securities Business Day for which such Term SOFR Reference Rate for such tenor was published by the Term SOFR Administrator so long as such first preceding U.S. Government Securities Business Day is not more than three (3) U.S. Government Securities Business Days prior to such Periodic Term SOFR Determination Day, and

(b) for any calculation with respect to a Base Rate Loan on any day, the Term SOFR Reference Rate for a tenor of one month on the day (such day, the "Base Term SOFR Determination Day") that is two (2) U.S. Government Securities Business Days prior to such day, as such rate is published by the Term SOFR Administrator; provided, however, that if as of 5:00 p.m. (New York City time) on any Base Term SOFR Determination Day the Term SOFR Reference Rate for the applicable tenor has not been published by the Term SOFR Administrator and a Benchmark Replacement Date with respect to the Term SOFR Reference Rate has not occurred, then Term SOFR will be the Term SOFR Reference Rate for such tenor as published by the Term SOFR Administrator on the first preceding U.S. Government Securities Business Day for which such Term SOFR Reference Rate for such tenor was published by the Term SOFR Administrator so long as such first preceding U.S. Government Securities Business Day is not more than three (3) U.S. Government Securities Business Days prior to such Base Rate Term SOFR Determination Day.

"Term SOFR Adjustment" means, for any calculation with reflect to a Base Rate Loan or a SOFR Loan, a percentage per annum as set forth below for the applicable Type of such Loan and (if applicable) Interest Period therefor:

Base Rate Loans:

0.11448% (11.448 basis points)

SOFR Loans:

Interest Period	<u>Percentage</u>
One Month	<u>0.11448% (11.448 basis points)</u>
Three Months	0.26161% (26.161 basis points)
Six Months	0.42826% (42.826 basis points)

"Term SOFR Administrator" means CME Group Benchmark Administration Limited (CBA) (or a successor administrator of the Term SOFR Reference Rate selected by the Administrative Agent in its reasonable discretion).

"Term SOFR Reference Rate" means the forward-looking term rate based on SOFR.

"Terminated Lender" as defined in Section 2.23.

"Termination Conditions" means that the Commitments have been terminated, the principal of and interest on each Loan, all fees and all other expenses or amounts payable under any Credit Document (other than amounts in respect of indemnification, expense reimbursement, yield protection or tax gross-up and contingent obligations, in each case that are not then owing or with respect to which no claim has been made) have been paid in full and all Letters of Credit have been cancelled, or have expired or have been Cash Collateralized or otherwise backstopped in a manner satisfactory to the applicable Issuing Bank.

"Test Period" in effect at any time means the most recent period of four consecutive Fiscal Quarters of the Borrower ended on or prior to such time (taken as one accounting period) in respect of which financial statements for each quarter or fiscal year in such period have been or are required to be delivered pursuant to Section 5.1(a) or (b), as applicable; *provided* that, prior to the first date that financial statements have been or are required to be delivered pursuant to Section 5.1(a) or (b), the Test Period in effect will be the period of four consecutive Fiscal Quarters of the Borrower ended September 30, 2017. A Test Period may be designated by reference to the last day thereof (i.e., the "December 31, 2017 Test Period" refers to the period of four consecutive Fiscal Quarters ended on December 31, 2017) or by reference to the applicable fiscal period (i.e., references to the "Q4-2017 Test Period" and the "Fiscal Year 2017 Test Period" also both refer to the period of four consecutive Fiscal Quarters ended on December 31, 2017), and a Test Period will be deemed to end on the last day thereof.

"Third Amendment" shall mean that certain Third Amendment to Credit and Guaranty Agreement, dated as of June 2, 2021, among the Borrower, the Guarantor Subsidiaries, the Administrative Agent and the Lenders party thereto.

"Third Amendment Effective Date" shall have the meaning provided in the Third Amendment. "Third "Amendment Lead Arranger" means DBSI in its capacity as lead arranger in respect of the Third Amendment.

"Total Net Leverage Ratio" means, as of any date, the ratio of (a) Consolidated Total Debt as of such date, minus all Unrestricted Cash as of such date to (b) Consolidated Adjusted EBITDA for the most recently ended Test Period, all of the foregoing determined on a Pro Forma Basis.

"Total Utilization of Revolving Credit Commitments" means, as at any date of determination, the sum of (a) the aggregate principal amount of all outstanding Revolving Loans (other than Revolving Loans made for the purpose of reimbursing the applicable Issuing Bank for any amount drawn under any Letter of Credit, but not yet so applied) and (b) the Letter of Credit Usage.

"Transaction Costs" means the fees, costs and expenses paid or payable by the Borrower or the Subsidiaries in connection with the Transactions paid on or about the Closing Date.

"Transactions" means the Initial Credit Extension, the repayment and release of the Borrower Existing Debt on the Closing Date, the consummation of the Acquisition on the Closing Date, the payment of the Transaction Costs, the other transactions consummated (or to be consummated) in connection with the Acquisition, including distributor terminations and the buyout of minority interests in the Acquired Business, within twelve (12) months following the Closing Date.

"Transformative Acquisition" means any merger, acquisition, Investment, dissolution, liquidation, consolidation or disposition, in any such case by the Borrower or any Subsidiary that is either

(a) not permitted by the terms of any Credit Document immediately prior to the consummation of such transaction or (b) if permitted by the terms of the Credit Documents immediately prior to the consummation, would not provide the Borrower and the Subsidiaries with adequate flexibility under the Credit Documents for the continuation and/or expansion of their combined operations following such consummation, as reasonably determined by the Borrower acting in good faith.

"TTM Consolidated Adjusted EBITDA" means, as of any date of determination, the Consolidated Adjusted EBITDA for the four consecutive Fiscal Quarters most recently ended prior to such date for which financial statements have been delivered pursuant to Section 5.1(a) or (b) (or, in the case of a determination date that occurs prior to the first such delivery pursuant to such Sections, for the four consecutive Fiscal Quarters ended as of September 30, 2017), on a Pro Forma Basis.

"Type of Loan" means, with respect to either Term Loans or Revolving Loans, a Base Rate Loan or a Eurodollar RateSOFR Loan.

"UCC" means the Uniform Commercial Code as in effect from time to time in the State of New York; provided that if by reason of mandatory provisions of law, the perfection, the effect of perfection or non-perfection or the priority of the security interests of the Collateral Agent in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than New York, the term "UCC" means the Uniform Commercial Code as in effect in such other jurisdiction for purposes of the provisions hereof relating to such perfection, effect of perfection or non-perfection or priority.

"UK Resolution Authority" means the Bank of England or any other public administrative authority having responsibility for the resolution of any UK Financial Institution.

"Undisclosed Administration" means the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official by a supervisory authority or regulator with respect to a Lender or its direct or indirect parent under or pursuant to the law in the country where such Lender or parent is subject to home jurisdiction supervision, if applicable law requires that such appointment is not to be publicly disclosed.

"Unrestricted Cash" means the sum of the aggregate amount of cash and Cash Equivalents held in accounts of the Borrower and the Subsidiaries reflected in the combined consolidated balance sheet of the Borrower and the Subsidiaries to the extent that (a) it would not appear as "restricted" on the combined consolidated balance sheet of the Borrower and the Subsidiaries (unless such appearance is related to the Credit Documents (or the Liens created thereunder)), (b) it is not subject to any Lien (other than Permitted Liens) in favor of any Person other than the Collateral Agent for the benefit of the Secured Parties or (c) for purposes of calculating any of the First Lien Net Leverage Ratio, the Secured Net Leverage Ratio or the Total Net Leverage Ratio, it does not represent the cash proceeds of any Indebtedness then being incurred.

"Unrestricted Subsidiary" means, as of any date, collectively and individually, any direct or indirect subsidiary (determined in accordance with the definition of "Subsidiary" but without giving effect to clause (b) of the last sentence thereof) of the Borrower identified by the Borrower in writing to the Administrative Agent as being an "Unrestricted Subsidiary" pursuant to Section 5.13; provided that
(a) except to the extent provided in Section 5.13, no Subsidiary may be designated (or re-designated) as an Unrestricted Subsidiary and (b) no Person may be designated as an "Unrestricted Subsidiary" if such Person is not an "Unrestricted Subsidiary" or is a "Guarantor" under any agreement, document or instrument evidencing any

Incremental Equivalent Debt, Credit Agreement Refinancing Indebtedness or other Material Indebtedness of the Borrower or any of its Subsidiaries, or any Permitted Refinancing in respect of the foregoing, or has otherwise guaranteed or given assurances of payment or performance under or in respect of any such Indebtedness. For purposes of calculating Investments permitted under Section 6.6, (i) the designation of any Subsidiary as an "Unrestricted Subsidiary" will constitute an Investment in an amount equal to the fair market value of such Subsidiary, determined as of the date of such designation by the Borrower in its good faith and reasonable business judgment and (ii) the aggregate amount of all Investments permitted to be made in all "Unrestricted Subsidiaries" will be limited as provided in Section 6.6. The designation of any Unrestricted Subsidiary as a Subsidiary shall constitute the incurrence at the time of designation of any Indebtedness or Liens of such Subsidiary existing at such time and a return on any Investment by the Borrower in Unrestricted Subsidiaries pursuant to the preceding sentence in an amount equal to the fair market value as determined by the Borrower in good faith at the date of such designation of the Borrower's or its Subsidiary's (as applicable) Investment in such Subsidiary. On the Closing Date, immediately after giving effect to the Transactions, there are no Unrestricted Subsidiaries.

"U.S." or "United States" means United States of America.

"U.S. Government Securities Business Day" means any day except for (a) a Saturday, (b) a Sunday or (c) a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States government securities.

"U.S. Lender" means each Lender (including any Issuing Bank) that is a United States person as defined in Section 7701(a)(30) of the Internal Revenue Code.

"Voting Capital Stock" means, with respect to any Person, shares of such Person's Capital Stock having the right to vote for the election of directors of such Person and any other Capital Stock of such Person treated as voting stock for purposes of Treasury Regulation Section 1.956-2(c)(2).

"Waivable Mandatory Prepayment" as defined in Section 2.15(e).

"Weighted Average Life to Maturity" means, when applied to any Indebtedness at any date, the number of years obtained by dividing:
(a) the sum of the products obtained by multiplying (i) the amount of each then remaining installment, sinking fund, serial maturity or other required payments of principal, including payment at final maturity, in respect thereof, by (ii) the number of years (calculated to the nearest one-twelfth) that will elapse between such date and the making of such payment; by (b) the then outstanding principal amount of such Indebtedness.

"Write-Down and Conversion Powers" means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

1.2 Accounting Terms. Except as otherwise expressly provided herein, all accounting terms not otherwise defined herein will have the meanings assigned to them in conformity with GAAP. Financial statements and other information required to be delivered by the Borrower to the Lenders pursuant to Sections 5.1(a) and 5.1(b) will be prepared in accordance with GAAP as in effect at the time of such preparation (and delivered together with the reconciliation statements provided for in Section 5.1(f), if applicable). If at any time any change in GAAP would affect the computation of any financial ratio or financial requirement, or compliance with any covenant, set forth in any Credit Document, and either the Borrower or the Required Lenders (or, solely in the case of the Financial Covenant, the Required Revolving Lenders) will so request, the Administrative Agent, the Lenders and the Borrower will negotiate in good faith to amend such ratio, requirement or covenant to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders or Required Revolving Lenders, as applicable); provided that until so amended, (a) such ratio, requirement or covenant will continue to be computed in accordance with GAAP prior to such change therein and (b) the Borrower will provide to the Administrative Agent and the Lenders reconciliation statements to the extent provided in Section 5.1(f), if applicable. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein will be construed, and all computations of amounts and ratios referred to in Section 5 and Section 6 will be made, without giving effect to any election under Accounting Standards Codification 825-10 (or any other Financial Accounting Standard having a similar result or effect) to value any Indebtedness or other Liabilities of any Credit Party or any Subsidiary of any Credit Party at "fair value." Subject to the foregoing, calculations in connection with the definitions, cov

Historical Financial Statements, including those identified as exceptions to generally accepted accounting principles in the definition of "GAAP."

1.3 Interpretation, etc. Any of the terms defined herein may, unless the context otherwise requires, be used in the singular or the plural, depending on the reference. References to "hereof" or "herein" mean of or in this Agreement, as applicable. References herein to any Section, Appendix, Schedule or Exhibit will be to a Section, an Appendix, a Schedule or an Exhibit, as the case may be, hereof unless otherwise specifically provided. The use herein of the word "include" or "including," when following any general statement, term or matter, will not be construed to limit such statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation" or "but not limited to" or words of similar import) is used with reference thereto, but rather will be deemed to refer to all other items or matters that fall within the broadest possible scope of such general statement, term or matter. The terms lease and license will include sub-lease and sub-license, as applicable. Unless the context requires otherwise, any definition of or reference to any agreement, instrument or other document (including any Organizational Document) will be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or in any other Credit Document). Any reference herein to any Person will be construed to include such Person's successors and permitted assigns. The words "asset" and "property" will be construed to have the same meaning and effect as the word "shall." Any reference to any law or regulation will (a) include all statutory and regulatory provisions consolidating, replacing or interpreting or supplementing such law or regulation and (b) unless otherwise specified, refer to such law or regulation as amended, modified or supplemented from time t

1.4 Certifications. Any certificate or other writing required hereunder or under any other Credit Document to be certified by any officer or other authorized representative of any Person will be deemed to be executed and delivered by such officer or other authorized representative solely in such individual's capacity as an officer or other authorized representative of such Person and not in such officer's or other authorized representative's individual capacity.

Limited Condition Acquisitions. Notwithstanding anything in this Agreement or any Credit Document to the contrary, when (a) (i) calculating any applicable ratio or the use of any basket,

(ii) determining the accuracy of the representations and warranties set forth in Section 4 hereof or (iii) determining satisfaction of any conditions precedent, in the case of each of clause (i), (ii) and (iii), in connection with any Specified Transaction or (b) determining compliance with any provision that requires that no Default or Event of Default has occurred, is continuing or would result thereof, in each case (a) and (b) in connection with a Limited Condition Acquisition, the date of determination of such ratio and determination of such compliance will, at the option of the Borrower (the Borrower's election to exercise such option in connection with any Limited Condition Acquisition, an "LCA Election"), be deemed to be the date the definitive agreements for such Limited Condition Acquisition are entered into (the "LCA Test Date"). If on a Pro Forma Basis after giving effect to such Limited Condition Acquisition and the other Specified Transactions to be entered into in connection therewith (including any incurrence of Indebtedness and the use of proceeds thereof) calculated as if such Limited Condition Acquisition or other transactions had occurred at the beginning of the most recently ended Test Period ending prior to the LCA Test Date for which financial statements are delivered (or were required to have been delivered), the Borrower could have taken such action on the relevant LCA Test Date in compliance with the applicable ratios, then such provisions will be deemed to have been complied with, unless an Event of Default pursuant to Section 8.1(a), (f) or (g) will be continuing on the date such Limited Condition Acquisition is consummated. For the avoidance of doubt, (A) if any of such ratios are exceeded as a result of fluctuations in such ratio (including due to fluctuations in Consolidated Adjusted EBITDA or Consolidated Current Assets) at or prior to the consummation of the relevant Limited Condition Acquisition, such ratios and other provisions will not be deemed to have been exceeded as a result of such fluctuations solely for purposes of determining whether the Limited Condition Acquisition is permitted hereunder and (B) such ratios and compliance with such conditions will not be tested at the time of consummation of such Limited Condition Acquisition or related Specified Transactions, unless on such date an Event of Default pursuant to Section 8.1(a), (f) or (g) will be continuing. If the Borrower has made an LCA Election for any Limited Condition Acquisition, then in connection with any subsequent calculation of any ratio or basket availability with respect to any other Specified Transaction on or following the relevant LCA Test Date and prior to the earlier of the date on which such Limited Condition Acquisition is consummated or the date that the definitive agreement for such Limited Condition Acquisition is terminated or expires without consummation of such Limited Condition Acquisition, any such ratio or basket will be calculated and tested (A) assuming such Limited Condition Acquisition and other transactions in connection therewith (including any incurrence of Indebtedness and the use of proceeds thereof and the use of cash which would have otherwise constituted Unrestricted Cash for the purpose of calculating any applicable ratio) have not been consummated and (B) on a Pro Forma Basis assuming such Limited Condition Acquisition and other transactions in connection therewith (including any incurrence of Indebtedness and the use of proceeds thereof and the use of cash which would have otherwise constituted Unrestricted Cash for the purpose of calculating any applicable ratio) have been consummated, until such time as the applicable Limited Condition Acquisition has actually closed or the definitive agreement with respect thereto has been terminated or expires.

1.6 Currency Conversion and Fluctuations.

- (a) If more than one currency or currency unit are at the same time recognized by the central bank of any country as the lawful currency of that country, then (i) any reference in the Credit Documents to, and any obligations arising under the Credit Documents in, the currency of that country shall be translated into or paid in the currency or currency unit of that country designated by the Administrative Agent and (ii) any translation from one currency or currency unit to another shall be at the official rate of exchange recognized by the central bank for conversion of that currency or currency unit into the other, rounded up or down (to the next 1/16 of 1%) by the Administrative Agent as it deems appropriate.
- (b) If a change in any currency of a country occurs, this Agreement shall be amended (and each party hereto agrees to enter into any supplemental agreement necessary to effect any such amendment) to the extent that the Administrative Agent determines such amendment to be necessary to reflect the change in currency and to put the Lenders in the same position, so far as possible, that they would have been in if no change in currency had occurred.
- (c) No later than 11:00 a.m. London time on each Calculation Date, the Administrative Agent shall determine the Exchange Rate as of such Calculation Date with respect to each applicable currency; provided that, upon receipt of an Application or Issuance Notice for a Foreign Currency Letter of Credit pursuant to Section 2.4(b), the Administrative Agent shall determine the Exchange Rate with respect to the relevant currency on the related Calculation Date (it being acknowledged and agreed that the Administrative Agent shall use such Exchange Rate for the purposes of determining compliance with Section 2.4(a) with respect to such Application). The Exchange Rates so determined shall become effective on the relevant Calculation Date (a "Reset Date"), shall remain effective until the next succeeding Reset Date and shall for all purposes of this Agreement (other than Section 10.26 and any other provision expressly requiring the use of a current Exchange Rate) be the Exchange Rates employed in converting any amounts between Dollars and any other currency.
- (d) No later than 11:00 a.m. London time on each Reset Date, the Administrative Agent shall determine the aggregate amount of the Dollar Equivalents of the Letter of Credit Obligations then outstanding in a currency other than Dollars.
 - (e) The Administrative Agent shall promptly notify the Borrower of each determination of an Exchange Rate hereunder.

1.7 Rates. The Administrative Agent does not warrant or accept responsibility for, and shall not have any liability with respect to (a) the continuation of, administration of, submission of, calculation of or any other matter related to Base Rate, Daily Simple SOFR, SOFR, the Term SOFR Reference Rate, Adjusted Term SOFR, Term SOFR or any other Benchmark, or any component definition thereof or rates referred to in the definition thereof, or any alternative, comparable, replacement or successor rate thereto, including whether the composition or characteristics of any such alternative, comparable, replacement or successor rate will be similar to, or produce the same value or economic equivalence of, or have the same volume or liquidity as, Base Rate, Daily Simple SOFR, SOFR, the Term SOFR Reference Rate, Adjusted Term SOFR or Term SOFR or any other Benchmark prior to its discontinuance or unavailability, or (b) the effect, implementation or composition of any Benchmark Replacement Conforming Changes made in accordance with the definition thereof. The Administrative Agent and its affiliates or other related entities may engage in transactions that affect the calculation of Base Rate, Daily Simple SOFR, SOFR, the Term SOFR Reference Rate, Adjusted Term SOFR or Term SOFR or any alternative, successor or replacement rate thereto, or any relevant adjustments thereto, in each case, in a manner adverse to the Borrower or any Guarantor.

The Administrative Agent may select information sources or services in its reasonable discretion to ascertain Base Rate, Daily Simple SOFR, SOFR, the Term SOFR Reference Rate, Adjusted Term SOFR, Term SOFR or any other Benchmark, in each case pursuant to the terms of this Agreement, and shall have no liability to the Borrower, any Guarantor, any Lender or any other Person or entity for damages of any kind, including direct or indirect, special, punitive, incidental or consequential damages, costs, losses or expenses (whether in tort, contract or otherwise and whether at law or in equity), for any error or calculation of any such rate (or component thereof) provided by any such information source or service.

SECTION 2. LOANS AND LETTERS OF CREDIT

2.1 Term Loans.

(a) <u>Initial Term Loan Commitments</u>. Subject to the terms and conditions hereof, each Lender identified on Appendix A-1 hereto severally agrees to make, on the Closing Date, an Initial Term Loan to the Borrower in an amount equal to such Lender's Initial Term Loan Commitment as of such date; *provided* that the Borrower will deliver to Administrative Agent on behalf of the Lenders a fully executed Funding Notice no later than 11:00 a.m. (New York City time) at least one (1) Business Day in advance of the proposed funding date (in the case of a Base Rate Loan) or at least three (3) Business Days in advance of the proposed funding date (in the case of

a Eurodollar Rate SOFR Loan), and in any case which Funding Notice may be conditional on consummation of the Acquisition. The Borrower may make only one borrowing under the Initial Term Loan Commitment, which will be on the Closing Date. Any amount borrowed under this Section 2.1(a) and subsequently repaid or prepaid may not be reborrowed. Subject to Sections 2.12, 2.13(a) and 2.14, all amounts owed hereunder with respect to the Initial Term Loans will be paid in full no later than the Term Loan Maturity Date. Each Lender's Initial Term Loan Commitment shall terminate immediately and without further action on the Closing Date after giving effect to the funding of such Lender's Initial Term Loan Commitment on such date.

2.2 Revolving Loans.

(a) Revolving Credit Commitments. Subject to the terms and conditions hereof, each Revolving Lender severally agrees to make Revolving Loans to the Borrower during the Revolving Credit Commitment Period in an aggregate amount up to but not exceeding such Lender's Revolving Credit Commitment; provided that, after giving effect to the making of any Revolving Loans in no event will the Total Utilization of Revolving Credit Commitments exceed either (i) as to any Revolving Loans made on the Closing Date, the Initial Revolving Borrowing or (ii) at all times, the Revolving Credit Limit. Amounts borrowed pursuant to this Section 2.2(a) may be repaid and reborrowed during the Revolving Credit Commitment Period. Each Lender's Revolving Credit Commitment will expire on the Revolving Credit Commitment Termination Date and all Revolving Loans and all other amounts owed hereunder with respect to the Revolving Loans and the Revolving Credit Commitments will be paid in full no later than such date.

(b) <u>Borrowing Mechanics for Revolving Loans.</u>

- (i) Revolving Loans that are Base Rate Loans will be made in an aggregate minimum amount of \$1,000,000 and integral multiples of \$500,000 in excess of that amount, and Revolving Loans that are Eurodollar RateSOFR Loans will be in an aggregate minimum amount of \$1,000,000 and integral multiples of \$500,000 in excess of that amount.
- (ii) Whenever the Borrower desires that the Lenders make Revolving Loans, the Borrower will deliver to the Administrative Agent by Electronic Transmission a fully executed and delivered Funding Notice no later than 10:00 a.m. (New York City time) on the proposed Credit Date in the case of a Revolving Loan that is a Base Rate Loan, and 11:00 a.m. at least three (3) Business Days in advance of the proposed Credit Date in the case of a Eurodollar Rate SOFR Loan. Except with respect to a Funding Notice for borrowings of Revolving Loans on the Closing Date (which may be conditional on consummation of the Acquisition) and as otherwise provided herein, a Funding Notice for a Revolving Loan that is a Eurodollar SOFR Rate Loan will be irrevocable on and after the related Interest Rate Determination Date, and the Borrower will be bound to make a borrowing in accordance therewith.
- (iii) Notice of receipt of each Funding Notice in respect of Revolving Loans, together with the amount of each Lender's Pro Rata Share thereof, if any, together with the applicable interest rate, will be provided by the Administrative Agent to each applicable Lender by Electronic Transmission with reasonable promptness, but (*provided* the Administrative Agent will have received such notice by the time required pursuant to clause (ii) above) not later than 2:00 p.m. (New York City time) (or with respect to Funding Requests for Base Rate Loans on the same day, not later than 12:00 noon (New York City time)) on the same day as the Administrative Agent's receipt of such Funding Notice from the Borrower.
- (iv) Each Lender will make the amount of its Revolving Loan available to the Administrative Agent not later than 12:00 noon (New York City time) (or, with respect to Revolving Loans that are Base Rate Loans for which the Funding Request has been submitted on the same day, not later than 1:00 p.m. (New York City time)) on the applicable Credit Date by wire transfer of same day funds in Dollars at the Payment Office. Except as provided herein, upon satisfaction or waiver of the applicable conditions precedent specified herein, the Administrative Agent will make the proceeds of such Revolving Loans available to the Borrower on the applicable Credit Date by causing an amount of same day funds in Dollars equal to the proceeds of all such Revolving Loans received by the Administrative Agent from the Lenders to be credited to the account of the Borrower at the Payment Office or such other account as may be designated in writing to the Administrative Agent by the Borrower.

2.3 [Reserved].

2.4 Letters of Credit.

(a) <u>Letters of Credit</u>. From time to time on any Business Day from the Closing Date through the earlier of the Revolving Credit Commitment Termination Date and the fifth Business Day prior to the date specified in clause (a) of the definition of "Revolving Credit Commitment Termination Date", subject to the terms

and conditions hereof, each Issuing Bank agrees to Issue, in accordance with such Issuing Bank's usual and customary business practices, Letters of Credit for the account of the Borrower (which, at the Borrower's discretion, may be issued on behalf of the Borrower or any Subsidiary) in the aggregate amount up to but not exceeding the Letter of Credit Sub-limit; provided that (i) each Letter of Credit will be denominated in Dollars or in one or more Available Foreign Currencies; (ii) the stated amount of each Letter of Credit will not be less than \$10,000 or such lesser amount as is acceptable to such applicable Issuing Bank; (iii) after giving effect to such Issuance, in no event will the Total Utilization of Revolving Credit Commitments exceed the Revolving Credit Limit then in effect; (iv) after giving effect to such Issuance, in no event will the Letter of Credit Usage exceed the Letter of Credit Sub-limit then in effect; (v) in no event will any Letter of Credit have an expiration date that is not a Business Day or is later than the earlier of (A) the fifth Business Day prior to the date specified in clause (a) of the definition of "Revolving Credit Commitment Termination Date" unless the Borrower provides collateral in the form of cash or Cash Equivalents or otherwise backstops such Letter of Credit in a manner reasonably satisfactory to the applicable Issuing Bank and (B) the date which is one year from the date of Issuance of such Letter of Credit (subject to the immediately following sentence); and (vi) no Letter of Credit shall be issued (or deemed issued) by any Issuing Bank the stated amount of which, when added to the Letter of Credit Usage with respect to Letters of Credit issued by such Issuing Bank, would exceed the Specified Letter of Credit Commitment of such Issuing Bank then in effect. Subject to the foregoing, each Issuing Bank may agree that a Letter of Credit will automatically be extended for one or more successive periods not to exceed one year each (and in any event not to exceed the period prescribed in clause (v)(A) above subject to the exception therein), unless such Issuing Bank elects not to extend for any such additional period; provided that such Issuing Bank will not extend any such Letter of Credit if it has received written notice that an Event of Default has occurred and is continuing at the time such Issuing Bank must elect to allow such extension; provided further that no Issuing Bank will Issue any Letter of Credit if (1) any fee due in connection with, and on or prior to, the Issuance of such Letter of Credit has not been paid, (2) such Letter of Credit is requested to be Issued in a form that is not acceptable to such Issuing Bank or (3) such Issuing Bank will not have received, each in form and substance reasonably acceptable to it and duly executed by the Borrower, the documents that such Issuing Bank generally uses in the ordinary course of business for the Issuance of letters of credit of the type of such Letter of Credit (collectively, the "L/C Reimbursement Agreement"); provided further that so long as any Revolving Lender is a Defaulting Lender, such Issuing Bank will not be required to Issue any Letter of Credit unless such Issuing Bank has entered into arrangements satisfactory to it and the Borrower to eliminate such Issuing Bank's risk with respect to the participation in Letters of Credit of the Defaulting Lender, including by Cash Collateralizing such Defaulting Lender's Pro Rata Share of the Letter of Credit Usage, and participating interests in any such newly issued or increased Letter of Credit will be allocated among non-Defaulting Lenders in a manner consistent with Section 2.22 (and Defaulting Lenders will not participate therein). No Issuing Bank shall be under any obligation to issue Letters of Credit if the issuance of such Letter of Credit would violate one or more policies of such Issuing Bank applicable to letters of credit generally.

(b) Notice of Issuance. Whenever the Borrower desires the Issuance of a Letter of Credit, it will deliver in a writing or Electronic Transmission to the applicable Issuing Bank and the Administrative Agent an Application or an Issuance Notice no later than 12:00 noon (New York City time) at least three (3) Business Days or such shorter period as may be agreed to by the applicable Issuing Bank in any particular instance, in advance of the proposed date of Issuance. For each Issuance, the applicable Issuing Bank may, but will not be required to, determine that, or take notice whether, the conditions precedent set forth in Section 3.2 have been satisfied or waived in connection with the Issuance of any Letter of Credit; provided, however, that no Letters of Credit will be Issued during the period starting on the first Business Day after the receipt by such Issuing Bank of notice from the Administrative Agent or the Lenders holding more than 50% of the aggregate Revolving Credit Exposure of all Lenders that any condition precedent contained in Section 3.2 is not satisfied and ending on the date all such conditions are satisfied or duly waived. Upon receipt by the applicable Issuing Bank of the L/C Reimbursement Agreement, in form and substance reasonably acceptable to such Issuing Bank and duly executed by the Borrower, the applicable Issuing Bank will Issue the requested Letter of Credit only in accordance with such Issuing Bank will promptly notify the Administrative Agent, which will in turn promptly notify each Revolving Lender of such Issuance, which notice will be accompanied by a copy of such Letter of Credit or amendment or modification to a Letter of Credit and the amount of such Lender's respective participation in such Letter of Credit pursuant to Section 2.4(e). Each Issuing Bank further agrees to provide the Administrative Agent, in form and substance satisfactory to the Administrative Agent, upon the request of the Administrative Agent (or any Revolving Lender through the documents and information as

(c) <u>Responsibility of the Issuing Banks With Respect to Requests for Drawings and Payments</u>. In determining whether to honor any drawing under any Letter of Credit by the beneficiary thereof, the applicable Issuing Bank will be responsible only to examine the documents delivered under such Letter of Credit with reasonable care so as to determine whether they appear on their face to be in accordance with the terms and conditions of such Letter of Credit. The parties hereto expressly agree that, in the absence of gross negligence or willful misconduct on the part of the applicable Issuing Bank (as determined by a court of competent jurisdiction in a final non-appealable order) with respect to such a determination, such Issuing Bank will be deemed to have

exercised reasonable care in each such determination. In furtherance of the foregoing and without limiting the generality thereof, the parties agree that, with respect to documents presented which appear on their face to be in substantial compliance with the terms of a Letter of Credit, any Issuing Bank may, in its sole discretion, either accept and make payment upon such documents without responsibility for further investigation, regardless of any notice or information to the contrary, or refuse to accept and make payment upon such documents if such documents are not in strict compliance with the terms of such Letter of Credit. As between the Borrower and the Issuing Banks, the Borrower assumes all risks of the acts and omissions of, or misuse of the Letters of Credit Issued by the Issuing Banks, by the respective beneficiaries of such Letters of Credit. In furtherance and not in limitation of the foregoing, the Issuing Banks will not be responsible for: (i) the form, validity, sufficiency, accuracy, genuineness or legal effect of any document submitted by any party in connection with the application for and Issuance of any such Letter of Credit, even if it should in fact prove to be in any or all respects invalid, insufficient, inaccurate, fraudulent or forged; (ii) the validity or sufficiency of any instrument transferring or assigning or purporting to transfer or assign any such Letter of Credit or the rights or benefits thereunder or proceeds thereof, in whole or in part, which may prove to be invalid or ineffective for any reason; (iii) failure of the beneficiary of any such Letter of Credit to comply fully with any conditions required in order to draw upon such Letter of Credit; (iv) errors, omissions, interruptions or delays in transmission or delivery of any messages, by mail, email, cable, telex or otherwise, whether or not they be in cipher; (v) errors in interpretation of technical terms; (vi) any loss or delay in the transmission or otherwise of any document required in order to make a drawing under any such Letter of Credit or of the proceeds thereof; (vii) the misapplication by the beneficiary of any such Letter of Credit or (viii) any consequences arising from causes beyond the control of the Issuing Banks, including any Governmental Acts; none of the above will affect or impair, or prevent the vesting of, any of the Issuing Banks' rights or powers hereunder. Without limiting the foregoing and in furtherance thereof, any action taken or omitted by the Issuing Banks under or in connection with the Letters of Credit or any documents and certificates delivered thereunder, if taken or omitted in good faith, will not give rise to any liability on the part of the Issuing Banks to the Borrower. Notwithstanding anything to the contrary contained in this Section 2.4(c), the Borrower will retain any and all rights it may have against the applicable Issuing Bank for any liability arising solely out of the gross negligence or willful misconduct of such Issuing Bank as determined by a court of competent jurisdiction in a final non-appealable order.

(d) <u>Reimbursement by the Borrower of Amounts Drawn or Paid Under Letters of Credit</u>. In the event any Issuing Bank has determined to honor a drawing under a Letter of Credit, it will immediately notify the Borrower and the Administrative Agent, and the Borrower will reimburse the applicable Issuing Bank, or the Administrative Agent for the benefit of such Issuing Bank, on or before the Business Day immediately following the date on which such drawing is honored (the "Reimbursement Date") in an amount in Dollars and in same day funds equal to the amount of such honored drawing or, in the case of reimbursement in an Available Foreign Currency, in such Available Foreign Currency and in same day funds equal to the amount of such honored drawing; provided that anything contained herein to the contrary notwithstanding, (i) unless the Borrower will have notified the Administrative Agent and the applicable Issuing Bank prior to 10:00 a.m. (New York City time) on the date such drawing is honored that the Borrower intends to reimburse the applicable Issuing Bank for the amount of such honored drawing with funds other than the proceeds of Revolving Loans, the Borrower will be deemed to have given a timely Funding Notice to the Administrative Agent requesting each Revolving Lender to make Revolving Loans that are Base Rate Loans on the Reimbursement Date in an amount in Dollars equal to the amount of such honored drawing (and in the event such amount is payable in respect of a Foreign Currency Letter of Credit, such amount shall be converted to Dollars based on the Dollar Equivalent thereof), and (ii) without regard to the satisfaction of the conditions specified in Section 3.2 (each of which conditions precedent the Revolving Lenders hereby irrevocably waive), each Revolving Lender will, on the Reimbursement Date, make Revolving Loans that are Base Rate Loans in the amount of such honored drawing (and in the event such amount is payable in respect of a Foreign Currency Letter of Credit, such amount shall be converted to Dollars based on the Dollar Equivalent thereof), the proceeds of which will be applied directly by the Administrative Agent to reimburse the applicable Issuing Bank for the amount of such honored drawing; and provided further, if for any reason proceeds of Revolving Loans are not received by the applicable Issuing Bank on the Reimbursement Date in an amount equal to the amount of such honored drawing, the Borrower will reimburse such Issuing Bank, on demand, in an amount in same day funds equal to the excess of the amount of such honored drawing over the aggregate amount of such Revolving Loans, if any, which are so received. In the event any amount denominated in an Available Foreign Currency is not paid when due, such amount shall, for all purposes of this Agreement, be converted to an amount in Dollars based on the Dollar Equivalent thereof. Nothing in this Section 2.4(d) will be deemed to relieve any Revolving Lender from its obligation to make Revolving Loans on the terms and conditions set forth herein, and the Borrower will retain any and all rights it may have against any Lender resulting from the failure of such Lender to make such Revolving Loans under this Section 2.4(d).

(e) <u>Lenders' Purchase of Participations in Letters of Credit</u>. Immediately upon the Issuance of each Letter of Credit, each Revolving Lender will be deemed to have purchased, in each case, without recourse or warranty, and hereby agrees to irrevocably purchase, from the Issuing Banks a participation in such Letter of Credit and any drawings honored thereunder in an amount equal to such Revolving Lender's Pro Rata Share (with respect to the Revolving Credit Commitments) of the maximum amount which is or at any time may become available to be drawn thereunder. In the event that the Borrower will fail for any reason to reimburse the applicable Issuing Bank as provided in Section 2.4(d), the applicable Issuing Bank will promptly notify each Revolving Lender of the

unreimbursed amount of such honored drawing (and in the event such amount is payable in respect of a Foreign Currency Letter of Credit, such amount shall be converted to Dollars based on the Dollar Equivalent thereof) and of such Lender's respective participation therein based on such Revolving Lender's Pro Rata Share of the Revolving Credit Commitments. Each Revolving Lender will make available to the applicable Issuing Bank an amount equal to its respective participation, in Dollars and in same day funds, at the office of the Issuing Bank specified in such notice, not later than 12:00 noon (New York City time) on the first Business Day (under the laws of the jurisdiction in which such office of such Issuing Bank is located) after the date notified by such Issuing Bank. In the event that any Revolving Lender fails to make available to the applicable Issuing Bank on such Business Day the amount of such Lender's participation in such Letter of Credit as provided in this Section 2.4(e), such Issuing Bank will be entitled to recover such amount on demand from such Lender together with interest thereon for three (3) Business Days at the rate customarily used by such Issuing Bank for the correction of errors among banks and thereafter at the Base Rate. Nothing in this Section 2.4(e) will be deemed to prejudice the right of any Revolving Lender to recover from such Issuing Bank any amounts made available by such Lender to such Issuing Bank pursuant to this Section in the event that it is determined that the payment with respect to a Letter of Credit in respect of which payment was made by such Lender constituted gross negligence or willful misconduct on the part of such Issuing Bank as determined by a court of competent jurisdiction in a final non-appealable order. In the event such Issuing Bank will have been reimbursed by other Lenders pursuant to this Section 2.4(e) for all or any portion of any drawing honored by such Issuing Bank under a Letter of Credit, such Issuing Bank will distribute to the Administrative A

- (f) Obligations Absolute. The obligation of the Borrower to reimburse the Issuing Banks for drawings honored under the Letters of Credit Issued by it and to repay any Revolving Loans made by the Lenders pursuant to Section 2.4(d) and the obligations of the Lenders under Section 2.4(e) will be unconditional and irrevocable and will be performed strictly in accordance with the terms hereof under all circumstances including any of the following circumstances: (i) any lack of validity or enforceability of any Letter of Credit, any document transferring or purporting to transfer any Letter of Credit, any Credit Document (including the sufficiency of any such instrument), or any modification to any provision of any of the foregoing; (ii) the existence of any claim, set-off, defense, abatement, recoupment or other right which the Borrower or any Lender may have at any time against a beneficiary or any transferee of any Letter of Credit (or any Persons for whom any such transferee may be acting), the Issuing Banks, Lender or any other Person or, in the case of a Lender, against the Borrower, whether in connection herewith, the transactions contemplated herein or any transaction (including any underlying transaction between the Borrower or the Subsidiaries and the beneficiary for which any Letter of Credit was procured); (iii) any draft or other document presented under any Letter of Credit proving to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; (iv) payment by the applicable Issuing Bank under any Letter of Credit against presentation of a draft or other document which does not substantially comply with the terms of such Letter of Credit; (v) any adverse change in the business, operations, properties, assets, condition (financial or otherwise) or prospects of the Borrower or any Subsidiary; (vi) any breach hereof or any other Credit Document by any party thereto; (vii) any other circumstance or happening whatsoever, whether or not simi
- (g) Indemnification. Without duplication of any obligation of the Borrower under Section 10.2 or Section 10.3, in addition to amounts payable as provided herein, the Borrower hereby agrees to protect, indemnify, pay and save harmless the Issuing Banks from and against any and all claims, demands, liabilities, damages, losses, costs, charges and expenses (including reasonable fees, expenses and disbursements of counsel) which the Issuing Banks may incur or be subject to as a consequence, direct or indirect, of (i) the Issuance of any Letter of Credit by an Issuing Bank, other than as a result of (A) the gross negligence or willful misconduct of such Issuing Bank as determined by a court of competent jurisdiction in a final non-appealable order or (B) the failure by such Issuing Bank to exercise reasonable care when determining whether a proper demand for payment is made under any Letter of Credit Issued by it, or (ii) the failure of an Issuing Bank to honor a drawing under any such Letter of Credit as a result of any Governmental Act. For the avoidance of doubt, this Section 2.4(g) will not apply with respect to Taxes other than any Taxes that represent losses, claims, or damages arising from any non-Tax claim.
- (h) <u>Cash Collateralization of Letters of Credit</u>. In the event that any Letter of Credit is outstanding at the time that the Borrower prepays, or is required to repay, the Obligations or the Revolving Credit Commitments are terminated or the Borrower is required to provide Cash Collateral under Section 8.2(a), the

Borrower will (i) deposit with the Administrative Agent, for the benefit of all Lenders having Revolving Credit Exposure, Cash Collateral (or procure a backstop letter of credit satisfactory to the relevant Issuing Bank) to be available to Administrative Agent, for its benefit and the benefit of Issuing Banks, to reimburse payments of drafts drawn under such Letters of Credit and pay any fees and expenses related thereto and (ii) prepay the fee payable under Section 2.11(a)(ii) with respect to such Letters of Credit for the full remaining terms of such Letters of Credit. All deposits made pursuant to preceding clause (i) shall be made in Dollars or, with respect to Foreign Currency Letters of Credit, in the applicable Available Foreign Currency or as the applicable Issuing Bank may otherwise agree. Upon termination of any such Letter of Credit and provided no Event of Default will have occurred and be continuing, the unearned portion of such prepaid fee attributable to such Letter of Credit will be refunded to the Borrower, together with the deposit described in the preceding clause (i) to the extent not previously applied by the Administrative Agent in the manner described herein.

2.5 Pro Rata Shares; Availability of Funds.

- (a) <u>Pro Rata Shares</u>. All Loans will be made, and all participations will be purchased, by the Lenders simultaneously and proportionately to their respective Pro Rata Shares. No Lender will be responsible for any default by any other Lender in such other Lender's obligation to make a Loan requested hereunder or purchase a participation required hereby nor will any Term Loan Commitment or any Revolving Credit Commitment of any Lender be increased or decreased as a result of a default by any other Lender in such other Lender's obligation to make a Loan requested hereunder or purchase a participation required hereby.
- (b) Availability of Funds. Unless the Administrative Agent will have been notified by any Lender prior to the applicable Credit Date that such Lender does not intend to make available to the Administrative Agent the amount of such Lender's Loan requested on such Credit Date, the Administrative Agent may assume that such Lender has made such amount available to the Administrative Agent on such Credit Date and the Administrative Agent may, in its sole discretion, but will not be obligated to, make available to the Borrower a corresponding amount on such Credit Date. If such corresponding amount is not in fact made available to the Administrative Agent by such Lender, the Administrative Agent will be entitled to recover such corresponding amount on demand from such Lender together with interest thereon, for each day from such Credit Date until the date such amount is paid to the Administrative Agent, at the customary rate set by the Administrative Agent for the correction of errors among banks for three (3) Business Days and thereafter at the Base Rate. If such Lender does not pay such corresponding amount forthwith upon the Administrative Agent's demand therefor, the Administrative Agent will promptly notify the Borrower and the Borrower will immediately pay such corresponding amount to the Administrative Agent together with interest thereon, for each day from such Credit Date until the date such amount is paid to the Administrative Agent, at the rate payable hereunder for Base Rate Loans for such Class of Loans. Nothing in this Section 2.5(b) will be deemed to relieve any Lender from its obligation to fulfill its Term Loan Commitments and Revolving Credit Commitments hereunder or to prejudice any rights that the Borrower may have against any Lender as a result of any default by such Lender hereunder.

2.6 Use of Proceeds.

- (a) The proceeds of the Initial Term Loans will be used to consummate the Transactions. The Initial Revolving Borrowing will be used to issue Letters of Credit in accordance with Section 2.4(i) and to pay all or a portion of the Transaction Costs.
- (b) The proceeds of the Revolving Loans and Letters of Credit made after the Closing Date will be applied by the Borrower for working capital and general corporate purposes of the Borrower and the Subsidiaries, including for Permitted Acquisitions, capital expenditures and other transactions not prohibited under the terms of this Agreement.
- (c) No portion of the proceeds of or draws related to any Credit Extension will be used to purchase or carry Margin Stock or in any manner that causes such Credit Extension or the application of such proceeds to violate Regulation T, Regulation U or Regulation X of the Board of Governors.
- (d) No Credit Party, nor any of its Controlled Entities or any of their respective directors and officers, will directly or, to its knowledge, indirectly use any part of any proceeds of any Credit Extension or lend, contribute, or otherwise make available such proceeds to any Person (i) to fund or facilitate any activities or business of or with any Person that, at the time of such funding or facilitation, is the subject or the target of Anti-Terrorism Laws except to the extent authorized or permissible for a Person required to comply with Anti-Terrorism Laws, (ii) to fund or facilitate any activities or business of or in any Sanctioned Country except to the extent authorized or permissible for a Person required to comply with Anti-Terrorism Laws or (iii) in any other manner that will result in a violation by any party hereto of Anti-Terrorism Law. No part of the proceeds of any Credit Extension will be used, directly or, to the Credit Parties' knowledge, indirectly for any payments to any Government Official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of Anti-Corruption Laws.

2.7 Evidence of Debt; Register; Disqualified Lender List; Notes.

- (a) Evidence of Debt. Each Lender will maintain on its internal records an account or accounts evidencing the Indebtedness of the Borrower to such Lender, including the amounts of the Loans made by it and each repayment and prepayment in respect thereof. Any such recordation will be conclusive and binding on the Borrower, absent manifest error; provided that failure to make any such recordation, or any error in such recordation, will not affect any Lender's Commitments or the Borrower's Obligations in respect of any applicable Loans; and provided further, in the event of any inconsistency between the Register and any Lender's records, the recordations in the Register will govern.
- (b) Register. The Administrative Agent will maintain a register for the recordation of the names and addresses of the Lenders and the Revolving Credit Commitments and the Loans of each Lender from time to time (the "Register"). The Register will be available for inspection by the Borrower or any Lender (with respect to any entry relating to such Lender's Loans) at any reasonable time from time to time upon reasonable prior notice. The Administrative Agent will record in the Register the Revolving Credit Commitments and the Loans, the principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from to time and each repayment or prepayment in respect of the principal amount of the Loans, and any such recordation will be conclusive and binding on the Borrower and each Lender, absent manifest error; provided that failure to make any such recordation, or any error in such recordation, will not affect any Lender's Revolving Credit Commitments or the Borrower's Obligations in respect of any Loan. The Borrower hereby designates the Administrative Agent to serve as the Borrower's agent solely for purposes of maintaining the Register as provided in this Section 2.7, and the Borrower hereby agrees that, to the extent the Administrative Agent serves in such capacity, the Administrative Agent and its officers, directors, employees, agents and affiliates will constitute "Indemnitees."
- (c) <u>Disqualified Lender List</u>. The list of Disqualified Lenders will be available to the Lenders, other Agents and Issuing Banks upon written request to the Borrower and the Administrative Agent. The parties to this Agreement hereby acknowledge and agree that the Administrative Agent will not be deemed to be in default under this Agreement or to have any duty or responsibility or to incur any liabilities as a result of a breach of this Section 2.7(c), nor will the Administrative Agent have any duty, responsibility or liability to monitor or enforce assignments, participations or other actions in respect of Disqualified Lenders, inquire as to whether any Person is a Disqualified Lender or otherwise take (or omit to take) any action with respect thereto.
- (d) Notes. If so requested by any Lender by written notice to the Borrower (with a copy to the Administrative Agent) at least two (2) Business Days prior to the Closing Date, or at any time thereafter, the Borrower will execute and deliver to such Lender (and/or, if applicable and if so specified in such notice, to any Person who is an assignee of such Lender pursuant to Section 10.6) on the Closing Date (or, if such notice is delivered after the date that is three (3) Business Days prior to the Closing Date, promptly after the Borrower's receipt of such notice) a Note or Notes to evidence such Lender's Term Loan or Revolving Loan, as the case may be.

2.8 Interest on Loans.

(a) Except as otherwise set forth herein, each Class of Loan will bear interest on the unpaid principal amount thereof from the date made through repayment (whether by acceleration or otherwise) thereof as follows:

Class of loans	<u>Interest</u>	
Initial Term Loans and Revolving Loans that are Base Rate Loans	Base Rate <u>plus</u> the Applicable Margin	
Initial Term Loans and Revolving Loans that are Eurodollar RateSOFR Loans	Eurodollar Adjusted Term SOFR Rate plus the Applicable Margin	
Incremental Term Loans, Extended Term Loans or Refinancing Term Loans that are Base Rate Loans	Base Rate <u>plus</u> the applicable margin set forth in the applicable Incremental Amendment, Extension Amendment or Refinancing Amendment.	
Incremental Term Loans, Extended Term Loans or Refinancing Term Loans that are EurodollarRateSOFR Loans	Eurodollar Rate Adjusted Term SOFR plus the applicable margin so forth in the applicable Incremental Amendment, Extension Amendment or Refinancing Amendment.	

- (b) The basis for determining the rate of interest with respect to any Loan, and the Interest Period with respect to any Eurodollar RateSOFR Loan, will be selected by the Borrower and notified to the Administrative Agent and the Lenders pursuant to the applicable Funding Notice or Conversion/Continuation Notice, as the case may be. If on any day a Loan is outstanding with respect to which a Funding Notice or Conversion/Continuation Notice has not been delivered to the Administrative Agent in accordance with the terms hereof specifying the applicable basis for determining the rate of interest, then for that day such Loan will be a Base Rate Loan.
- (c) In connection with Eurodollar RateSOFR Loans there will be no more than five

 (5) Interest Periods outstanding at any time (unless otherwise agreed by the Administrative Agent). In the event the Borrower fails to specify between a Base Rate Loan or a Eurodollar RateSOFR Loan in the applicable Funding Notice or Conversion/Continuation Notice, such Loan (if outstanding as a Eurodollar RateSOFR Loan) will be automatically converted into a Base Rate Loan on the last day of the then-current Interest Period for such Loan (or if outstanding as a Base Rate Loan will remain as, or (if not then outstanding) will be made as, a Base Rate Loan). In the event the Borrower fails to specify an Interest Period for any Eurodollar RateSOFR Loan in the applicable Funding Notice or Conversion/Continuation Notice, the Borrower will be deemed to have selected an Interest Period of one month. As soon as practicable after 10:00 a.m. (New York City time) on each Interest Rate Determination Date, the Administrative Agent will determine (which determination will, absent manifest error, be final, conclusive and binding upon all parties) the interest rate that will apply to the Eurodollar RateSOFR Loans for which an interest rate is then being determined for the applicable Interest Period and will promptly give notice thereof (in writing or by telephone confirmed)

in writing) to the Borrower and each Lender.

- (d) Interest payable pursuant to Section 2.8(a) will be computed (i) in the case of Base Rate Loans with the Base Rate determined pursuant to subclause (a) of the definition of "Base Rate", on the basis of a 365-day year (or 366-day year, in the case of a leap year), (ii) in the case of Base Rate Loans with the Base Rate determined pursuant to subclause (b) or (c) of the definition of "Base Rate", on the basis of a 360-day year and (iii) in the case of Eurodollar RateSOFR Loans, on the basis of a 360-day year, in each case for the actual number of days elapsed in the period during which it accrues. In computing interest on any Loan, the date of the making of such Loan or the first day of an Interest Period applicable to such Loan or, with respect to a Base Rate Loan being converted from a Eurodollar RateSOFR Loan, the date of conversion of such Loan or, with respect to a Base Rate Loan being converted to a Eurodollar RateSOFR Loan, the date of conversion of such Base Rate Loan to such Loan or, with respect to a Base Rate Loan being converted to a Eurodollar RateSOFR Loan, the date of conversion of such Base Rate Loan to such Eurodollar RateSOFR Loan, as the case may be, will be excluded; provided that if a Loan is repaid on the same day on which it is made, one day's interest will be paid on that Loan.
- (e) Except as otherwise set forth herein, interest on each Loan will accrue on a daily basis and be payable in arrears (i) on each Interest Payment Date applicable to that Loan; (ii) any prepayment of that Loan, whether voluntary or mandatory, to the extent accrued on the amount being prepaid; and (iii) at maturity, including final maturity (or, in the case of Revolving Loans, such earlier date on which the Revolving Credit Commitments are terminated) and, after such maturity (or termination), on each date on which demand for payment is made; provided, however, that, with respect

to any voluntary prepayment of a Revolving Loan outstanding as a Base Rate Loan, accrued interest will instead be payable on the applicable Interest Payment Date.

- (f) The Borrower agrees to pay to the applicable Issuing Bank, with respect to drawings honored under any Letter of Credit, interest on the amount paid by such Issuing Bank in respect of each such honored drawing from the date such drawing is honored to but excluding the date such amount is reimbursed by or on behalf of the Borrower at a rate equal to (i) for the period from the date such drawing is honored to but excluding the applicable Reimbursement Date, the rate of interest otherwise payable hereunder with respect to Revolving Loans that are Base Rate Loans, and (ii) thereafter, a rate which is 2.00% per annum in excess of the rate of interest otherwise payable hereunder with respect to Revolving Loans that are Base Rate Loans.
- (g) Interest payable pursuant to Section 2.8(f) will be computed (i) in the case of interest determined pursuant to subclause (a) of the definition of "Base Rate", on the basis of a 365-day year (or 366-day year, in the case of a leap year) and (ii) in the case of interest determined pursuant to subclause (b) or (c) of the definition of "Base Rate", on the basis of a 360-day year, in each case for the actual number of days elapsed in the period during which it accrues, and will be payable on demand or, if no demand is made, on the date on which the related drawing under a Letter of Credit is reimbursed in full. Promptly upon receipt by an Issuing Bank of any payment of interest pursuant to Section 2.8(f), such Issuing Bank will distribute to the Administrative Agent, which will in turn distribute to each Lender, out of the interest received by such Issuing Bank in respect of the period from the date such drawing is honored to but excluding the date on which such Issuing Bank is reimbursed for the amount of such drawing (including any such reimbursement out of the proceeds of any Revolving Loans), the amount that such Lender would have been entitled to receive in respect of the letter of credit fee that would have been payable in respect of such Letter of Credit for such period if no drawing had been honored under such Letter of Credit. In the event an Issuing Bank will have been reimbursed by the Lenders for all or any portion of such honored drawing, such Issuing Bank will distribute to each Lender which has paid all amounts payable by it under Section 2.4(e) with respect to such honored drawing such Lender's Pro Rata Share of any interest received by such Issuing Bank was so reimbursed by the Lenders to but excluding the date on which such portion of such honored drawing is reimbursed by the Borrower.

2.9 Conversion/Continuation.

- (a) Subject to Section 2.18 and so long as no Default or Event of Default will have occurred and then be continuing, the Borrower will have the option:
 - (i) to convert at any time all or any part of any Term Loan or Revolving Loan equal to \$100,000 and integral multiples of \$50,000 in excess of that amount from one Type of Loan to another Type of Loan; provided that a Eurodollar Rate SOFR Loan may only be converted on the expiration of the Interest Period applicable to such Eurodollar Rate SOFR Loan unless the Borrower will pay all amounts due under Section 2.18 in connection with any such conversion; or
 - (ii) upon the expiration of any Interest Period applicable to any Eurodollar Rate SOFR Loan, to continue all or any portion of such Loan equal to \$100,000 and integral multiples of \$50,000 in excess of that amount as a Eurodollar Rate SOFR Loan
- (b) The Borrower will deliver a Conversion/Continuation Notice to the Administrative Agent by Electronic Transmission no later than 11:00 a.m. (New York City time) at least one (1) Business Day in advance of the proposed conversion date (in the case of a conversion to a Base Rate Loan) and at least three (3) Business Days in advance of the proposed conversion/continuation date (in the case of a conversion to, or a continuation of, a Eurodollar RateSOFR Loan). Except as otherwise provided herein, a Conversion/Continuation Notice for conversion to, or continuation of, any Eurodollar RateSOFR Loans will be irrevocable on and after the related Interest Rate Determination Date, and the Borrower will be bound to effect a conversion or continuation in accordance therewith.
- **2.10 Default Interest**. Upon the occurrence and during the continuance of an Event of Default under Section 8.1(a), 8.1(f) or 8.1(g), the overdue principal amount of any Loans and, to the extent permitted by applicable law and due and owing, any overdue interest payments on the Loans and any other overdue fees and other overdue amounts, will bear interest (including post-petition interest in any proceeding under the Bankruptcy Code or other applicable bankruptcy laws) from the date of such Event of Default, payable on demand at a rate that is 2.00% per annum in excess of the interest rate otherwise payable hereunder with respect to the applicable Loans (or, in the case of any such fees and other amounts, at a rate which is 2.00% per annum in excess of the interest rate otherwise payable hereunder for Revolving Loans outstanding as Base Rate Loans); provided that in the case of any overdue principal or interest with respect to Eurodollar RateSOFR Loans, upon the expiration of the Interest Period in effect at the time any the increase in interest rate is effective, such Eurodollar RateSOFR Loans will thereupon become Base Rate Loans and thereafter such overdue principal or interest, as applicable, will bear interest payable upon

demand at a rate that is 2.00% per annum in excess of the interest rate otherwise payable hereunder for such Base Rate Loans. Payment or acceptance of the increased rates of interest provided for in this Section 2.10 is not a permitted alternative to timely payment and will not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of the Administrative Agent or any Lender.

2.11 Fees; Loan Call Protection.

(a) <u>Revolving Commitment Fee</u>. The Borrower agrees to pay to the Lenders having Revolving Credit Exposure the following fees:

- (i) commitment fees equal to (A) the average of the daily difference between (1) the Revolving Credit Commitments, and (2) the Total Utilization of Revolving Commitments, *times* (B) the Applicable Commitment Fee Rate; and
- (ii) letter of credit fees equal to (A) the Applicable Margin for Revolving Loans that are Eurodollar RateSOFR Loans, times (B) the average aggregate daily maximum amount available to be drawn under all Letters of Credit issued and outstanding under this Agreement (regardless of whether any conditions for drawing could then be met and determined as of the close of business on any date of determination); provided that, in the case of Foreign Currency Letters of Credit, such calculation will be based on the Dollar Equivalent of the face amount thereof.

All fees referred to in this Section 2.11(a) will be paid to the Administrative Agent at the Payment Office and upon receipt, the Administrative Agent will promptly distribute to each Lender its Pro Rata Share thereof.

- (b) <u>Letter of Credit Fees</u>. The Borrower agrees to pay to the Administrative Agent (in U.S. dollars), for the account of each Issuing Bank, the following fees in respect of Letters of Credit:
 - (i) a fronting fee equal to (A) the Issuing Bank's prevailing rate (not to exceed 0.125% per annum) <u>times</u> (B) the average aggregate daily maximum amount available to be drawn under all Letters of Credit issued by it and outstanding under this Agreement (determined as of the close of business on any date of determination); *provided* that, in the case of Foreign Currency Letters of Credit, such calculation will be based on the Dollar Equivalent of the maximum amount available to be drawn thereunder; and
 - (ii) such documentary and processing charges for any Issuance, amendment, transfer or payment of a Letter of Credit as are in accordance with such Issuing Bank's standard schedule for such charges and as in effect at the time of such Issuance, amendment, transfer or payment, as the case may be.

(c) [Reserved].

- (d) Loan Call Protection. At the time of the effectiveness of any Repricing Event that is consummated during the period commencing on or prior to the six month anniversary of the Third Amendment Effective Date, the Borrower agrees to pay to the Administrative Agent, for the ratable account of each Lender with Initial Term Loans that are either repaid, converted or subjected to a pricing reduction or amendment (including the Initial Term Loans of any Non-Consenting Lender replaced pursuant to Section 2.23 in connection with such conversion or amendment) in connection with such Repricing Event, a fee in an amount equal to 1.0% of (i) in the case of a Repricing Event described in clause (a) of the definition thereof, the aggregate principal amount of all Initial Term Loans prepaid (or converted) in connection with such Repricing Event and (ii) in the case of a Repricing Event described in clause (b) of the definition thereof, the aggregate principal amount of all Initial Term Loans outstanding on such date that are subject to an effective pricing reduction pursuant to such Repricing Event. Such fees shall be earned, due and payable upon the date of the effectiveness of such Repricing Event.
- (e) All fees referred to in Section 2.11(a) through 2.11(d) (except 2.11(b)(i)) will be calculated on the basis of a 360-day year and the actual number of days elapsed. The fees referred to in Sections 2.11(a) and 2.11(b)(i) will be payable quarterly in arrears on the last Business Day of each calendar quarter of each year during the Revolving Credit Commitment Period, commencing on the first such date to occur at the end of the first full calendar quarter ending after the Closing Date, and on the Revolving Credit Commitment Termination Date.
- (f) In addition to the foregoing fees, the Borrower agrees to pay to Agents such other fees in the amounts and at the times separately agreed upon.
- (g) Once paid, none of the foregoing fees will be refundable under any circumstances.

2.12 Scheduled Payments.

(a) The Borrower will repay to the Administrative Agent for the ratable account of

the Lenders:

- (i) on the last Business Day of each Fiscal Quarter (commencing with the Fiscal Quarter ending March 31, 2018, which is the first full Fiscal Quarter after the Closing Date) an aggregate principal amount equal to 0.25% of the original aggregate principal amount of all Initial Term Loans outstanding on the Closing Date (which, for the avoidance of doubt, is \$562,500 per calendar quarter, subject to adjustment as provided in clause (c) below), and
- (ii) on the Term Loan Maturity Date, the aggregate principal amount of all Initial Term Loans outstanding on such date.
- (b) In the event any Incremental Term Loans, Extended Term Loans or Refinancing Term Loans are made, such Incremental Term Loans, Extended Term Loans or Refinancing Term Loans will be repaid in such installments as may be set forth in the applicable Incremental Amendment, Extension Amendment or Refinancing Amendment, as applicable.
 - (c) Notwithstanding the foregoing clauses (a) and (b):
 - (i) any installment payments contemplated by clause (a) or (b) above will be reduced in connection with any voluntary or mandatory prepayments of the Term Loans in accordance with Sections 2.13, 2.14 and 2.15, as applicable, or any Discounted Prepayments of the Term Loans in accordance with Section 2.25 or 10.6(j);
 - (ii) the rate of amortization (or the amount of any installment) with respect to any Class of Loans may be increased (and the provisions of clause (a)(i) or the applicable Incremental Amendment, Extension Amendment or Refinancing Amendment may be amended accordingly) without the consent of the Lenders or the Administrative Agent in connection with the incurrence of any subsequent Incremental Term Loans, Extended Term Loans or Refinancing Term Loans that also comprise part of such Class of Loans; and
 - (iii) the Term Loans, together with all other amounts owed hereunder with respect thereto, will, in any event, be paid in full no later than the applicable Term Loan Maturity Date.

2.13 Voluntary Prepayments/Commitment Reductions.

(a) <u>Voluntary Prepayments</u>. Any time and from time to time, with respect to any Type of Loan, the Borrower may prepay the Loans, in whole or in part, on any Business Day in whole or in part, in an aggregate minimum amount of and integral multiples in excess of that amount (or, in each case, if less the entire amount thereof), and upon prior written notice given to the Administrative Agent, by 12:00 noon (New York City time) on the applicable date indicated below, in each case, as set forth in the following table:

Class of Loans	Minimum Amount	<u>Integral Multiple</u>	D V .:
			<u>Prior Notice</u>
Base Rate Loans	\$100,000	\$50,000	One Business Day
Eurodollar RateSOFR Loans	\$100,000	\$50,000	Three Business Days

Any amounts received after such time on such date will be deemed to have been received on the next succeeding Business Day. Upon the giving of any such notice, the principal amount of the Loans specified in such notice will become due and payable without premium or penalty (except as set forth in Section 2.11(d) and subject to Section 2.18(c)) on the prepayment date specified therein; *provided* that such notice may be conditioned on receiving the proceeds necessary for such prepayment in a refinancing or otherwise. Any such voluntary prepayment will be applied as specified in Section 2.15(a). The foregoing provisions will not apply with respect to any Discounted Prepayment governed by Section 2.25.

(b) <u>Voluntary Revolving Credit Commitment Reductions</u>. The Borrower may, upon not less than three (3) Business Days' prior written notice, at any time and from time to time terminate in whole or permanently reduce in part, without premium or penalty, the Revolving Credit Commitments in an amount up to the amount by which the Revolving Credit Limit exceeds the Total Utilization of Revolving Credit Commitments at the time of such proposed termination or reduction; *provided* that any such partial reduction of the Revolving Credit Commitments must be in an aggregate minimum amount of \$100,000 and integral multiples of \$50,000 in excess of that amount (or, in each case, if less the entire amount thereof); *provided*, *further*, that the Borrower may rescind any notice of termination under this Section 2.13(b) if such notice was delivered agent will designate the date (which must be a Business Day) of such termination or reduction and the amount of any partial reduction, and such termination or reduction of the Revolving Credit Commitments will be effective on the date specified in the Borrower's notice and will reduce the Revolving Credit Commitment of each Lender proportionately to its Pro Rata Share thereof.

2.14 Mandatory Prepayments/Commitment Reductions.

- (a) <u>Asset Sales.</u> No later than the fifth Business Day following the date of receipt by the Borrower or any Subsidiary of any Net Cash Proceeds from Asset Sales made pursuant to Section 6.8(e), the Borrower will prepay, or cause to be prepaid, the Term Loans in accordance with Section 2.15(b) in an aggregate amount equal to 100% of such excess (subject to Sections 2.15(e) and 2.15(f)); *provided* that:
 - (i) the Borrower will have the option, directly or through one or more Subsidiaries, to invest such Net Cash Proceeds within three hundred sixty-five (365) days of receipt thereof (subject to extension as provided in subclause (ii) below) in assets of the type used or useful in the Business;
 - (ii) if the Borrower or any Subsidiary enters into a legally binding commitment (and has provided the Administrative Agent a copy of such binding commitment) to invest such Net Cash Proceeds within the 365-day period specified in subclause (i) above, it may directly or through one or more Subsidiaries, so invest such Net Cash Proceeds within one hundred eighty (180) days following the end of such initial 365-day period; and
 - (iii) pending any investment of any Net Cash Proceeds pursuant to the foregoing subclauses (i)-(ii), such Net Cash Proceeds may be applied to prepay Revolving Loans to the extent then outstanding (without a reduction in Revolving Credit Commitments).
- (b) <u>Casualty Events.</u> No later than the fifth Business Day following the date of receipt by the Borrower or any Subsidiary, or the Administrative Agent as loss payee, of any Net Cash Proceeds from a Casualty Event exceeding \$5,000,000 in any year, the Borrower will prepay, or cause to be prepaid, the Term Loans in accordance with Section 2.15(b) in an aggregate amount equal to 100% of such excess (subject to Sections 2.15(e) and 2.15(f)); *provided* that:
 - (i) the Borrower will have the option, directly or through one or more of the Subsidiaries, to invest such Net Cash Proceeds within three hundred sixty-five (365) days of receipt thereof (subject to extension as provided in subclause (ii) below) in assets used or useful in the Business, which investment may include the repair, restoration or replacement of the applicable assets thereof:
 - (ii) if the Borrower or any Subsidiary enters into a legally binding commitment (and has provided the Administrative Agent a copy of such binding commitment) to invest such Net Cash Proceeds within the 365-day period specified in subclause (i) above, it may directly or through one or more of the Subsidiaries, so invest such Net Cash Proceeds within one hundred eighty (180) days following the end of such initial 365-day period; and
 - (iii) pending any such investment such Net Cash Proceeds pursuant to the foregoing clauses (i)-(ii), such Net Cash Proceeds may be applied to prepay Revolving Loans to the extent then outstanding (without a reduction in Revolving Credit Commitments).
- (c) <u>Issuance of Debt.</u> No later than the first Business Day following receipt by the Borrower or any Subsidiary of any Net Cash Proceeds from the incurrence of any Indebtedness of the Borrower or any Subsidiary (other than any Indebtedness permitted to be incurred or issued pursuant to Section 6.1 (excluding Credit Agreement Refinancing Indebtedness and Replacement Term Loans)), the Borrower will prepay the Term Loans in accordance with Section 2.15(b) in an aggregate amount equal to 100% of such Net Cash Proceeds.
- (d) <u>Consolidated Excess Cash Flow.</u> In the event that there is positive Consolidated Excess Cash Flow for any Fiscal Year (commencing with the Fiscal Year ending December 31, 2018), the Borrower will, within five (5) days of delivery (or, if later, required delivery) of the annual financial statements pursuant to Section

5.1(a) (the date of such payment, the "ECF Payment Date"), prepay the Term Loans in accordance with Section 2.15(b) in an aggregate amount equal to 50% (such percentage, as it may be reduced as described below, the "ECF Percentage") of the sum of (subject to Sections 2.15(e) and 2.15(f)):

- (i) Consolidated Excess Cash Flow for such Fiscal Year, *minus*
- (ii) the aggregate amount of all voluntary repayments or prepayments of Loans (including Incremental Term Loans) and any other Pari Passu Lien Indebtedness, in each case made during such Fiscal Year or after such Fiscal Year end but prior to the ECF Payment Date (other than (A) repayments or prepayments of Revolving Loans, unless such repayments or prepayments are accompanied by a permanent reduction of the Revolving Credit Commitments in like amount, (B) repurchases or other refinancing of Term Loans pursuant to Section 2.26 or substantially comparable repurchase or refinancing provisions in the definitive documentation governing such other Indebtedness and (C) repayments or prepayments of Loans or such other Indebtedness with proceeds of Funded Debt), *minus*
- (iii) the aggregate amount of all voluntary purchases, repayments or prepayments of the Term Loans (including Incremental Term Loans) and any other Pari Passu Lien Indebtedness made at a discount to par in compliance with Section 2.25 or Section 10.6(j) or comparable provisions in the definitive documentation governing such other Indebtedness (in each case, other than any such purchase, repayment or prepayment made with proceeds of Funded Debt), with such amount being equal to the discounted amount actually paid in respect of such prepayment for such Indebtedness

during such Fiscal Year or after such Fiscal Year end but prior to the ECF Payment Date;

provided that so long as no Default or Event of Default has occurred and is continuing, if, as of the last day of the most recently ended Fiscal Year, the Total Net Leverage Ratio on a Pro Forma Basis (determined for any such period by reference to the applicable Compliance Certificate delivered pursuant to Section 5.1(e), calculating the Total Net Leverage Ratio on a Pro Forma Basis as of the last day of such Fiscal Year) is (i) less than 3.25:1.00 but equal to or greater than 2.75:1.00, the ECF Percentage will be 25% and (ii) less than 2.75:1.00, the ECF Percentage will be 0%.

- (e) <u>Maximum Amount of Revolving Loans</u>. If, on any day, the Total Utilization of Revolving Credit Commitments exceeds the Revolving Credit Limit then in effect the Borrower shall prepay on such day the principal of Revolving Loans in an amount equal to such excess. If, after giving effect to the prepayment of all outstanding Revolving Loans, the aggregate amount of the Letter of Credit Obligations exceeds the Revolving Credit Limit at such time, the Borrower shall pay to the Administrative Agent on such day an amount of cash and/or Cash Equivalents to the amount of such excess (up to a maximum amount equal to the Letter of Credit Obligations at such time), such cash and/or Cash Equivalents to be held as security for all Obligations of the Borrower to the Issuing Banks and the Lenders hereunder in a cash collateral account to be established by the Administrative Agent.
- (f) Maximum Letter of Credit Usage. If, on any day, (i) the Letter of Credit Usage as of such date exceeds the Letter of Credit Sub-limit or (ii) the Letter of Credit Usage with respect to Letters of Credit Issued by an Issuing Bank exceeds the Specified Letter of Credit Commitment of such Issuing Bank (including, without limitation, in either case as a result of the determination by the Administrative Agent of the aggregate amount of the Dollar Equivalents of the Letter of Credit Usage outstanding on any Reset Date pursuant to Section 1.6 hereof), the Borrower shall pay to the Administrative Agent within one Business Day after receiving notice thereof an amount of cash and/or Cash Equivalents equal to the amount of such excess (up to a maximum amount equal to the Letter of Credit Usage at such time), such cash and/or Cash Equivalents to be held as security for all Obligations of the Borrower to the Issuing Banks and the Lenders hereunder in a cash collateral account to be established by the Administrative Agent but which shall be released to the Borrower once the Administrative Agent determines that such excess no longer exists.
- (g) <u>Prepayment Certificate</u>. Concurrently with any prepayment of the Loans pursuant to Sections 2.14(a) through 2.14(d), the Borrower will deliver to the Administrative Agent a calculation of the amount of the applicable net proceeds or Consolidated Excess Cash Flow, as the case may be. In the event that the Borrower will subsequently determine that the actual amount received exceeded the applied pursuant to this Section 2.14, the Borrower will promptly make an additional prepayment of the Loans in an amount equal to such excess, and the Borrower will concurrently therewith deliver to the Administrative Agent a calculation of such excess.

2.15 Application of Prepayments/Reductions.

(a) <u>Application of Voluntary Prepayments</u>. Subject to Section 2.15(d), any prepayment of any Loan pursuant to Section 2.13(a) will be applied as specified by the Borrower in the applicable notice of prepayment and absent any such direction as to the prepayment of such Loans, in direct order of maturity; *provided*

that in any event, any prepayment shall be applied ratably among holders of the same Class of Loans (or, in the case of any Obligations other than Loans, of the same type of such Obligations).

- (b) <u>Application of Mandatory Prepayments</u>. Subject to Section 2.15(d), any amount required to be paid pursuant to Sections 2.14(a) through 2.14(d) will be applied as follows:
 - (i) except as set forth in any Refinancing Amendment, Extension Amendment or Incremental Amendment, such prepayment will be applied to each Class of Term Loans on a *pro rata* basis (in accordance with the respective outstanding principal amounts thereof); *provided* that any prepayment of Term Loans with the Net Cash Proceeds of Credit Agreement Refinancing Indebtedness will be applied solely to each applicable Class of Refinanced Indebtedness, and
 - (ii) such prepayment will be applied to the succeeding installments of each applicable Class of Term Loans in direct order of maturity, with the balance, if any, applied to the amount due at maturity.

Notwithstanding anything to the contrary in any Credit Document, the Borrower may use a portion of the amounts required to be paid pursuant to Sections 2.14(a) and 2.14(b) to prepay, repurchase, redeem, defease or otherwise repay, or offer to prepay, repurchase, redeem, defease or otherwise repay, with such amounts other Pari Passu Lien Indebtedness and the amount required to be paid pursuant to such Sections will be ratably reduced; provided that the definitive documentation in respect of such Pari Passu Lien Indebtedness requires the issuer or borrower thereof to prepay, repurchase, redeem, defease or otherwise repay, or offer to prepay, repurchase, redeem, defease or otherwise repay, such Pari Passu Lien Indebtedness with such amounts, in each case, on a pro rata basis with the outstanding principal amount of Term Loans.

- (c) <u>Application of Prepayments of Loans to Base Rate Loans and Eurodollar RateSOFR</u> Loans. Considering each Class of Loans being prepaid separately, any prepayment thereof will be applied first to Base Rate Loans to the full extent thereof before application to Eurodollar RateSOFR Loans, in each case, in a manner that minimizes the amount of any payments required to be made by the Borrower pursuant to Section 2.18(c).
- (d) <u>Application of Payments or Proceeds</u>. During the continuance of an Event of Default, the Administrative Agent may and will upon the direction of the Required Lenders apply any and all payments received by the Administrative Agent in respect of any Obligation in accordance with Section 8.2. All payments made by a Credit Party to the Administrative Agent after any or all of the Obligations have been accelerated (so long as such acceleration has not been rescinded), including proceeds of Collateral, will be applied in accordance with Section 8.2.
- (e) <u>Waivable Mandatory Prepayment</u>. Anything contained herein to the contrary notwithstanding, so long as any Term Loans are outstanding, in the event the Borrower is required to make any mandatory prepayment pursuant to Section 2.14(a) through (d) (other than any mandatory prepayment with the Net Cash Proceeds of any Credit Agreement Refinancing Indebtedness or Replacement Term Loans) (a "Waivable Mandatory Prepayment"), not less than three (3) Business Days prior to the date (the "Required Prepayment Date") on which the Borrower is are required to make such Waivable Mandatory Prepayment, the Borrower will notify the Administrative Agent of the amount of such prepayment. Each such Lender may exercise its option to refuse any Waivable Mandatory Prepayment by giving written notice to the Borrower and the Administrative Agent of its election to do so on or before the first Business Day prior to the Required Prepayment Date (it being understood that any Lender that does not notify the Borrower and the Administrative Agent of its election to exercise such option on or before the first Business Day prior to the Required Prepayment Date will be deemed to have elected, as of such date, not to exercise such option). On the Required Prepayment Date, the Borrower will pay to the Administrative Agent the amount of the Waivable Mandatory Prepayment, which amount will be applied to those Lenders that have elected not to exercise such option, as prepayment of the Term Loans (which prepayment will be applied to the scheduled installments of principal of the Term Loans of Lenders not electing to exercise such option, in accordance with Section 2.15(b)), with any balance of the Waivable Mandatory Prepayment to be retained by the Borrower and used for any purpose permitted by the terms of this Agreement.
- (f) <u>Repatriation; Foreign Considerations</u>. Notwithstanding any provisions of Section 2.14 or this Section 2.15 to the contrary:
 - (i) to the extent that any or all of the Net Cash Proceeds of any Asset Sale by a Foreign Subsidiary (or a Domestic Subsidiary of a Foreign Subsidiary) giving rise to a prepayment event pursuant to Section 2.14(a) (a "Foreign Disposition"), the Net Cash Proceeds of any Casualty Event from a Foreign Subsidiary (or a Domestic Subsidiary of a Foreign Subsidiary) giving rise to a prepayment event pursuant to Section 2.14(b) (a "Foreign Casualty Event") or Consolidated Excess Cash Flow are prohibited or delayed by applicable local law or restrictions in Organizational Documents of Joint Venture Subsidiaries (including, without

limitation, as to financial assistance, restrictions on upstreaming of cash, corporate benefit restrictions and as to fiduciary and statutory duties of directors and managers) from being repatriated to the United States (each, a "Foreign Mandatory Prepayment Event"), the amount of the Term Loan required to be repaid as a result of such Foreign Mandatory Prepayment Event shall be reduced by the amount of the portion of such Net Cash Proceeds or Consolidated Excess Cash Flow so affected by such local law restrictions (the "Prepayment Deferred Amount") (and no Event of Default will arise therefrom) and such Term Loan repayment obligation shall be deferred so long as the applicable local law will not permit repatriation to the United States (the Borrower hereby agreeing to cause the applicable Subsidiary to promptly take all commercially reasonable actions required by the applicable local law to permit such repatriation), and once such repatriation of any of such affected Net Cash Proceeds or Consolidated Excess Cash Flow is permitted under the applicable local law, the Prepayment Deferred Amount will be promptly (and in any event not later than three (3) Business Days after repatriation of any Net Cash Proceeds or Consolidated Excess Cash Flow) applied (net of costs, expenses and additional Taxes payable or reserved against as a result thereof) to the repayment of the Term Loans pursuant to Section 2.14 to the extent provided therein, and

(ii) to the extent that the Borrower has reasonably determined in good faith that repatriation of any of or all the Net Cash Proceeds of any Foreign Disposition, Net Cash Proceeds of any Foreign Casualty Event or Consolidated Excess Cash Flow would result in material adverse Tax consequences to the Borrower, their Subsidiaries or any direct or indirect equity owners of the Borrower, the amount of the Term Loan required to be repaid as a result of such Foreign Mandatory Prepayment Event shall be reduced by an amount equal to the portion of the Net Cash Proceeds or Consolidated Excess Cash Flow so affected (and no Event of Default will arise therefrom) (the Borrower hereby agreeing to promptly take and cause such Subsidiary to take all commercially reasonable actions to eliminate or minimize any such adverse Tax consequences in furtherance of allowing the repatriation of such Net Cash Proceeds or Consolidated Excess Cash Flow, provided that in no event will the Borrower be required to undertake any action that would result in any material costs or Taxes payable by the Borrower or their Affiliates).

For the avoidance of doubt, while the provisions of Section 2.14 and Section 2.15 may give rise to an obligation on the part of the Credit Parties to repay certain Term Loan amounts, in no event will these provisions require a Foreign Subsidiary to distribute any Net Cash Proceeds or Consolidated Excess Cash Flow or to apply any Net Cash Proceeds or Consolidated Excess Cash Flow to the payment of the Term Loans.

2.16 General Provisions Regarding Payments.

- (a) All payments by the Borrower of principal, interest, fees and other Obligations will be made in Dollars (or, in the case of any reimbursement payment by the Borrower in an Available Foreign Currency pursuant to Section 2.4(d), in such Available Foreign Currency) in same day funds and by wire transfer or ACH transfer (which will be the exclusive means of payment hereunder), without defense, setoff or counterclaim, free of any restriction or condition, and delivered to the Administrative Agent not later than 2:00 p.m. (New York City time) on the date due at the Payment Office (or such other address as the Administrative Agent may from time to time specify in accordance with Section 10.1) for the account of the Lenders; for purposes of computing interest and fees, funds received by the Administrative Agent after that time on such due date will be deemed to have been paid by the Borrower on the next succeeding Business Day. If, for any reason, the Borrower is prohibited by any law from making any required payment hereunder in an Available Foreign Currency, the Borrower shall make such payment in Dollars in the Dollar Equivalent of the Available Foreign Currency payment amount.
- (b) All payments of the principal amount of any Term Loan made pursuant to Section 2.13 will be accompanied by payment of accrued interest on the principal amount being repaid or prepaid, and all such payments will be applied to the payment of interest then due and payable before application to principal.
- (c) The Administrative Agent (or its agent or sub-agent appointed by it) will promptly distribute to each Lender at such address as such Lender may indicate in writing, (i) such Lender's applicable Pro Rata Share of all payments and prepayments of principal and interest due to such Lender pursuant to Sections 2.8, 2.10, 2.12, 2.13 or 2.14, and (ii) all other amounts due to such Lender, including all fees payable with respect thereto, to the extent received by the Administrative Agent.
- (d) Notwithstanding the foregoing provisions hereof, if any Conversion/Continuation Notice is withdrawn as to any Affected Lender or if any Affected Lender makes Base Rate Loans in lieu of its Pro Rata Share of any Eurodollar Rate SOFR Loans, the Administrative Agent will give effect thereto in apportioning payments received thereafter.
- (e) Subject to the provisos set forth in the definition of "Interest Period," whenever any payment to be made hereunder is stated to be due on a day that is not a Business Day, such payment will be made

on the next succeeding Business Day and such extension of time will be included in the computation of the payment of interest hereunder or of the Revolving Credit Commitment fees hereunder.

- (f) [Reserved].
- (g) The Administrative Agent will deem any payment by or on behalf of the Borrower hereunder that is not made in same day funds prior to 2:00 p.m. (New York City time) to be a non-conforming payment. Any such payment will not be deemed to have been received by the Administrative Agent until the later of (i) the time such funds become available funds and (ii) the applicable next Business Day. The Administrative Agent will give prompt written notice to the Borrower if any payment is non-conforming. Any non-conforming payment may constitute or become a Default or Event of Default in accordance with the terms of Section 8.1(a). Interest will continue to accrue on any principal as to which a non-conforming payment is made until such funds become available funds (but in no event less than the period from the date of such payment to the next succeeding applicable Business Day) at the rate determined pursuant to Section 2.10 from the date such amount was due and payable until the date such amount is paid in full.
- (h) Notwithstanding any other provisions hereof, so long as no Event of Default has occurred and is continuing, if any prepayment of Eurodollar RateSOFR Loans is required to be made prior to the last day of the Interest Period therefor, in lieu of making any payment in respect of any such Eurodollar RateSOFR Loan prior to the last day of the Interest Period therefor, the Borrower may, in the sole discretion of the Borrower, deposit an amount sufficient to make any such prepayment otherwise required to be made thereunder together with accrued interest to the last day of such Interest Period into an escrow account designated by the Administrative Agent until the last day of such Interest Period, at which time the Administrative Agent will be authorized (without any further action by or notice to or from the Borrower or any other Credit Party) to apply such amount to the prepayment of such Loans in accordance with the provisions of this Agreement otherwise applicable to such payment. Upon the occurrence and during the continuance of any Event of Default, the Administrative Agent will also be authorized (without any further action by or notice to or from the Borrower or any other Credit Party) to apply such amount to the prepayment of the outstanding Loans in accordance with the provisions of this Agreement otherwise applicable to such payment.
- 2.17 Ratable Sharing. The Lenders hereby agree among themselves that, except as otherwise provided in the Collateral Documents with respect to amounts realized from the exercise of rights with respect to Liens on the Collateral, if any of them, whether by voluntary payment (other than a voluntary prepayment of Loans made and applied in accordance with the terms hereof), through the exercise of any right of set-off or banker's lien, by counterclaim or cross action or by the enforcement of any right under the Credit Documents, or as adequate protection of a deposit treated as cash collateral under the Bankruptcy Code or as a distribution in connection with a plan of reorganization, plan of liquidation or similar dispositive plan, receive payment or reduction of a proportion of the aggregate amount of principal, interest, amounts payable in respect of Letters of Credit, fees and other amounts then due and owing to such Lender hereunder or under the other Credit Documents (collectively, the "Aggregate Amounts Due") to such Lender) which is greater than the proportion received by any other Lender in respect of the Aggregate Amounts Due to such other Lender receiving such proportionately greater payment will (a) notify the Administrative Agent and each other Lender of the receipt of such payment and (b) apply a portion of such payment to purchase participations (which it will be deemed to have purchased from each seller of a participation simultaneously upon the receipt by such seller of its portion of such payment) in the Aggregate Amounts Due to the other Lenders so that all such recoveries of Aggregate Amounts Due will be shared by all of the Lenders in proportion to the Aggregate Amounts Due to them; provided that if all or part of such proportionately greater payment received by such purchasing Lender is thereafter recovered from such Lender upon the bankruptcy or reorganization of the Borrower or otherwise, those purchases will be rescinded and the purchase prices paid for such participations will be returned t

2.18 Making or Maintaining **Eurodollar Rate SOFR** Loans.

(a) <u>Inability to Determine Applicable Interest Rate.</u> <u>InSubject to clause (b) below, in</u> the event that the Administrative Agent determines (which determination will be final and conclusive and binding upon all parties hereto), on any Interest Rate Determination Date with respect to any <u>Eurodollar RateSOFR</u> Loans, that (i) adequate and fair means do not exist for ascertaining the interest rate applicable to such Loans on the basis provided for in the definition of "<u>Eurodollar RateAdjusted Term SOFR</u>" or (ii) <u>the Eurodollar RateAdjusted Term SOFR</u> for any requested Interest Period does not adequately and fairly reflect the cost to Lenders of funding such <u>Eurodollar RateSOFR</u> Loan, the Administrative Agent will on such date give notice (by telefacsimile or by telephone

confirmed in writing) to the Borrower and each Lender of such determination, whereupon (i) no Loans may be made as, or converted to, Eurodollar Rate SOFR Loans until such time as the Administrative Agent notifies the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist and (ii) any Funding Notice or Conversion/Continuation Notice given by the Borrower with respect to the Loans in respect of which such determination was made will be deemed to be rescinded by the Borrower.

- (b) <u>Benchmark Replacement Setting.</u> Notwithstanding anything to the contrary herein or in any other Credit Document:
- (i) On March 5, 2021 the Financial Conduct Authority ("FCA"), the regulatory supervisor of USD LIBOR's administrator ("IBA"), announced in a public statement the future cessation or loss of representativeness of overnight/Spot Next, 1-month, 3-month, 6-month and 12-month USD LIBOR tenor settings. On the earlier of (i) the date that all Available Tenors of USD LIBOR have either permanently or indefinitely ceased to be provided by IBA or have been announced by the FCA pursuant to public statement or publication of information to be no longer representative and (ii) the Early Opt-in Effective Date, if the then-current Benchmark is USD LIBOR, the Benchmark Replacement will replace such Benchmark for all purposes hereunder and under any Loan Document in respect of any setting of such Benchmark on such day and all subsequent settings without any amendment to, or further action or consent of any other party to this Agreement or any other Loan Document. If the Benchmark Replacement is Daily Simple SOFR, all interest payments will be payable on a quarterly basis.
- (i) (iii) Upon the occurrence of a Benchmark Transition Event, the Benchmark Replacement will replace the then-current Benchmark for all purposes hereunder and under any Loan Document in respect of any Benchmark setting at or after 5:00 p.m. on the fifth (5th) Business Day after the date notice of such Benchmark Replacement is provided to the Lenders without any amendment to, or further action or consent of any other party to, this Agreement or any other Loan Document so long as the Administrative Agent has not received, by such time, written notice of objection to such Benchmark Replacement from Lenders comprising the Required Lenders of each Class. At any time that the administrator of the then-current Benchmark has permanently or indefinitely ceased to provide such Benchmark or such Benchmark has been announced by the regulatory supervisor for the administrator of such Benchmark pursuant to public statement or publication of information to be no longer representative of the underlying market and economic reality that such Benchmark is intended to measure and that representativeness will not be restored, the Borrower may revoke any request for a borrowing of, conversion to or continuation of Loans to be made, converted or continued that would bear interest by reference to such Benchmark until the Borrower's receipt of notice from the Administrative Agent that a Benchmark Replacement has replaced such Benchmark, and, failing that, the Borrower will be deemed to have converted any such request into a request for a borrowing of or conversion to ABR Base Rate Loans. During the period referenced in the foregoing sentence, the component of ABR the Base Rate based upon the Benchmark will not be used in any determination of ABR the Base Rate.
- (ii) (iii) In connection with the implementation and administration of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement.
- (iii) (iv)—The Administrative Agent will promptly notify the Borrower and the Lenders of (i) the implementation of any Benchmark Replacement and (ii) the effectiveness of any Benchmark Replacement Conforming Changes. Any determination, decision or election that may be made by the Administrative Agent or, if applicable, any Lender (or group of Lenders) pursuant to this Section 2.18(b), including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section 2.18(b).
- (iv) (v) At any time (including in connection with the implementation of a Benchmark Replacement), (i) if the then-current Benchmark is a term rate (including the Term SOFR or USD LIBOR Reference Rate), then the Administrative Agent may remove any tenor of such Benchmark that is unavailable or non-representative for Benchmark (including Benchmark Replacement) settings and (ii) the Administrative Agent may reinstate any such previously removed tenor for Benchmark (including Benchmark Replacement) settings.
 - (v) (vi) As used in this Section 2.18(b):

- (1) "Available Tenor" means, as of any date of determination and with respect to the then-current Benchmark, as applicable, (x) if the then-current Benchmark is a term rate, any tenor for such Benchmark that is or may be used for determining the length of an Interest Period or (y) otherwise, any payment period for interest calculated with reference to such Benchmark, as applicable, pursuant to this Agreement as of such date.
- (2) "Benchmark" means, initially, USD LIBOR(the Term SOFR Reference Rate; provided that if a replacement of the Benchmark has occurred pursuant to this Section 2.18(b) titled "Benchmark Replacement Setting" with respect to the Term SOFR Reference Rate, then "Benchmark" means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has replaced such prior benchmark rate. Any reference to "Benchmark" shall include, as applicable, the published component used in the calculation thereof.
- (A) for purposes of clause (i) of this Section 2.18(b), the first alternative set forth below that can be determined by the Administrative Agent: (a) the sum of: (i) TermDaily Simple SOFR and (ii) 0.11448% (11.448 basis points) for an Available Tenor of one-month's duration, 0.26161% (26.161 basis points) for an Available Tenor of three-months' duration, and 0.42826% (42.826 basis points) for an Available Tenor of six-months' duration, or (b) the sum of: (i) Daily Simple SOFR and (ii) the spread adjustment selected or recommended by the Relevant Governmental Body for the replacement of the tenor of USD LIBOR with a SOFR-based rate having approximately the same length as the interest payment period specified in clause (i) of this Section 2.18(b); and (B) for purposes of clause (ii) of this Section 2.18(b), the sum of (a) thean alternate benchmark rate and (bii) an adjustment (which may be a positive or negative value or zero), in each case, that has been selected by the Administrative Agent and the Borrower as the replacement for such Available Tenor of such Benchmark giving due consideration to any evolving or then-prevailing market convention, including any applicable recommendations made by the Relevant Governmental Body, for U.S. dollar-denominated syndicated credit facilities at such time:

provided that, if the Benchmark Replacement as determined pursuant to clause

- (A) or (B) above would be less than the Floor, the Benchmark Replacement will be deemed to be the Floor for the purposes of this Agreement and the other Loan Documents; *provided*, *further*, that if the Benchmark Replacement is Daily Simple SOFR, all interest payments will be payable on a monthly basis.
- (4) "Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "ABRBase Rate," the definition of "Business Day," the definition of "Interest Period," timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, the applicability and length of lookback periods, the applicability of breakage provisions, and other technical, administrative or operational matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of such Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement and the other Loan Documents).
- (5) "Benchmark Transition Event" means, with respect to any then-current Benchmark other than USD LIBOR, the occurrence of a public statement or publication of information by or on behalf of the administrator of the then-current Benchmark, the regulatory supervisor for the administrator of such Benchmark, the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York, an insolvency official with jurisdiction over the administrator for such Benchmark, a resolution authority with jurisdiction over the administrator for such Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark, announcing or stating that such administrator has ceased or will cease on a specified date to provide all Available Tenors of such Benchmark, permanently or indefinitely; provided that, at the time of such statement or publication,

there is no successor administrator that will continue to provide any Available Tenor of such Benchmark or (b) all Available Tenors of such Benchmark are or will no longer be representative of the underlying market and economic reality that such Benchmark is intended to measure and that representativeness will not be restored.

- (6) "Daily Simple SOFR" means, for any day, SOFR, with the conventions for this rate (which will include a lookback) being established by the Administrative Agent in accordance with the conventions for this rate recommended by the Relevant Governmental Body for determining "Daily Simple SOFR" for syndicated business loans; *provided* that if the Administrative Agent decides that any such convention is not administratively feasible for the Administrative Agent, then the Administrative Agent may establish another convention in its reasonable discretion.
- (7) "Early Opt-in Effective Date" means, with respect to any Early Opt-in Election, the sixth (6th) Business Day after the date notice of such Early Opt-in Election is provided to the Lenders, so long as the Administrative Agent has not received, by 5:00 p.m. (New York City time) on the fifth (5th) Business Day after the date notice of such Early Opt-in Election is provided to the Lenders, written notice of objection to such Early Opt-in Election from Lenders comprising the Required Lenders.
- (8) "Early Opt-in Election" means the occurrence of: (A) a notification by the Administrative Agent to (or the request by the Borrower to the Administrative Agent to notify) each of the other parties hereto that at least five currently outstanding U.S. dollar-denominated syndicated credit facilities at such time contain (as a result of amendment or as originally executed) a SOFR-based rate (including SOFR, a term SOFR or any other rate based upon SOFR) as a benchmark rate (and such syndicated credit facilities are identified in such notice and are publicly available for review), and (B) the joint election by the Administrative Agent and the Borrower to trigger a fallback from USD LIBOR and the provision by the Administrative Agent of written notice of such election to the Lenders.
- (7) (9) "Floor" means the benchmark rate floor, if any, provided in this Agreement initially (as of the execution of this Agreement, the modification, amendment or renewal of this Agreement or otherwise) with respect to USD LIBOR Adjusted Term SOFR.
- (8) (10) "Relevant Governmental Body" means the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of New York, or any successor thereto.
- (11) "SOFR" means a rate per annum equal to the secured overnight financing rate for such Business Day published by the Federal Reserve Bank of New York (or a successor administrator of the secured overnight financing rate) on the website of the Federal Reserve Bank of New York, currently at http://www.newyorkfed.org (or any successor source for the secured overnight financing rate identified as such by the administrator of the secured overnight financing rate from time to time).
- (12) "Term SOFR" means, for the applicable corresponding tenor, the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body:
- (13) "USD LIBOR" means the London interbank offered rate for U.S. dollars.
- (c) <u>Illegality</u> or Impracticability of Eurodollar Rate of SOFR Loans. In the event that on any date any Lender determines in good faith (which determination will be final and conclusive and binding upon all parties hereto but will be made only after consultation with the Borrower and the Administrative Agent) that the making, maintaining or continuation of its Eurodollar Rate SOFR Loans (i) has become unlawful as a result of compliance by such Lender in good faith with any law, treaty, governmental rule, regulation, guideline or order (or would conflict with any such treaty, governmental rule, regulation, guideline or order not having the force of law even though the failure to comply therewith would not be unlawful), or (ii) has become impracticable, as a result of contingencies occurring after the Closing Date that materially and adversely

Lender" and it will on that day give notice (by telefacsimile or by telephone confirmed in writing) to the Borrower and the Administrative Agent of such determination (which notice the Administrative Agent will promptly transmit to each other Lender). If the Administrative Agent receives a notice from any Lender pursuant to the preceding sentence, then (A) the obligation of such Lender to make Loans as, or to convert Loans to, Eurodollar RateSOFR Loans will be suspended until such notice is withdrawn by such Affected Lender, (B) to the extent such determination by the Affected Lender relates to a Eurodollar RateSOFR Loan then being requested by the Borrower pursuant to a Funding Notice or a Conversion/Continuation Notice, such Lender makes such Loan as (or continue such Loan as or convert such Loan to, as the case may be) a Base Rate Loan, (C) such Lender's obligations to maintain its outstanding Eurodollar RateSOFR Loans (the "Affected Loans") will be terminated at the earlier to occur of the expiration of the Interest Period then in effect with respect to the Affected Loans or when required by law, and (D) the Affected Loans will automatically convert into Base Rate Loans on the date of such termination. Notwithstanding the foregoing, to the extent a feunding Notice or a Conversion/Continuation Notice, the Borrower will have the option, subject to the provisions of Section 2.18(c), to rescind such Funding Notice or Conversion/Continuation Notice as to all Lenders by giving written notice to Administrative Agent of such rescission on the date on which the Affected Lender gives notice of its determination as described above (which notice of rescission the Administrative Agent will promptly transmit to each other Lender). Except as provided in the immediately preceding sentence, nothing in this Section 2.18(b) will affect the obligation of any Lender other than an Affected Lender to make or maintain Loans as, or to convert Loans to, Eurodollar RateSOFR Loans in accordance with the terms hereof.

Compensation for Breakage or Non-Commencement of Interest Periods. In the event of (i) the payment or prepayment (voluntary or otherwise) of any principal of any Eurodollar RateSOFR Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default), (ii) the conversion of any Eurodollar RateSOFR Loan other than on the last day of the Interest Period applicable thereto, (iii) the failure to borrow, convert, continue or prepay any Eurodollar RateSOFR Loan on the date specified in any notice delivered pursuant hereto or (iv) the assignment of any Eurodollar RateSOFR Loan earlier than the last day of the Interest Period applicable thereto as a result of a request by the Borrower pursuant to Section 2.23, then, in any such event, the Borrower will compensate each Lender for the actual loss, cost and expense incurred by such Lender attributable to such event, excluding loss of anticipated profits or margin and without giving to any applicable LIBOR "floor." Floor. A certificate of any Lender computing any amount or amounts that such Lender is entitled to receive pursuant to this Section in reasonable detail will be delivered to the Borrower and will be presumptively correct. The Borrower will pay such Lender the amount shown as due on any such certificate within thirty (30) days after receipt thereof.

(d) <u>Booking of Eurodollar RateSOFR</u> Loans. Any Lender may make, carry or transfer <u>Eurodollar RateSOFR</u> Loans at, to, or for the account of any of its branch offices or the office of an Affiliate of such Lender.

2.19 Increased Costs; Capital Adequacy.

(a) <u>Compensation For Increased Costs and Taxes</u>. Subject to the provisions of Section 2.20 (which will be controlling with respect to the matters covered thereby), in the event that any Lender (which term includes each Issuing Bank for purposes of this Section 2.19(a)) determines in good faith (which determination will, absent manifest error, be final and conclusive and binding upon all parties hereto) that any law, treaty or governmental rule, regulation or order, or any change therein or in the interpretation, administration or application thereof (including the introduction of any new law, treaty or governmental rule, regulation or order), or any determination of a Governmental Authority, in each case that becomes effective after the Closing Date, or compliance by such Lender with any guideline, request or directive issued or made after the Closing Date by any central bank or other Governmental Authority: (i) subjects such Lender (or its applicable Lending Office) to any additional Tax (other than

(A) Indemnified Taxes and (B) Excluded Taxes) with respect to this Agreement or any of the other Credit Documents or any of its obligations hereunder or thereunder or any payments to such Lender (or its applicable Lending Office) of principal, interest, fees or any other amount payable hereunder or thereunder; (ii) imposes, modifies or holds applicable any reserve (including any marginal, emergency, supplemental, special or other reserve), special deposit, compulsory loan, FDIC insurance or similar requirement against assets held by, or deposits or other liabilities in or for the account of, or advances or loans by, or other credit extended by, or any other acquisition of funds by, any office of such Lender (other than any such reserve or other requirements with respect to Eurodollar Rate Loans that are reflected in the definition of "Eurodollar Rate"); or (iii) imposes any other condition (other than with respect to a Tax matter) on or affecting such Lender (or its applicable Lending Office) or its obligations hereunder or the London interbank market; and the result of any of the foregoing is to increase the cost to such Lender of agreeing to make, making or maintaining Loans hereunder or to reduce any amount received or receivable by such Lender (or its applicable Lending Office) with respect thereto; then, in any such case, the Borrower will pay to such Lender, within ten (10) Business Days of receipt of the statement referred to in the next sentence, such additional amount or amounts (in the form of an increased rate of, or a different method of calculating, interest or otherwise as such Lender in its sole discretion may determine) as may be necessary to compensate such Lender for any such increased cost or reduction in amounts received or receivable hereunder. Such

Lender will deliver to the Borrower (with a copy to the Administrative Agent) a written statement, setting forth in reasonable detail the basis for calculating the additional amounts owed to such Lender under this Section 2.19(a), which statement will be conclusive and binding upon all parties hereto absent manifest error.

- (b) <u>Capital Adequacy Adjustment.</u> In the event that any Lender (which term includes each Issuing Bank for purposes of this Section 2.19(b)) determines that the adoption, effectiveness, phase-in or applicability after the Closing Date of any law, rule or regulation (or any provision thereof) regarding capital or liquidity requirements, or any change therein or in the interpretation or administration thereof by any Governmental Authority, central bank or comparable agency charged with the interpretation or administration thereof, or compliance by any Lender (or its applicable Lending Office) or any entity controlling any Lender with any guideline, request or directive regarding capital or liquidity requirements (whether or not having the force of law) of any such Governmental Authority, central bank or comparable agency, has or would have the effect of reducing the rate of return on the capital of such Lender or any entity controlling such Lender as a consequence of, or with reference to, such Lender's Loans or Revolving Credit Commitments or Letters of Credit, or participations therein or other obligations hereunder with respect to the Loans or the Letters of Credit to a level below that which such Lender or such controlling entity could have achieved but for such adoption, effectiveness, phase-in, applicability, change or compliance (taking into consideration the policies of such Lender or such controlling entity with regard to capital or liquidity requirements), then from time to time, within five (5) Business Days after receipt by the Borrower from such Lender of the statement referred to in the next sentence, the Borrower will pay to such Lender such additional amount or amounts as will compensate such Lender or such controlling entity for such reduction. Such Lender will deliver to the Borrower (with a copy to the Administrative Agent) a written statement will be conclusive and binding upon all parties hereto absent manifest error.
- (c) <u>Dodd-Frank; Basel III.</u> Notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case in respect of this clause (ii) pursuant to Basel III, will, in each case, be deemed to be a change in law, treaty or governmental rule, regulation or order under subsection (a) above and/or a change in law, rule or regulation (or any provision thereof) regarding capital or liquidity requirements under subsection (b) above, as applicable, regardless of the date enacted, adopted or issued.
- (d) <u>Delay in Requests</u>. The failure or delay on the part of any Lender (which term will include each Issuing Bank for purposes of this Section 2.19(d)) to demand compensation pursuant to the foregoing provisions of this Section 2.19 will not constitute a waiver of such Lender's right to demand such compensation; *provided* that the Borrower will not be required to compensate a Lender pursuant to the foregoing provisions of this Section 2.19 for any increased costs incurred or reductions suffered more than one hundred and eighty (180) days prior to the date that such Lender sends the Borrower written notice of such Lender's intention to claim compensation therefor; *provided further* that if the circumstance giving rise to such increased costs or reductions suffered is retroactive, then the 180-day period referred to above will be extended to include the period of retroactive effect thereof.

2.20 Taxes; Withholding, etc.

- (a) Except as required by Law or otherwise provided in this Section 2.20, each payment by any Credit Party under any Credit Document will be made without deduction or withholding for any Taxes with respect thereto.
- (b) If any Taxes will be required by any Law to be deducted from or in respect of any amount payable under any Credit Document to any Recipient (i) to the extent such Taxes required to be deducted are Indemnified Taxes, such amount will be increased as necessary to ensure that, after all required deductions for Indemnified Taxes are made (including deductions for Indemnified Taxes applicable to any increases to any amount under this Section 2.20(b)(i)), such Recipient receives the amount it would have received had no such deductions for Indemnified Taxes been made, (ii) the relevant Credit Party or the Administrative Agent, as applicable, will make such deductions, (iii) the relevant Credit Party or the Administrative Agent, as applicable, will timely pay the full amount deducted to the relevant taxing authority or other authority in accordance with applicable Law and (iv) as soon as practicable after any such payment by a Credit Party is made, the relevant Credit Party will deliver to the Administrative Agent an original or certified copy of a receipt evidencing such payment, a copy of the return reporting such payment or other evidence of payment reasonably satisfactory to the Administrative Agent.
- (c) In addition, the Credit Parties will timely pay to the relevant Governmental Authority, in accordance with applicable law, any Other Taxes. As soon as practicable, after the date of any payment of Other Taxes by any Credit Party pursuant to this Section 2.20(c), the Borrower will deliver to the Administrative Agent the original or a certified copy of a receipt evidencing payment thereof, a copy of the return reporting such payment or other evidence of payment reasonably satisfactory to the Administrative Agent.

- (d) Without duplication of Section 2.20(b) or Section 2.20(c), the Credit Parties will jointly and severally indemnify and reimburse, within 30 days after receipt of a written demand therefor (with copy to the Administrative Agent), each Recipient for all Indemnified Taxes (including any Indemnified Taxes imposed by any jurisdiction on amounts payable under this Section 2.20) imposed on or with respect to any payment made by the Credit Parties hereunder, and any reasonable out-of-pocket expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally asserted. Any Recipient claiming indemnity pursuant to this Section 2.20(d) will notify the Credit Parties of the imposition of the relevant Indemnified Taxes as soon as practicable after the Recipient becomes aware of such imposition. A certificate of the Recipient (or of the Administrative Agent on behalf of such Recipient) claiming any compensation under this clause (d), setting forth in reasonable detail the amounts to be paid thereunder and delivered to the Borrower with copy to the Administrative Agent, will be conclusive, binding and final for all purposes, absent manifest error.
- (e) Without limiting Section 2.21, any Lender claiming any additional amounts payable pursuant to this Section 2.20 will use its reasonable efforts (consistent with its internal policies and Law) to change the jurisdiction of its Lending Office if such a change would reduce any such additional amounts (or any similar amount that may thereafter accrue) and would not, in the sole determination of such Lender, be otherwise disadvantageous to such Lender.

(f)

- (i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Credit Document will deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, will deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 2.20(f)(ii)(A), Section 2.20(f)(ii)(B) and Section 2.20(f)(ii)(D) below) will not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.
 - (ii) Without limiting the generality of the foregoing:
 - (A) any U.S. Lender will deliver to the Borrower and the Administrative Agent, on or prior to the date on which such Lender becomes a party to this Agreement from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent, executed originals of IRS Form W-9 (certifying that such U.S. Lender is exempt from U.S. federal backup withholding tax);
 - (B) Any Non-U.S. Lender will, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as will be requested by the recipient), on or prior to the date on which such Non-U.S. Lender becomes a party to this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:
 - 1. in the case of a Non-U.S. Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Credit Document, executed originals of IRS Form W-8BEN or W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Credit Document, executed originals of IRS Form W-8BEN or W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;
 - 2. executed originals of IRS Form W-8ECI or W-8EXP;
 - 3. in the case of a Non-U.S. Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Internal Revenue Code, (x) a certificate substantially in the form of Exhibit F-1 to the effect that

such Non-U.S. Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Internal Revenue Code, a "10-percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Internal Revenue Code or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Internal Revenue Code (a "U.S. Tax Compliance Certificate") and (y) executed originals of IRS Form W-8BEN or W-8-BEN-E; or

- 4. to the extent a Non-U.S. Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN or W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit F-2, IRS Form W-9 and/or other certification documents from each beneficial owner, as applicable; *provided* that, if the Non-U.S. Lender is a partnership and one or more direct or indirect partners of such Non-U.S. Lender are claiming the portfolio interest exemption, such Non-U.S. Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit F-4 on behalf of each such direct and indirect partner;
- (C) any Non-U.S. Lender will, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as will be requested by the recipient), on or prior to the date on which such Non-U.S. Lender becomes a party to this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and
- (D) if a payment made to a Recipient under any Credit Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Recipient were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Internal Revenue Code, as applicable), such Recipient will deliver to the Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Internal Revenue Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Recipient has complied with such Recipient's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this Section 2.20(f)(ii)(D), "FATCA" will include any amendments made to FATCA after the date of this Agreement.

Each Recipient agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it will update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

- (g) Any Administrative Agent that (i) is a U.S. Person will deliver to the Borrower, on or prior to the date on which it becomes a party to this Agreement (and from time to time thereafter upon the reasonable request of the Borrower), executed originals of IRS Form W-9 certifying that such Administrative Agent is exempt from U.S. federal backup withholding tax or (ii) is not a U.S. Person will deliver to the Borrower, on or prior to the date on which it becomes a party to this Agreement (and from time to time thereafter upon the reasonable request of the Borrower), executed originals of (A) IRS Form W-8ECI (with respect to any payments to be received on its own behalf) and (B) IRS Form W-8IMY (for all other payments) establishing that the Borrower can make payments to the Administrative Agent without deduction or withholding of any Taxes imposed by the United States, including Taxes imposed under FATCA.
- (h) If any Recipient determines in its sole discretion exercised in good faith that it has received a refund (which for purposes of this paragraph shall include a credit received in lieu of a refund) of any Taxes as to which it has been indemnified pursuant to this Section 2.20 (including by the payment of additional amounts pursuant to this Section 2.20), it will pay to the Borrower an amount equal to such refund (but only to the extent of indemnity payments made or additional amounts paid under this Section 2.20 with respect to the Taxes giving rise to such refund), net of all reasonable, documented, out-of-pocket expenses of such Recipient and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). The

Borrower, upon the request of such Recipient, will repay to such Recipient the amount paid over pursuant to this Section 2.20(h) (*plus* any penalties, interest or other charges properly imposed by the relevant Governmental Authority) in the event that such Recipient is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (h), in no event will the Recipient be required to pay any amount to a Credit Party pursuant to this paragraph (h) the payment of which would place the Recipient in a less favorable net after-Tax position than the Recipient would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph will not be construed to require any Recipient to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to any Credit Party or any other Person.

- (i) Each Lender will severally indemnify the Administrative Agent, within 10 days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that any Credit Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of the Credit Parties to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 10.6(g) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Credit Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent will be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Credit Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this Section 2.20(i).
- (j) Each party's obligations under this Section 2.20 will survive the resignation or replacement of the Administrative Agent or any assignment of right by, or the replacement of, a Recipient.
- **2.21 Obligation to Mitigate**. Each Lender (which term includes each Issuing Bank for purposes of this Section 2.21) agrees that, as promptly as practicable after the officer of such Lender responsible for administering its Loans or Letters of Credit, as the case may be, becomes aware of the occurrence of an event or the existence of a condition that would cause such Lender to become an Affected Lender or that would entitle such Lender to receive payments under Section 2.18, 2.19 or 2.20, it will, to the extent not inconsistent with the internal policies of such Lender and any applicable legal or regulatory restrictions, use reasonable efforts (a) to make, Issue, fund or maintain its Credit Extensions, including any Affected Loans, through another office of such Lender, or (b) to take such other measures as such Lender may deem reasonable, if as a result thereof the circumstances which would cause such Lender to be an Affected Lender would cease to exist or the additional amounts which would otherwise be required to be paid to such Lender pursuant to Section 2.18, 2.19 or 2.20 would be materially reduced and if, as determined by such Lender in its sole discretion, the making, Issuing, funding or maintaining of such Revolving Credit Commitments, Loans or Letters of Credit through such other office or in accordance with such other measures, as the case may be, would not otherwise adversely affect such Revolving Credit Commitments, Loans or Letters of Credit or the interests of such Lender; *provided* that such Lender will not be obligated to utilize such other office pursuant to this Section 2.21 unless the Borrower agrees to pay all incremental expenses incurred by such Lender as a result of utilizing such other office as described above. A certificate as to the amount of any such expenses payable by the Borrower pursuant to this Section 2.21 (setting forth in reasonable detail the basis for requesting such amount) submitted by such Lender to the Borrower (with a copy to the Administrative Agent) will be conclus
- **2.22 Defaulting Lenders**. Anything contained herein to the contrary notwithstanding, in the event that any Lender becomes a Defaulting Lender, then:
- (a) during any Default Period with respect to such Defaulting Lender, such Defaulting Lender will be deemed not to be a "Lender" for purposes of voting on any matters (including the granting of any consents or waivers, except with respect to Section 10.5(b) or any other matter which matter disproportionately affects such Defaulting Lender) with respect to any of the Credit Documents;
- (b) to the extent permitted by applicable law, until such time as the Default Excess with respect to such Defaulting Lender has been reduced to zero, any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Section 8 or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 10.4 shall be applied at such time or times as may be determined by the Administrative Agent as follows: first, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; second, to the payment on a pro rata basis of any amounts owing by such Defaulting Lender to any Issuing Bank hereunder; third, to Cash Collateralize the Issuing Banks' fronting exposure with respect to such Defaulting Lender in accordance with Section 2.4(h); fourth, as the Borrower may request (so long as no Default or Event of Default has occurred and is continuing), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Administrative Agent; fifth, if so determined by the Administrative Agent and the Borrower, to be held in a

deposit account and released *pro rata* in order to (i) satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement and (ii) Cash Collateralize the Issuing Banks' future fronting exposure with respect to such Defaulting Lender with respect to such future Letters of Credit issued under this Agreement, in accordance with Section 2.4(h); *sixth*, to the payment of any amounts owing to the Lenders or the Issuing Banks as a result of any judgment of a court of competent jurisdiction obtained by any Lender or the Issuing Banks against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; *seventh*, so long as no Default or Event of Default has occurred and is continuing, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and *eighth*, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; *provided* that if (i) such payment is a payment of the principal amount of any Loans or Letter of Credit Usage in respect of which such Defaulting Lender has not fully funded its appropriate share and (ii) such Loans were made or the related Letters of Credit were issued at a time when the conditions set forth in Section 3.2 were satisfied or waived, such payment shall be applied solely to pay the Loans of, and Letter of Credit Usage owed to, all non-Defaulting Lenders on a *pro rata* basis prior to being applied to the payment of any Loans of, or Letter of Credit Usage owed to, such Defaulting Lender until such time as all Loans and funded and unfunded participations in Letter of Credit Obligations are held by the Lenders *pro rata* in accordance with the Commitments under the applicable Facility without giving effect to Section 2.22(c). Any payments, prepayments or other amounts pai

- (c) all or any part of a Defaulting Lender's participation in Letter of Credit Obligations will be reallocated among the non-Defaulting Lenders holding Revolving Credit Commitments on a *pro rata* basis according to their Revolving Credit Commitments (calculated without regard to such Defaulting Lender's Revolving Credit Commitment) but only to the extent that such reallocation does not cause any non-Defaulting Lender's Revolving Credit Exposure (defined, solely for purposes of this clause (c), by reference to clause (b) of the definition of "Revolving Credit Exposure") at such time to exceed such Lender's Revolving Credit Commitment (it being understood that no reallocation hereunder will constitute a waiver or release of any claim of a non-Defaulting Lender against a Defaulting Lender as a result of such non-Defaulting Lender's increased exposure following such reallocation); *provided* that:
 - (i) if the reallocation described in this clause (c) cannot, or can only partially, be effected, the Borrower will, without prejudice to any right or remedy available to it hereunder or under Law, within one (1) Business Day following written notice by the Administrative Agent Cash Collateralize such Defaulting Lender's portion of the Revolving Credit Exposure in respect of Letters of Credit (after giving effect to any partial reallocation pursuant to this clause (c)) in accordance with the procedures set forth in Section 2.4(h) for so long as such Revolving Credit Exposure in respect of Letters of Credit is outstanding;
 - (ii) if the Borrower Cash Collateralizes any portion of such Defaulting Lender's Revolving Credit Exposure in respect of Letters of Credit pursuant to this proviso, the Borrower will not be required to pay any letter of credit participation fee to such Defaulting Lender during the period such Defaulting Lender's Revolving Credit Exposure in respect of Letters of Credit is Cash Collateralized;
 - (iii) if the Revolving Credit Exposure in respect of Letters of Credit of the non-Defaulting Lenders is reallocated pursuant to this clause (c), then the fees payable to the Lenders pursuant to Section 2.11(a)(i) will be adjusted in accordance with such non-Defaulting Lenders' reallocated Revolving Credit Exposure in respect of Letters of Credit; and
 - (iv) if any Defaulting Lender's Revolving Credit Exposure in respect of Letters of Credit is neither Cash Collateralized nor reallocated pursuant to this clause (c), then, without prejudice to any rights or remedies of the Issuing Banks or any Lender hereunder, all commitment fees that otherwise would have been payable to such Defaulting Lender (solely with respect to the portion of such Defaulting Lender's Commitment that was utilized by such Revolving Credit Exposure in respect of Letters of Credit) and letter of credit participation fee payable with respect to such Defaulting Lender's Revolving Credit Exposure in respect of Letters of Credit will be payable to the applicable Issuing Banks until such Revolving Credit Exposure in respect of Letters of Credit is Cash Collateralized and/or reallocated;
- (d) the Total Utilization of Revolving Credit Commitments as at any date of determination will be calculated as if such Defaulting Lender has funded all Defaulted Loans. No Commitment of any Lender will be increased or otherwise affected, and, except as otherwise expressly provided in this Section 2.22, performance by the Borrower of its obligations hereunder and the other Credit Documents will not be excused or otherwise

modified as a result of any Funding Default or the operation of this Section 2.22. The rights and remedies against a Defaulting Lender under this Section

2.22 are in addition to other rights and remedies that the Borrower may have against such Defaulting Lender with respect to any Funding Default and that the Administrative Agent or any Lender may have against such Defaulting Lender with respect to any Funding Default; and

(e) as long as no Default or Event of Default has occurred and is continuing or would result therefrom, the Borrower may, in its sole discretion, elect to prepay any Defaulting Lender and/or terminate the Commitments of any Defaulting Lender, in each case, without penalty or premium; *provided* that, if such Defaulting Lender is a Revolving Lender, the Required Revolving Lenders shall have consented to such prepayment and/or termination.

For purposes of this Agreement, (i) "Funding Default" means, with respect to any Defaulting Lender, the occurrence of any of the events set forth in the definition of "Defaulting Lender," and (ii) "Defaulted Loan" means any Loan of a Defaulting Lender with respect to which such Defaulting Lender is a Defaulting Lender.

2.23 Removal or Replacement of a Lender. Anything contained herein to the contrary notwithstanding, in the event that:

- (a) (i) any Lender (an "Increased Cost Lender") gives notice to the Borrower that such Lender is an Affected Lender or that such Lender is entitled to receive payments under Section 2.18, 2.19 or 2.20, (ii) the circumstances that have caused such Lender to be an Affected Lender or that entitle such Lender to receive such payments remain in effect, and (iii) such Lender fails to withdraw such notice within five (5) Business Days after the Borrower's request for such withdrawal; or
- (b) (i) any Lender becomes a Defaulting Lender, (ii) the Default Period for such Defaulting Lender remains in effect, and (iii) such Defaulting Lender fails to cure the default as a result of which it has become a Defaulting Lender within five (5) Business Days after the Borrower's request that it cures such default; or
- (c) in connection with any proposed amendment, modification, termination, waiver or consent with respect to any of the provisions of a Credit Document as contemplated by Section 10.5(b), the consent of Required Lenders or Required Revolving Lenders, as applicable, with respect to which has been obtained but the consent of one or more of such other Lenders (each a "Non-Consenting Lender") whose consent is required has not been obtained;

then, with respect to each such Increased Cost Lender, Defaulting Lender or Non-Consenting Lender (the "Terminated Lender"), the Borrower may, by giving written notice to the Administrative Agent and any Terminated Lender of its election to do so, elect to cause such Terminated Lender (and such Terminated Lender hereby irrevocably agrees) to assign its outstanding Loans and its Revolving Credit Commitments, if any, in full to one or more Eligible Assignees (each a "Replacement Lender") in accordance with the provisions of Section 10.6 and the Borrower will pay the fees, if any, payable thereunder in connection with any such assignment from an Increased Cost Lender or a Non-Consenting Lender and the Defaulting Lender will pay the fees, if any, payable thereunder in connection with any such assignment from such Defaulting Lender; provided that (i) on the date of such assignment, the Replacement Lender must pay to a Terminated Lender that is not a Defaulting Lender an amount equal to the sum of (A) an amount equal to the principal of, and all accrued interest on, all outstanding Loans of the Terminated Lender, (B) an amount equal to all unreimbursed drawings that have been funded by such Terminated Lender, together with all then unpaid interest with respect thereto at such time and (C) an amount equal to all accrued, but theretofore unpaid fees owing to such Terminated Lender pursuant to Section 2.11; (ii) on the date of such assignment, the Borrower must pay any amounts payable to such Terminated Lender pursuant to Section 2.11(d) (if applicable), 2.18(c), 2.19 or 2.20; and (iii) in the event such Terminated Lender is a Non-Consenting Lender, each Replacement Lender will consent, at the time of such assignment, to each matter in respect of which such Terminated Lender was a Non-Consenting Lender; provided that the Borrower may not make such election with respect to any Terminated Lender that is also an Issuing Bank unless, prior to the effectiveness of such election, the Borrower have caused each outstanding Letter of Credit Issued thereby to be cancelled, backstopped or Cash Collateralized. Upon the assignment of all amounts owing to any Terminated Lender and the termination or assignment of such Terminated Lender's Revolving Credit Commitments, if any, such Terminated Lender will no longer constitute a "Lender" for purposes hereof; provided that any rights of such Terminated Lender to indemnification hereunder will survive as to such Terminated Lender. Each Lender agrees that if the Borrower exercises its option hereunder to cause an assignment by such Lender as a Non-Consenting Lender or Terminated Lender, such Lender will, promptly after receipt of written notice of such election, execute and deliver all documentation necessary to effectuate such assignment in accordance with Section 10.6. In the event that a Lender does not comply with the requirements of the immediately preceding sentence within one (1) Business Day after receipt of such notice, each Lender hereby grants to the Administrative Agent an irrevocable power of attorney (which power of attorney will be coupled with an interest) to execute and deliver such documentation as may be required to give effect to an assignment in accordance with Section 10.6 on behalf of a Non-Consenting Lender or Terminated Lender and any such documentation so executed by the Administrative Agent will be effective for purposes of documenting an assignment pursuant to Section 10.6. Notwithstanding the foregoing, each Lender

hereby grants to the Administrative Agent an irrevocable power of attorney (which power of attorney will be coupled with an interest) to execute and deliver, on or after the First Amendment Effective Date (not giving effect to any notice requirement) such documentation as may be required to give effect to an assignment in accordance with Section 10.6 on behalf of a Non-Consenting Lender in connection with the First Amendment and any such documentation so executed by the Administrative Agent will be effective for purposes of documenting an assignment pursuant to Section 10.6, which power of attorney shall expire on the three-month anniversary hereof.

2.24 Incremental Facilities.

- (a) Notice. At any time and from time to time, on one or more occasions, the Borrower may, by notice to the Administrative Agent, (i) increase the aggregate principal amount of any outstanding tranche of Term Loans or add one or more additional tranches of term loans under the Credit Documents (the "Incremental Term Facilities" and the term loans made thereunder, the "Incremental Term Loans") or (ii) increase the aggregate principal amount of Revolving Credit Commitments on the same terms as the then-existing Revolving Credit Commitments (the "Incremental Revolving Facilities" and the revolving loans and other extensions of credit made thereunder, the "Incremental Revolving Loans") (each such increase or tranche pursuant to clauses (i) and (ii), an "Incremental Facility" and the loans or other extensions of credit made thereunder, the "Incremental Loans").
- (b) Ranking. Incremental Facilities will (i) rank pari passu in right of payment and security with the Initial Term Loans and the Initial Revolving Commitments, (ii) be secured by the same Liens on the Collateral (with the same ranking in priority) that secure the Initial Revolving Commitments and the Initial Term Loans and (iii) benefit from the same Guarantees as the Initial Revolving Commitments and the Initial Term Loans.
- (c) Size. The aggregate principal amount of Incremental Facilities on any date Indebtedness thereunder is first incurred (or in the case of Incremental Revolving Facilities, first committed), together with the aggregate principal amount of Incremental Equivalent Debt incurred as of such date, will not exceed an amount equal to the sum of the Incremental Fixed Amount and the Incremental Ratio Amount (the "Incremental Amount"). Calculation of the Incremental Ratio Amount, if used, will be made on Pro Forma Basis and for purposes of the calculation thereof all Incremental Revolving Facilities shall be deemed fully utilized. Each Incremental Amendment executed in connection with an Incremental Facility will identify whether all or any portion of such Incremental Facility is being incurred pursuant to the Incremental Fixed Amount or the Incremental Ratio Amount. For the avoidance of doubt, if the Borrower incurs indebtedness under an Incremental Facility under the Incremental Fixed Amount on the same date that it incurs indebtedness under the Incremental Ratio Amount, then the First Lien Net Leverage Ratio, Secured Net Leverage Ratio or Total Net Leverage Ratio, as applicable, will be calculated with respect to such incurrence under the Incremental Ratio Amount without regard to any incurrence of indebtedness under the Incremental Fixed Amount. Unless the Borrower elects otherwise, each Incremental Facility will be deemed incurred first under the Incremental Ratio Amount to the extent permitted, with the balance incurred under the Incremental Fixed Amount. Each Incremental Facility will be in an integral multiple of \$500,000 and in an aggregate principal amount that is not less than \$2,500,000 (or such lesser minimum amount approved by the Administrative Agent in its reasonable discretion); provided that such amount may be less than such minimum amount or integral multiple amount if such amount represents all the remaining availability under the limit set forth above.
- (d) <u>Incremental Lenders</u>. Incremental Facilities may be provided by any existing Lender (it being understood that no existing Lender will have an obligation to make all or any portion of any Incremental Loan) or by any Additional Lender on terms permitted by this Section 2.24; *provided* that the Administrative Agent and/or each Issuing Bank will have consented (in each case, such consent not to be unreasonably withheld, conditioned or delayed) to any such Person's providing Incremental Facilities if such consent would be required under Section 10.6(c)(ii) for an assignment of Loans or Commitments to such Person.
- (e) <u>Incremental Facility Amendments</u>; <u>Use of Proceeds</u>. Each Incremental Facility will become effective pursuant to an amendment (each, an "Incremental Amendment") to this Agreement and, as appropriate, the other Credit Documents, executed by the Borrower, each Person providing such Incremental Facility and the Administrative Agent. Incremental Amendments may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Credit Documents as may be necessary or appropriate, in the reasonable good faith opinion of the Administrative Agent and the Borrower, to effect the provisions of this Section 2.24. An Incremental Amendment may at the election of the Borrower effect such amendments as may be reasonably necessary or advisable so that such Incremental Term Loans and the applicable existing Term Loans form the same Class of Term Loans or so that such Incremental Term Loans are fungible with other outstanding Loans, including by (i) extending or adding "call protection" to any existing tranche of Term Loans, including amendments to Section 2.11(d), and (ii) amending the schedule of amortization payments relating to any existing tranche of Term Loans, including amendments to Section 2.12(a) (*provided* that any such amendment will not decrease any amortization payment to any Lender that would have otherwise been payable to such Lender immediately prior to the effectiveness of the applicable Incremental Amendment); *provided* that such amendments are not adverse to the existing Term Lenders (as determined in good faith by the Borrower). Each of the parties hereto hereby agrees that, upon the effectiveness of any Incremental Amendment, this Agreement and the other

Credit Documents, as applicable, will be amended to the extent necessary to reflect the existence and terms of the Incremental Facility and the Incremental Loans evidenced thereby. This Section 2.24 will supersede any provisions in Section 2.17 or 10.5 to the contrary. The Borrower may use the proceeds of the Incremental Loans for any purpose permitted by this Agreement.

- (f) <u>Conditions</u>. The availability of Incremental Facilities under this Agreement will be subject solely to the following conditions:
 - (i) no Default or Event of Default will have occurred and be continuing on the date such Incremental Loans are incurred or would occur immediately after giving effect thereto, subject to Section 1.5; and
 - (ii) the representations and warranties in the Credit Documents will be true and correct in all material respects (except for representations and warranties that are already qualified by materiality, which representations and warranties will be true and correct in all respects) immediately prior to, and immediately after giving effect to, the incurrence of such Incremental Facility (except to the extent that such representation or warranty expressly relates to an earlier date, in which case such representation or warranty shall be true and correct in all material respects (without duplication of any materiality qualifier contained therein) as of such earlier date); provided that if such Incremental Facility is being provided in connection with a Permitted Acquisition or other permitted Investment or acquisition, the condition set forth in this clause (ii) may be satisfied with (A) the accuracy of customary "specified representations" and "acquisition agreement representations" and (B) such other limitations or exceptions to representations and warranties as may be agreed by the lenders providing such Incremental Facility).
- (g) <u>Terms.</u> Each Incremental Amendment will set forth the amount and terms of the relevant Incremental Facility. The other terms of each tranche of Incremental Term Loans will be as agreed between the Borrower and the Persons providing such Incremental Term Loans; *provided* that:
 - (i) the final maturity date of such Incremental Term Loans will be no earlier than the Latest Term Loan Maturity Date of the Initial Term Loans;
 - (ii) the Weighted Average Life to Maturity of such Incremental Term Loans will be no shorter than the longest remaining Weighted Average Life to Maturity of the Initial Term Loans;
 - (iii) any such Incremental Term Loans may participate on a *pro rata* basis or a less than *pro rata* basis (but not greater than a *pro rata* basis) in any mandatory repayments or prepayments of the Initial Term Loans (other than pursuant to a refinancing or with respect to greater than *pro rata* payments to an earlier maturing tranche); and
 - (iv) the other terms applicable to such Incremental Term Loans are substantially identical to, or (taken as a whole as determined by the Borrower in good faith) no more favorable to the lenders providing such Incremental Term Facility than, those applicable to the Initial Term Loans; provided that this clause (iv) will not apply to (A) interest rate, fees, funding discounts and other pricing terms, (B) redemption, prepayment or other premiums, (C) optional prepayment terms, and (D) covenants and other terms, in each case that are (1) applied to the Term Loans existing at the time of incurrence of such Incremental Term Facility (so that existing Lenders also receive the benefit of such provisions) and/or (2) applicable only to periods after the Latest Term Loan Maturity Date at the time of incurrence of such Indebtedness; provided further, a certificate of the Borrower delivered to the Administrative Agent at least four (4) Business Days prior to the incurrence of such Indebtedness (or such shorter period as may be agreed by the Administrative Agent), together with a reasonably detailed description of the material covenants and events of default of such Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has reasonably determined in good faith that such terms and conditions satisfy the foregoing requirement unless the Administrative Agent notifies the Borrower within such four (4) Business Day period that it disagrees with such determination (including a reasonably detailed description of the basis upon which it disagrees); provided further that, in each case, the operational and agency provisions contained in such documentation are reasonably satisfactory to the Administrative Agent.
- (h) <u>Pricing</u>. The interest rate, fees, and original issue discount for any Incremental Term Loans will be as determined by the Borrower and the Persons providing such Incremental Term Loans; *provided* that the MFN Adjustment will apply to any Incremental Term Loans that constitute MFN Eligible Debt.

- (i) Adjustments to Revolving Loans. Upon each increase in the Revolving Credit Commitments pursuant to this Section 2.24,
- (i) each Revolving Lender immediately prior to such increase will automatically and without further act be deemed to have assigned to each lender providing a portion of such increase (each an "Incremental Revolving Facility Lender"), and each such Incremental Revolving Facility Lender will automatically and without further act be deemed to have assumed, a portion of such Revolving Lender's participations hereunder in outstanding Letters of Credit such that, after giving effect to each such deemed assignment and assumption of participations, the percentage of the aggregate outstanding participations hereunder in Letters of Credit will equal the percentage of the aggregate Revolving Credit Commitments of all Lenders represented by such Revolving Lender's Revolving Credit Commitments; and
- (ii) if, on the date of such increase, there are any Revolving Loans outstanding, such Revolving Loans will on or prior to the effectiveness of such Incremental Revolving Facility be prepaid from the proceeds of Incremental Revolving Loans made hereunder (reflecting such increase in Revolving Credit Commitments), which prepayment will be accompanied by accrued interest on the Revolving Loans being prepaid and any costs incurred by any Revolving Lender in accordance with Section 2.18(c).

The Administrative Agent and the Lenders hereby agree that the minimum borrowing, *pro rata* borrowing and *pro rata* payment requirements contained elsewhere in this Agreement will not apply to the transactions effected pursuant to the immediately preceding sentence.

2.25 Discounted Prepayments.

- (a) Generally. Notwithstanding anything in any Credit Document to the contrary, so long as (i) no Default or Event of Default has occurred and is continuing on both the date a Discounted Prepayment Notice (as defined below) is delivered to the Administrative Agent and Lenders and the date a Discounted Prepayment (as defined below) is made (both before and after giving effect thereto), (ii) all parties to such transaction render a Big Boy Letter and (iii) no proceeds of Revolving Loans are used to make any such Discounted Prepayment, the Borrower or other Credit Party (in such capacity, the "Discounted Prepayment Offeror") will be permitted to (A) offer to make voluntary prepayments of the Term Loans (each, a "Discounted Prepayment") on one or more occasions pursuant to the provisions of this Section 2.25, and (B) make such Discounted Prepayment on one or more occasions pursuant to the provisions of this Section 2.25 (it being understood that no Lender will have an obligation to accept a Discounted Prepayment). As used herein, "Big Boy Letter" means a letter from a Lender acknowledging that (1) the Borrower may have information regarding the Borrower and the Subsidiaries, their ability to perform the Obligations or any other material information that has not previously been disclosed to the Administrative Agent and the Lenders ("Excluded Information"), (2) the Excluded Information may not be available to such Lender, (3) such Lender has independently and without reliance on any other party made its own analysis and determined to assign Term Loans to the Borrower pursuant to this Section 2.25 notwithstanding its lack of knowledge of the Excluded Information and (4) such Lender waives and releases any claims it may have against the Administrative Agent, the Borrower and the Subsidiaries with respect to the nondisclosure of the Excluded Information; or otherwise in form and substance reasonably satisfactory to the Administrative Agent, the Borrower and assigning such Lender
- (b) Procedures. In connection with any Discounted Prepayment, the Discounted Prepayment Offeror will notify the Administrative Agent in writing (the "Discounted Prepayment Notice") that the Discounted Prepayment Offeror desires to prepay the Term Loans on a specified Business Day, in a maximum aggregate amount (which amount will be not less than \$1,000,000 and whole increments of \$100,000 in excess thereof) (the "Discounted Prepayment Amount") at a discount to par (which will be expressed as a range of percentages of par of the principal amount of the Term Loans) specified by the Discounted Prepayment Offeror with respect to each Discounted Prepayment (the "Discounted Prepayment than 15 Business Days and no later than 5 Business Days prior to the proposed date by which Lenders are required to respond to the Discounted Prepayment Notice if they desire to participate (the "Discounted Prepayment Response Date") and (ii) at the Discounted Prepayment Offeror's discretion, the offer in any such notice will be made to all Lenders holding Term Loans (it being understood that different Discount Price Ranges may be offered with respect to different Classes of Term Loans and, in such event, each such offer will be treated as a separate offer pursuant to the terms of this Section 2.25). The Administrative Agent will promptly provide each Lender of the applicable Classes a copy of such Discounted Prepayment Notice. In connection with a Discounted Prepayment, each Lender holding the Term Loans of the applicable Classes will be entitled to specify to the Administrative Agent a discount Price") within the Discount Price Range for a principal amount (subject to rounding requirements specified by the Administrative Agent) of the Term Loans of the applicable Class held by such Lender at which such Lender is willing to accept such Discounted Prepayment Response by a Lender to a Discounted Prepayment Notice (A) will be due no later than 5:00 p.m. (New York City time) on the Discounted Prepayment Response Date, (B) to the

extent not timely received by the Administrative Agent will be disregarded and such Lender will be deemed to have declined the Discounted Prepayment offer and (C) to the extent timely received by the Administrative Agent will be irrevocable. The Administrative Agent will provide the Discounted Prepayment Offeror with a summary of all tenders by Lenders in response to the Discounted Prepayment Notice and, based on the Acceptable Discount Prices and principal amounts of the Term Loans of the applicable Classes specified by Lenders, the Administrative Agent, in consultation with the Discounted Prepayment Offeror, will determine the applicable discount price (the "Applicable Discount Price") for the applicable Discounted Prepayment of all Loans to be prepaid in such Discounted Prepayment, which will be the lower of (1) the lowest Acceptable Discount Price at which the Discounted Prepayment Offeror can complete the Discounted Prepayment for 100% of the Discounted Prepayment Amount, and (2) if the Lenders' response is such that the Discounted Prepayment could not be completed for 100% of the Discounted Prepayment Amount, the highest Acceptable Discount Price specified by the Lenders that is within the Discount Price Range specified by the Discounted Prepayment Offeror. The Discounted Prepayment Offeror will have the right, by written notice to the Administrative Agent, to revoke in full (but not in part) its offer to make a Discounted Prepayment and rescind any Discounted Prepayment Notice therefor at its discretion at any time on or prior to the applicable Discounted Prepayment Response Date (and if such offer is revoked or notice rescinded, any failure by the Discounted Prepayment Offeror to make a prepayment to a Lender, as applicable, pursuant to this Section will not constitute a Default or Event of Default under Section 8.1 or otherwise).

- (c) Prepayments; Application. The Discounted Prepayment Offeror will prepay the Term Loans of the applicable Classes (or the respective portion thereof) accepted by Lenders at the Acceptable Discount Prices specified by each such Lender that are equal to or less than (expressed as a percentage of par of the principal amount of Term Loans) the Applicable Discount Price; provided that if the aggregate proceeds required to prepay Qualifying Term Loans (disregarding any interest payable under this Section 2.25) would exceed the Discounted Prepayment Amount for such Discounted Prepayment, the Discounted Prepayment Offeror will prepay such Qualifying Term Loans at the Applicable Discount Price ratably based on the respective principal amounts of such Qualifying Term Loans (subject to rounding requirements specified by the Administrative Agent). The portion of the Term Loans prepaid by the Discounted Prepayment Offeror pursuant to this Section 2.25 will be applied to reduce the remaining installments of Term Loans pro rata against all such scheduled installments (including, for the avoidance of doubt, the amount of scheduled installments owing to Lenders not prepaid pursuant to this Section 2.25). The Administrative Agent will notify the Discounted Prepayment Offeror and the Lenders that received the Discounted Prepayment Notice of the results of the offer promptly after completion of the determinations referred to above, and the Discounted Prepayment Offeror will make the Discounted Prepayment no later than 3 Business Days after receipt of such notice. The par principal amount of the Term Loans prepaid pursuant to this Section 2.25 will be deemed immediately cancelled upon payment of the applicable Discounted Prepayment.
- (d) <u>Lender Consent</u>. The Lenders hereby consent to the transactions described in this Section 2.25 and waive (i) the requirements of Section 2.17 or any other requirement to the extent it would require that the Discounted Prepayment be made in respect of the Lenders' Pro Rata Share of the Term Loans or with respect to all Classes of Term Loans, and (ii) the requirements of any provision of this Agreement or any other Credit Document that might otherwise result in a Default or Event of Default as a result of a Discounted Prepayment.
- (e) <u>Miscellaneous.</u> Each Discounted Prepayment will be consummated pursuant to procedures (including as to timing, rounding and minimum amounts, type and Interest Periods of accepted Term Loans, conditions for terminating a Discounted Prepayment or rescinding an acceptance of prepayment, forms of other notices (including notices of offer and acceptance) by the Discounted Prepayment Offeror and Lenders and determination of Applicable Discount Price) established by the Administrative Agent acting in its reasonable discretion in consultation with the Discounted Prepayment Offeror. The making of a Discounted Prepayment will be deemed to be a representation and warranty by the Borrower that all conditions precedent to such Discounted Prepayment set forth in this Section 2.25 were satisfied in all respects.

2.26 Credit Agreement Refinancing Indebtedness; Refinancing Amendments.

- (a) <u>Refinancing Loans</u>. At any time after the Closing Date, the Borrower may obtain (i) from any Lender or any Additional Lender, Credit Agreement Refinancing Indebtedness in the form of Refinancing Loans or Refinancing Commitments, in each case pursuant to a Refinancing Amendment, or (ii) from any bank, other financial institution or institutional investor that agrees to provide any portion of any Credit Agreement Refinancing Indebtedness in any other form, such other Credit Agreement Refinancing Indebtedness, in each case to refinance (and to reduce on a dollar-for-dollar or greater basis) all or any portion of the Term Loans then outstanding under this Agreement.
- (b) <u>Refinancing Amendments</u>. The effectiveness of any Refinancing Amendment will be subject only to the satisfaction on the date thereof of such of the conditions set forth in Sections
- 3.1 and 3.2 as may be requested by the providers of applicable Refinancing Loans. The Administrative Agent will promptly notify each Lender as to the effectiveness of each Refinancing Amendment. Each of the parties hereto hereby agrees that, upon the effectiveness of any Refinancing Amendment, this Agreement will be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Refinancing Loans incurred pursuant thereto (including any amendments necessary to treat the Term Loans or Revolving Loans subject thereto as Refinancing Term Loans or Refinancing Revolving Loans, respectively).
- (c) <u>Required Consents</u>. Any Refinancing Amendment may, without the consent of any Person other than the Administrative Agent (which consent shall not be unreasonably withheld, conditioned or delayed), the Borrower and the Persons providing the applicable Refinancing Loans, effect such amendments to this Agreement and the other Credit Documents as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent and the Borrower, to effect the provisions of this Section 2.26. This Section 2.26 supersedes any provisions in Section 10.5 to the contrary.
- (d) <u>Providers of Refinancing Loans</u>. Refinancing Loans may be provided by any existing Lender (it being understood that no existing Lender will have an obligation to make all or any portion of any Refinancing Loan) or by any Additional Lender on terms permitted by this Section 2.26; *provided* that the Administrative Agent and each Issuing Bank will have consented (in each case, such consent not to be unreasonably withheld, conditioned or delayed) to any such Person's providing Refinancing Loans or Refinancing Commitments if such consent would be required under Section 10.6(c), respectively, for an assignment of Loans or Commitments to such Person.

SECTION 3. CONDITIONS PRECEDENT

- **3.1** Closing Date. The obligation of the Lenders on the Closing Date to fund the Initial Term Loans and the Initial Revolving Borrowings on the Closing Date (collectively, the "Initial Credit Extension") is subject to the satisfaction, or waiver by the Administrative Agent, of only the following conditions on or before the Closing Date:
- (a) <u>Credit Documents</u>. The Administrative Agent will have received a copy of each of the following Credit Documents, in each case where applicable, executed and delivered by the Borrower and each Guarantor Subsidiary: (i) this Agreement; (ii) the Pledge and Security Agreement;
- (iii) each of the Notes (if such Notes have been requested at least three (3) Business Days prior to the Closing Date); (iv) the Intercompany Subordination Agreement and (v) the Perfection Certificate.

(b) <u>Organizational Documents; Incumbency; Resolutions; Good Standing Certificates</u>. The Administrative Agent will have

received:

- (i) Organizational Documents. A copy of each Organizational Document of the Borrower and each Guarantor Subsidiary and, to the extent applicable, certified as of a recent date by the appropriate governmental official, each dated the Closing Date or a recent date prior thereto.
- (ii) *Incumbency Certificate*. A signature and incumbency certificate of the officers or other authorized representatives of the Borrower and each Guarantor Subsidiary executing the Credit Documents referenced in Section 3.1(a).
- (iii) Resolutions. Resolutions of the board of directors or similar governing body of the Borrower and each Guarantor Subsidiary approving and authorizing the execution, delivery and performance of this Agreement and the other Credit Documents to which it is a party or by which it or its assets may be bound as of the Closing Date, certified as of the Closing Date by its secretary or an assistant secretary (or any other officer with an equivalent role) as being in full force and effect without modification or amendment.
- (iv) Good Standing Certificates. A good standing certificate from the applicable Governmental Authority of the jurisdiction of incorporation, organization or formation of the Borrower and each Guarantor Subsidiary.

(c) [Reserved].

- (d) <u>Funding Notice</u>. The Administrative Agent will have received a fully executed and delivered Funding Notice as required pursuant to Section 2.1 and/or 2.2, as applicable (or, in the case of the Issuance of a Letter of Credit, an Issuance Notice pursuant to Section 2.4); *provided* that all certifications made under such Funding Notice will be made (or deemed made) as of the Closing Date; *provided further* that utilization of the Initial Revolving Commitments on the Closing Date will be limited to the Initial Revolving Borrowing.
- (e) <u>Closing Date Certificate and Attachments</u>. The Administrative Agent will have received an executed Closing Date Certificate, together with all attachments thereto, certifying to the satisfaction of the conditions set forth in Sections 3.1(f), 3.1(g) and 3.1(j).
- (f) <u>Acquisition</u>. The Acquisition will have been consummated substantially concurrently with the Initial Credit Extension in accordance with the Acquisition Agreement without any waiver, amendment or modification thereof, in each case, that is materially adverse to the Lenders or the Joint Lead Arrangers in their capacity as such unless consented to in writing by the Joint Lead Arrangers (such consent not to be unreasonably withheld or delayed).
- (g) <u>Specified Representations and Acquisition Agreement Representations</u>. Each of (A) the Specified Representations and (B) the Acquisition Agreement Representations will be true and correct on and as of the Closing Date.

(h) [Reserved].

- (i) Financial Statements. The Administrative Agent and the Lenders will have received (i) the audited consolidated balance sheets and related statements of income and cash flows of each of the Borrower and the Acquired Business for the Fiscal Years ending December 31, 2015 and December 31, 2016 (which the Administrative Agent acknowledges have been received); (ii) the unaudited consolidated balance sheets and related statements of income and cash flows of the Borrower and, to the extent received by the Borrower pursuant to the terms of the Acquisition Agreement, the Acquired Business, for each completed Fiscal Quarter of the Borrower or the Acquired Business, as applicable, ended after December 31, 2016 and ended at least 45 days prior to the Closing Date; and (iii) a pro forma consolidated balance sheet for the Borrower and its Subsidiaries (including the Acquired Business) as of the last day of the most recent period covered by the financial statements of the Acquired Business that have been delivered to the Borrower pursuant to the preceding clause (ii) and a pro forma consolidated statement of comprehensive income (loss) for the Borrower for the twelve-month period ended as of the last day of the most recent period covered by the financial statements of the Borrower that have been delivered pursuant to the preceding clause (ii); provided that the financial statements of the Borrower shall have been prepared in accordance with GAAP and the financial statements of the Acquired Business under clauses (ii) (with respect to the Fiscal Quarter ending September 30, 2017 and Fiscal Year to date) and (iii) shall have been reconciled to GAAP.
- (j) No Material Adverse Effect. Since December 31, 2016 there shall not have occurred a Company Material Adverse Effect that is continuing.

- (k) <u>Solvency</u>. The Administrative Agent will have received a solvency certificate in the form attached as <u>Exhibit D</u> from the chief financial officer or other officer with equivalent duties of the Borrower certifying to the solvency of the Borrower and the Subsidiaries on a consolidated basis after giving effect to the Transactions.
- (l) <u>Borrower Existing Debt</u>. On the Closing Date, the Administrative Agent will have received customary payoff letters with respect to the Borrower Existing Debt and any other Indebtedness of the Borrower, its Subsidiaries or the Acquired Business (other than Indebtedness permitted pursuant to Section 6.1) from or on behalf of the applicable lenders with respect thereto, regarding the discharge and release of obligations of the Borrower, its Subsidiaries and the Acquired Business thereunder (including all Indebtedness thereunder attributable to such Persons and any obligations as a borrower or guarantor thereunder) and the release of Liens securing such obligations.

(m) <u>Personal Property Collateral</u>. The Collateral Agent will have received:

- (i) Deliverables, Etc. In connection with the pledge of Capital Stock held by the Credit Parties, and the pledge of Indebtedness owing to the Credit Parties, in each case to the extent required under the Pledge and Security Agreement, the Borrower and each applicable Guarantor Subsidiary will deliver, or cause to be delivered, to the Collateral Agent, to the extent required under the Pledge and Security Agreement, an original stock certificate or other instruments representing such pledged Capital Stock or Indebtedness, together with customary blank stock or other equity transfer powers and instruments of transfer and irrevocable powers duly executed in blank.
- (ii) Lien Searches. The results of customary lien searches with regard to the Borrower and each Guarantor Subsidiaries requested no less than fifteen (15) days prior to the date the Acquisition is required to be consummated pursuant to the terms of the Acquisition Agreement; and
- (iii) UCC financing statements in appropriate form for filing under the UCC, documents suitable for filing with the United States Patent and Trademark Office and United States Copyright Office and all other documents and instruments necessary to establish and perfect the Collateral Agent's first priority Lien in the Collateral other than foreign Intellectual Property (subject to Permitted Liens), in each case, executed and delivered (if applicable, in proper form for filing) by the Borrower and the Guarantor Subsidiaries;

provided that, to the extent any Liens on the Collateral have not attached or are not perfected on the Closing Date (other than to the extent that a Lien on such Collateral may be perfected by (A) the filing of a financing statement under the UCC or (B) the delivery of certificated securities representing equity of direct wholly-owned material domestic subsidiaries of the Borrower) after use of commercially reasonable efforts to do so, such attachment or perfection will not constitute a condition precedent to the borrowing on the Closing Date, but will be required in accordance with Section 5.17.

- (n) <u>Opinions of Counsel to Credit Parties</u>. The Administrative Agent and its counsel will have received copies of (and each Credit Party hereby instructs such counsel to deliver such opinions to the Administrative Agent and the Lenders) customary legal opinions, each dated as of the Closing Date, of Vinson & Elkins L.L.P. and Greenberg Traurig, P.A., special counsel to the Borrower, with respect to the Borrower and each Guarantor Subsidiary.
- (o) <u>Fees and Expenses</u>. All costs, fees, expenses (including reasonable, documented, out-of-pocket legal fees and expenses of legal counsel) and other compensation payable to the Joint Lead Arrangers, Administrative Agent and the Lenders will have been paid (or will concurrently be paid) to the extent then due; *provided* that an invoice of such expenses will have been presented no less than two (2) Business Days prior to the Closing Date.
- (p) "<u>Know-Your-Customer</u>." The Administrative Agent will have received all documentation and other information required by bank regulatory authorities under applicable "know-your-customer" and anti-money laundering rules and regulations including the PATRIOT Act at least five (5) Business Days prior to the Closing Date, to the extent requested from the Borrower at least ten (10) Business Days prior to the Closing Date.

For purposes of determining compliance with the conditions specified in this Section 3.1, (i) each Lender that has signed this Agreement shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless the Administrative Agent shall have received notice from such Lender prior to the proposed Closing Date specifying its objection thereto and (ii) transactions occurring (or to occur) on the Closing Date in accordance with, and as expressly set forth in, the funds flow memorandum delivered to (and approved by) the Administrative Agent shall be deemed to occur and have occurred substantially simultaneously with the Initial Credit Extension.

3.2 Conditions to Each Credit Extension After the Closing Date.

- (a) <u>Conditions Precedent</u>. Except (x) in connection with the Initial Credit Extension and (y) as may be limited in respect of certain conditions precedent as set forth in Section 2.24(f) with respect to Incremental Term Loans or in Section 1.5 with respect to any Limited Condition Acquisition and other related Specified Transactions, the obligation of each Lender to make any Loan, or each Issuing Bank to Issue any Letter of Credit, on any Credit Date, are subject to the satisfaction, or waiver in accordance with Section 10.5, of the following conditions precedent:
 - (i) Notice. The Administrative Agent will have received a fully executed Funding Notice, Application or Issuance Notice, as the case may be;
 - (ii) Revolving Credit Limit. After making the Credit Extensions requested on such Credit Date, the Total Utilization of Revolving Credit Commitments will not exceed the Revolving Credit Limit then in effect;
 - (iii) Representations and Warranties. As of such Credit Date, the representations and warranties contained herein and in the other Credit Documents will be true and correct in all material respects (except for those representations and warranties that are conditioned by materiality, which will be true and correct in all respects) on and as of that Credit Date to the same extent as though made on and as of that date, except to the extent such representations and warranties specifically relate to an earlier date, in which case such representations and warranties will have been true and correct in all material respects (except for those representations and warranties that are conditioned by materiality, which will have been true and correct in all respects) on and as of such earlier date; and
 - (iv) No Default or Event of Default. Both immediately before and after the Credit Extension on such Credit Date, no Default or an Event of Default shall have occurred and be continuing.
- (b) <u>Letters of Credit</u>. In addition, with respect to any Letter of Credit, the Administrative Agent will have received all other information required by the applicable Application or Issuance Notice, and such other documents or information as the applicable Issuing Bank may reasonably require in connection with the Issuance of such Letter of Credit.
- (c) <u>Notices</u>. Any Notice will be executed by an Authorized Officer in a writing delivered to the Administrative Agent. The Administrative Agent, any Lender or any Issuing Bank will not have any obligation to verify the veracity of any such Notice nor will the Administrative Agent, any Lender or any Issuing Bank incur any liability to the Borrower in acting upon any Notice that the Administrative Agent believes in good faith to have been given by a duly authorized officer or other Person authorized on behalf of the Borrower. Each delivery of a Notice will constitute a representation and warranty that as of the date of any Credit Extension (both immediately before and immediately after such Credit Extension) the conditions contained in Section 3.2 have been satisfied.

SECTION 4. REPRESENTATIONS AND WARRANTIES

In order to induce the Lenders, each Agent and each Issuing Bank to enter into this Agreement and to make each Credit Extension to be made thereby, each Credit Party represents and warrants to the Lenders, the Agents and the Issuing Banks, on the Closing Date and on each Credit Date, that the following statements are true and correct:

- **4.1 Organization; Requisite Power and Authority; Qualification**. The Borrower and each Subsidiary (a) is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization which, as of the Closing Date, is identified in Schedule 4.10(b). (b) has all requisite organizational power and authority to (i) own and operate its properties, to lease the property it operates as lessee, and to carry on its business as now conducted and as proposed to be conducted, (ii) to enter into the Credit Documents to which it is a party and (iii) to carry out the transactions contemplated thereby, and (c) is qualified to do business and in good standing as a foreign entity in every jurisdiction where its assets are located and wherever necessary to carry out its business and operations, except in jurisdictions where (i) such Person is organized, (ii) there is no requirement to be so registered, or (iii) the failure to be so qualified or in good standing has not had, and could not be reasonably expected to have, a Material Adverse Effect.
- **4.2 Due Authorization**. The execution, delivery and performance of the Credit Documents have been duly authorized by all necessary action on the part of each Credit Party that is a party thereto.

4.3 No Conflict; Government Consents.

(a) No Conflict with Organizational Documents, Law or Contractual Obligations; No Creation of Liens. The execution, delivery and performance by each Credit Party of the Credit Documents to which it is a party and the consummation of the transactions contemplated by the Credit Documents do not and will not (i) (A) violate any of the Organizational Documents of such Credit Party or (B) otherwise require any approval of any stockholder, member or partner of such Credit Party, except for such approvals or consents which have been obtained or made; (ii) violate any provision of any law, rule, regulation, order, judgment or decree of any Governmental Authority applicable to or otherwise binding on such Credit Party, except to the extent such violation could not reasonably be expected to have a Material Adverse Effect; (iii) conflict with, result in a breach of or constitute (with due notice or lapse of time or both) a default under, or otherwise require any approval or consent of any Person under.

(A) any Contractual Obligation of such Credit Party, except to the extent such conflict, breach or default could not reasonably be expected to have a Material Adverse Effect, or (B) any Material Indebtedness, and in each case, except for such approvals or consents which have been obtained or made; or (iv) result in or require the creation or imposition of any Lien upon any of the properties or assets of such Credit Party (other than any Liens created under any of the Credit Documents in favor of the Collateral Agent, on behalf of the Secured Parties, and Permitted Liens).

- (b) <u>Governmental Consents</u>. The execution, delivery and performance by each Credit Party of the Credit Documents to which it is party and the consummation of the transactions contemplated by the Credit Documents do not and will not require any registration with, consent or approval of, or notice to, or other action to, with or by, any Governmental Authority, except for such filings and recordings with respect to the Collateral made as of the Closing Date or made or to be made in accordance with Sections 5.10, 5.12 and 5.17.
- **4.4 Binding Obligation**. Each Credit Document has been duly executed and delivered by each Credit Party that is a party thereto and is the legally valid and binding obligation of such Credit Party, enforceable against such Credit Party in accordance with its terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally or by general equitable principles, regardless of whether considered in a proceeding in equity or at law and principles of good faith and fair dealing.
- 4.5 Historical Financial Statements. The Historical Financial Statements were prepared in conformity with GAAP (or, in the case of the Acquired Business, Swiss generally accepted accounting principles) applied on a consistent basis throughout the periods covered thereby, except as may be indicated in the notes thereto, and fairly present, in all material respects, the financial position, on a consolidated basis, of the Persons described in such financial statements as at the respective dates thereof and the results of operations and cash flows, on a consolidated basis, of the entities described therein for each of the periods then ended, subject, in the case of any such unaudited financial statements, to changes resulting from audit and normal year-end adjustments. As of the Closing Date, except (a) as reserved for in the Historical Financial Statements, (b) liabilities incurred on behalf of the Borrower and the Subsidiaries in connection with the Acquisition Agreement and the Credit Documents in accordance with the terms thereof, and (c) liabilities incurred since September 30, 2017 in the ordinary course of business, none of the Borrower or any Subsidiary has any material liabilities or obligations of a nature (whether accrued, absolute, contingent or otherwise) required by GAAP (as modified by the first sentence of this Section 4.5) to be set forth on a combined consolidated balance sheet of the Borrower and the Subsidiaries (or the notes thereto) prepared in accordance with GAAP (as modified by the first sentence of this Section 4.5).
- **4.6 Projections.** On and as of the Closing Date, the projections of the Borrower and its Subsidiaries for the period from the Closing Date through and including Fiscal Year 2021 (the "**Projections**") are based on good faith estimates and assumptions made by the management of the Borrower; *provided* that (a) forecasts are not to be viewed as facts, (b) any forecasts are subject to significant uncertainties and contingencies, many of which are beyond the control of the Credit Parties,
- (c) no assurance can be given that any particular forecasts will be realized and (d) actual results may differ and such differences may be material.
- **4.7 No Material Adverse** Effect. Since December 31, 2016, no event or change has occurred that has caused or could reasonably be expected to cause, either in any case or in the aggregate, a Material Adverse Effect.
- **4.8** Adverse Proceedings. There are no Adverse Proceedings, individually or in the aggregate, that could reasonably be expected to have a Material Adverse Effect. None of the Borrower or the Subsidiaries is subject to or in default with respect to any final judgments, writs, injunctions, decrees, rules or regulations of any court or any federal, state, municipal or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, that, individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.
- **4.9 Payment of Taxes.** (a) The Borrower and the Subsidiaries have timely filed (or obtained valid extensions) with the appropriate United States federal, state, local and foreign taxing authorities all material tax returns and reports that were required to be filed and have timely paid all material Taxes owed by them, whether or not shown on such tax returns or reports, and (b) all such tax returns are true, correct and complete in all material respects. As of the Closing Date, no Executive Officer of the Borrower has any knowledge of any proposed material

Tax assessment against the Borrower or any Subsidiary with respect to Taxes which is not being actively contested by the Borrower or the Subsidiaries in good faith and by appropriate proceedings; *provided* that such reserves or other appropriate provisions, if any, as will be required in conformity with GAAP will have been made or provided therefor.

4.10 Ownership of Material Property.

- (a) Generally. The Borrower and its Subsidiaries have (i) good and indefeasible title to (in the case of fee interests in real property), (ii) valid leasehold interests in (in the case of leasehold interests in real or tangible personal property) and (iii) good title to (in the case of all other tangible personal property), all of their respective properties and material assets necessary in the ordinary conduct of the Business (as of the Closing Date, as reflected in the Historical Financial Statements and, from time to time after the Closing Date, as reflected in the most recent financial statements delivered pursuant to Section 5.1(a) or (b)), in each case, to the extent necessary to not materially interfere with its ability to conduct the Business or utilize such assets for their intended purposes as of the date of such financial statements, except (A) for assets disposed of since the balance sheet date of such financial statements in the ordinary course of business or as otherwise permitted under Section 6.8 and (B) as could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. Except as permitted by this Agreement or as could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, all such properties and assets are free and clear of Liens, except for Permitted Liens.
- (b) <u>Capital Stock and Subsidiaries</u> The Capital Stock of each Subsidiary has been duly authorized and validly issued in compliance with all applicable federal, state and other Laws and is fully paid and non-assessable (except to the extent such concepts are not applicable under the applicable Law of such Subsidiary's jurisdiction of formation). Except as set forth on <u>Schedule 4.10(b)</u> or with respect to Joint Venture Subsidiaries, as of the Closing Date, there is no existing option, warrant, call, right, commitment or other agreement (including preemptive rights) to which any Subsidiary is a party requiring, and there is no membership interest or other Capital Stock of any Subsidiary outstanding which upon conversion or exchange would require, the issuance by any Subsidiary of any additional membership interests or other Capital Stock of any Subsidiary or other Securities convertible into, exchangeable for or evidencing the right to subscribe for or purchase, a membership interest or other Capital Stock of any Subsidiary.
- (c) <u>Intellectual Property.</u> The Borrower and the Subsidiaries own or have the right to use all Intellectual Property that is used in or otherwise necessary for the operation of their respective Business as currently conducted, except where the failure of the foregoing could not reasonably be expected to have a Material Adverse Effect. The operation of the Business by the Borrower and the Subsidiaries does not infringe upon, misappropriate, violate or otherwise conflict with the Intellectual Property of any third party, except, in each case, as could not reasonably be expected to have a Material Adverse Effect.
- (d) Real Estate Assets. Schedule $4.10(\underline{d})$ is a complete and correct list as of the Closing Date of all Material Real Estate Assets of the Borrower and the Guarantor Subsidiaries.
- **4.11 Environmental Matters**. Except as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect:
- (a) Neither the Borrower nor any of its Subsidiaries nor any of their respective Facilities or operations are subject to any Environmental Claim, or any Environmental Liability;
- (b) there are and, to the knowledge of any Executive Officer of the Borrower, have been, no conditions, occurrences, or Hazardous Materials Activities which could reasonably be expected to form an Environmental Claim against the Borrower or any Subsidiary or give rise to any Environmental Liabilities of the Borrower or any Subsidiary; and
- (c) The Borrower, each Subsidiary and their respective Facilities and operations are in compliance with applicable Environmental Laws, including obtaining, maintaining and complying with the terms of any Governmental Authorizations required under any applicable Environmental Law.
- **4.12 Governmental Regulation**. Neither the Borrower nor any of its Subsidiaries is a "registered investment company" or a company "controlled" by a "registered investment company" as such terms are defined in the Investment Company Act of 1940.
- 4.13 Margin Stock. Neither the Borrower nor any of its Subsidiaries is engaged principally, or as one of its important activities, in the business of extending credit for the purpose of purchasing or carrying any Margin Stock. No part of the proceeds of any Credit Extension made to or for the benefit of any Credit Party or any Subsidiary will be used to purchase or carry any Margin Stock or to extend credit to others for the purpose of purchasing or carrying any Margin Stock or for any purpose that violates the provisions of Regulation T, U or X of the Board of Governors, as in effect from time to time.

4.14 Employee Matters. Neither the Borrower nor any of its Subsidiaries is engaged in any unfair labor practice that could reasonably be expected to have a Material Adverse Effect. There is (a) no unfair labor practice complaint pending against the Borrower or any Subsidiary, or to the knowledge of any Executive Officer of the Borrower, threatened against any of them before the National Labor Relations Board and no grievance or arbitration proceeding arising out of or under any collective bargaining agreement that is so pending against the Borrower or any Subsidiary or to the knowledge of any Executive Officer of the Borrower, threatened against any of them, (b) no strike or work stoppage in existence or, to the knowledge of any Executive Officer of the Borrower, threatened involving the Borrower or any Subsidiary, (c) there are no collective bargaining agreements covering the employees of any Credit Party or any Subsidiary as of the Closing Date and (d) to the knowledge of any Executive Officer of the Borrower, no union representation question existing with respect to the employees of the Borrower or any Subsidiary, to the knowledge of any Executive Officer of the Borrower, no union organization activity that is taking place, except, with respect to any matter specified in clause (a), (b) or

(d) above, either individually or in the aggregate, as could not be reasonably likely to result in a Material Adverse Effect.

4.15 Employee Benefit Plans. (a) The Borrower, each of its Subsidiaries and each of their respective ERISA Affiliates are in compliance in all material respects with all applicable provisions and requirements of ERISA and the Internal Revenue Code and the regulations and published interpretations thereunder with respect to each Employee Benefit Plan, (b) each Employee Benefit Plan which is intended to qualify under Section 401(a) of the Internal Revenue Code has received a favorable determination letter from the Internal Revenue Service indicating that such Employee Benefit Plan is so qualified and, to the knowledge of any Executive Officer of the Borrower, nothing has occurred subsequent to the issuance of such determination letter which would cause such Employee Benefit Plan to lose its qualified status, (c) no Liability to the PBGC (other than required premium payments), the Internal Revenue Service, any Employee Benefit Plan (except in the ordinary course) or any trust established under Title IV of ERISA has been or is expected to be incurred by the Borrower or any Subsidiary or any of their respective ERISA Affiliates, (d) except to the extent required under Section 4980B of the Internal Revenue Code or similar state laws, no Employee Benefit Plan provides health or welfare benefits (through the purchase of insurance or otherwise) for any retired or former employee of any of the Borrower or any Subsidiary or any of their respective ERISA Affiliates, (e) the present value of the aggregate benefit liabilities under each Pension Plan sponsored, maintained or contributed to by the Borrower or any Subsidiary or any of their respective ERISA Affiliates, (determined as of the end of the most recent plan year on the basis of the actuarial assumptions specified for funding purposes in the most recent actuarial valuation for such Pension Plan), did not exceed the aggregate current value of the assets of such Pension Plan and (f) no ERISA Event has occurred or is reasonably expected to occur; in each case, except as

4.16 Solvency. On the Closing Date, after giving effect to the Transactions, including the making of the Credit Extensions to be made on the Closing Date and giving effect to the application of the proceeds thereof, the Borrower and the Subsidiaries, on a consolidated basis, are Solvent.

4.17 Compliance with Laws.

- (a) <u>Generally.</u> Each of the Borrower and the Subsidiaries is in compliance with all applicable Laws in respect of the conduct of its business and the ownership of its property, except such non-compliance that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.
- (b) Anti-Terrorism Laws, Etc. Without limiting clause (a) above, no Credit Party nor any of its Controlled Entities or any of their respective directors or officers (i) is organized or resident in a Sanctioned Country, (ii) is in violation of any Anti-Terrorism Law, (iii) is a Blocked Person, or (iv) has been convicted by any Governmental Authority of a violation of any Anti-Terrorism Law. No Credit Party nor any of its Controlled Entities (A) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person except to the extent authorized or permissible by law for a Person required to comply with Anti-Terrorism Laws, or (B) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law except to the extent authorized or permissible for a Person required to comply with Ant-Terrorism Laws.
- (c) Anti-Corruption Laws, Etc. Since five (5) years prior to the Closing Date, to the knowledge of the Responsible Officers, there has been no action taken by any Credit Party or any of its Controlled Entities or any officer, director, or employee thereof in violation of applicable Anti-Corruption Laws in any material respect. None of the Credit Parties or any of their Controlled Entities has been convicted of violating any Anti-Corruption Laws. As of the Closing Date, there is no material suit, litigation, arbitration, claim, audit, action, proceeding or investigation pending or, to the knowledge of any Executive Officer of the Borrower, threatened against or affecting the Credit Parties or any of their Controlled Entities related to any applicable Anti-Corruption Laws, before or by any Governmental Entity. In the five (5) years prior to the Closing Date, none of the Credit Parties or any of their respective Subsidiaries or Unrestricted Subsidiaries has received any written notice, request or citation for any actual or potential noncompliance with any of the foregoing.
- 4.18 Disclosure. None of the written information and data (other than any projections, any information of a forward-looking nature and any general economic or specific industry information developed by, and obtained from, third-party sources) heretofore furnished to any Agent or the Lenders by or on behalf of the Borrower on or prior to the Closing Date for use in connection with the transactions contemplated hereby, when taken as a whole, contains any untrue statement of a material fact or omits to state a material fact (known to any Executive Officer of the Borrower, in the case of any document not furnished by the Borrower) necessary in order to make the statements contained therein taken as a whole not materially misleading in light of the circumstances under which such statements were made (after giving effect to all supplements and updates to such written information and data, in each case, furnished after the date on which such written information or data was originally delivered and prior to the Closing Date). Any projections and information of a forward-looking nature furnished to any Agent or the Lenders by or on behalf of the Borrower have been prepared in good faith based upon assumptions believed by the Borrower to be reasonable at the time made (it being understood and agreed that such projections and information of a forward-looking nature are not to be viewed as a guarantee of financial performance or achievement, that such projections and information of a forward-looking nature

are subject to significant uncertainties and contingencies, many of which are beyond your control, and that actual results may differ from the Projections and such differences may be material).

- 4.19 Perfection of Security Interests in the Collateral. On the Closing Date, the Collateral Documents create valid security interests in, and Liens on, the Collateral of the Credit Parties purported to be covered thereby on such date and described therein (other than foreign Intellectual Property), which security interests and Liens will be first priority Liens (subject to Permitted Liens) with respect to personal property of the Credit Parties, to the extent such Liens are perfected by filing appropriate UCC-1 financing statements against each such Credit Party with the secretary of state of the state of incorporation or formation of each such Credit Party and appropriate filings with the U.S. Patent and Trademark Office and the U.S. Copyright Office, as applicable, or the pledge of original stock certificates representing Capital Stock and customary stock and other equity powers related thereto upon the timely and proper filings, deliveries, notations and other actions contemplated by the Collateral Documents (to the extent that such security interests and Liens may be perfected by such filings, deliveries, notations and other actions contemplated by the Collateral Documents).
- **4.20** Use of Proceeds. The Borrower has used (or will use) the proceeds of the Initial Term Loans and the Revolving Loans in accordance with Section 2.6.
 - **4.21 No Default**. No Default or Event of Default has occurred and is continuing.
- **4.22 Insurance**. The properties and business of the Borrower and its Subsidiaries are insured with financially sound and reputable insurance companies that are not Affiliates of the Borrower in such amounts, with such deductibles and covering such risks as is deemed adequate and appropriate by Borrower. Such insurance is in full force and effect.

4.23 FDA Regulatory Compliance.

(a) Each of the Credit Parties and their Subsidiaries have all Registrations, or are pursuing such Registrations, from the FDA or other Governmental Authority required to conduct their respective businesses as currently conducted (other than the portion of such business conducted by distributors). With respect to jurisdictions in which Registrations are held by distributors, to the knowledge of the Credit Parties, each of the distributors has all Registrations, or is pursuing such Registrations, from the FDA or other Governmental Authority required to conduct its respective business as currently conducted. Each of the Registrations is, in all material respects, valid and subsisting in full force and effect. Except as set forth on Schedule 4.23 attached hereto, to the knowledge of the Credit Parties and their Subsidiaries, as of the Closing Date, the FDA is not considering limiting, suspending, or revoking such Registrations or changing the marketing classification or labeling of the products of the Credit Parties and their Subsidiaries. To the knowledge of the Credit Parties and their Subsidiaries and performed their obligations under each existing Registration in all material respects, and no event has occurred or condition or state of facts exists which would constitute a breach or default or would cause revocation or termination of any such Registration that could reasonably be expected to result in a Material Adverse Effect. To the knowledge of the Credit Parties and their Subsidiaries, any third party that is a manufacturer or contractor for the Credit Parties and their Subsidiaries is in compliance in all material respects with all Registrations from the FDA or comparable Governmental Authority insofar as they pertain to the manufacture of product components or products for the Credit Parties and their Subsidiaries.

- (b) All products developed, manufactured, tested, distributed or marketed by or on behalf of the Credit Parties and their Subsidiaries that are subject to the jurisdiction of the FDA or comparable Governmental Authority have been and are being developed, tested, manufactured, distributed and marketed in compliance with the FDA Laws or any other applicable requirement of Law, including, without limitation, pre-market notification, good manufacturing practices, labeling, advertising, record-keeping, and adverse event reporting, except where a failure to be in compliance could not reasonably be expected to result in a Material Adverse Effect, and have been and are being tested, investigated, distributed, marketed, and sold in compliance in all material respects with FDA Laws or any other applicable requirement of Law, except where a failure to be in compliance could not reasonably be expected to result in a Material Adverse Effect.
- (c) Except as could not reasonably be expected to result in a Material Adverse Effect, (i) the Credit Parties and their Subsidiaries are not subject to any obligation arising under an administrative or regulatory action, FDA inspection, FDA warning letter, FDA notice of violation letter, or other notice, response or commitment made to or with the FDA or any comparable Governmental Authority, and (ii) the Credit Parties and their Subsidiaries have made all notifications, submissions, and reports required by any such obligation, and all such notifications, submissions and reports were true, complete, and correct in all material respects as of the date of submission to FDA or any comparable Governmental Authority.
- (d) Since December 31, 2016, as of the Closing Date, no product has been seized, withdrawn, recalled, detained, or become subject to a suspension of manufacturing except as set forth on Schedule 4.23 attached hereto, and there are no facts or circumstances reasonably likely to cause, (i) the seizure, denial, withdrawal, recall, detention, field correction, safety alert or suspension of manufacturing relating to any product; (ii) a change in the labeling of any product; or (iii) a termination, seizure or suspension of marketing of any product, which would, in each case of clauses (i) through (iii), reasonably be expected to result in a Material Adverse Effect. Except as could not reasonably be expected to result in a Material Adverse Effect, no proceedings in the United States or any other jurisdiction seeking the withdrawal, recall, suspension, import detention, or seizure of any product are pending or, to the knowledge of the Credit Parties and their Subsidiaries, threatened against the Credit Parties and their Subsidiaries.

4.24 Healthcare Regulatory Compliance.

- (a) To the knowledge of the Credit Parties and their Subsidiaries, none of the Credit Parties, their Subsidiaries and their other Affiliates, nor any officer, director, managing employee or agent (as those terms are defined in 42 C.F.R. § 1001.1001) thereof, is a party to, or bound by, any order, individual integrity agreement, corporate integrity agreement or other formal or informal agreement with any Governmental Authority concerning compliance with Federal Health Care Program Laws.
- (b) To the knowledge of the Credit Parties and their Subsidiaries, none of the Credit Parties, their Subsidiaries and their other Affiliates, nor any officer, director, managing employee or agent (as those terms are defined in 42 C.F.R. § 1001.1001) thereof: (i) has been charged with or convicted of any criminal offense relating to the delivery of an item or service under any Federal Health Care Program; (ii) has been debarred, excluded or suspended from participation in any Federal Health Care Program; (iii) has had a civil monetary penalty assessed against it, him or her under Section 1128A of the SSA; (iv) is currently listed on the General Services Administration published list of parties excluded from federal procurement programs and non-procurement programs; or (v) to the knowledge of the Borrower, as of the Closing Date, is the target or subject of any current or potential investigation relating to any Federal Health Care Program related offense.
- (c) None of the Credit Parties, their Subsidiaries and their other Affiliates, nor any officer, director, managing employee or agent (as those terms are defined in 42 C.F.R. § 1001.1001): has engaged in any activity that is in violation, to the extent such violation could reasonably be expected to result in a Material Adverse Effect to any Credit Party or their Subsidiaries, of the federal Medicare or federal or state Medicaid statutes, Sections 1128, 1128A, 1128B, 1128C or 1877 of the SSA (42 U.S.C. § \$1320a-7a, 1320a-7b, 1320a-7c and 1395nn), the federal TRICARE statute (10 U.S.C. § 1071 et seq.), the civil False Claims Act of 1863 (31 U.S.C. § 3729 et seq.), criminal false claims statutes (e.g., 18 U.S.C. §§ 287 and 1001), the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. § 3801 et seq.), the antifraud and related provisions of the Health Insurance Portability and Accountability Act of 1996 (e.g., 18 U.S.C. §§ 1035 and 1347), or related regulations or other federal or state laws and regulations relating to healthcare fraud or government healthcare programs (collectively, "Federal Health Care Program Laws"), including the following:
 - (i) knowingly and willfully making or causing to be made a false statement or representation of a material fact in any application for any benefit or payment;
 - (ii) knowingly and willfully making or causing to be made a false statement or representation of a material fact for use in determining rights to any benefit or payment;

- (iii) knowingly and willfully soliciting or receiving any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or kind (A) in return for referring an individual to a person for the furnishing or arranging for the furnishing of any item or service for which payment may be made in whole or in part under any Federal Health Care Program; or (B) in return for purchasing, leasing, or ordering, or arranging for or recommending purchasing, leasing, or ordering any good, facility, service or item for which payment may be made in whole or in part under any Federal Health Care Program;
- (iv) knowingly and willfully offering or paying any remuneration (including any kickback, bribe or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to any person to induce such person (A) to refer an individual to a person for the furnishing or arranging for the furnishing of any item or service for which payment may be made in whole or in part under a Federal Health Care Program; or (B) to purchase, lease, order or arrange for or recommend purchasing, leasing or ordering any good, facility, service or item for which payment may be made in whole or in part under a Federal Health Care Program; or
- (v) any other activity that violates any state or federal law relating to prohibiting fraudulent, abusive or unlawful practices connected in any way with the provision of health care items or services or the billing for such items or services provided to a beneficiary of any Federal Health Care Program.
- (d) To the knowledge of the Borrower, no person has filed or has threatened to file against any Credit Party, any of their Subsidiaries or other Affiliates an action under any federal or state whistleblower statute, including without limitation, under the False Claims Act of 1863 (31 U.S.C. § 3729 et seq.).
- **4.25** Reimbursement Coding. To the extent the Credit Parties or any of their Subsidiaries provide to their customers or any other Persons reimbursement coding or billing advice regarding products offered for sale by the Credit Parties and their Subsidiaries, such advice is complete and accurate in all material respects.
- **4.26 HIPAA**. Each of the Credit Parties and their Subsidiaries is in compliance with the provisions of all business associate agreements (as such term is defined by HIPAA) to which it is a party except for the non-compliance of which would not have a reasonable likelihood of resulting in a Material Adverse Effect and to the knowledge of each of the Credit Parties and their Subsidiaries has implemented adequate policies, procedures and training designed to assure continued compliance and to detect noncompliance.

SECTION 5. AFFIRMATIVE COVENANTS

The Borrower and each Guarantor Subsidiary covenants and agrees that so long as the Commitments have not been terminated and until the principal of and interest on each Loan, all fees and all other expenses or amounts payable under any Credit Document (other than amounts in respect of indemnification, expense reimbursement, yield protection or tax gross-up and contingent obligations, in each case that are not then owing or with respect to which no claim has been made) have been paid in full and all Letters of Credit have been cancelled, or have expired or have been Cash Collateralized or otherwise backstopped in a manner satisfactory to the applicable Issuing Bank and all amounts drawn thereunder have been reimbursed in full, it will perform, and the Borrower will cause each of the Subsidiaries to perform (to the extent applicable to such Subsidiaries), all covenants in this Section 5.

- **5.1 Financial Statements; Notices and Other Reports**. The Borrower will deliver to the Administrative Agent by Electronic Transmission, and the Administrative Agent will deliver to the Lenders by Electronic Transmission:
- (a) Annual Financial Statements. As soon as available, and in any event within ninety (90) days after the end of each Fiscal Year ended after the Closing Date, (i) the consolidated balance sheet of the Borrower and the Subsidiaries and Unrestricted Subsidiaries as at the end of such Fiscal Year and the related consolidated statements of comprehensive income, stockholders' equity and cash flows of the Borrower and the Subsidiaries and Unrestricted Subsidiaries for such Fiscal Year, setting forth, in each case, in comparative form the corresponding figures for the previous Fiscal Year, together with a Financial Officer Certification and a Narrative Report with respect thereto, and (ii) with respect to such consolidated financial statements, a report thereon of independent certified public accountants of recognized national standing selected by the Borrower (or another accounting firm selected by the Borrower and reasonably satisfactory to the Administrative Agent), which report (A) will not be subject to any explanatory statement as to the Borrower's ability to continue as a "going concern" or like qualification or exception (other than with respect to (1) an upcoming maturity of any Loans under this Agreement within the subsequent twelve (12) months or (2) any actual or anticipated inability to satisfy the Financial Covenant) or any qualification or exception as to the scope of such audit and (B) will state that such consolidated financial statements fairly present, in all material respects, the consolidated financial position of the

Borrower and the Subsidiaries and Unrestricted Subsidiaries as at the dates indicated and the results of their operations and their cash flows for the periods indicated in conformity with GAAP applied on a basis consistent with prior years (except as otherwise disclosed in such financial statements).

- (b) Quarterly Financial Statements. As soon as available, and in any event within forty-five (45) days after the end of each of the first three Fiscal Quarters of each Fiscal Year, commencing with the March 31, 2018 Fiscal Quarter, the consolidated balance sheet of the Borrower and the Subsidiaries and Unrestricted Subsidiaries as at the end of such Fiscal Quarter and the related consolidated statements of comprehensive income and cash flows of the Borrower and the Subsidiaries and Unrestricted Subsidiaries for such Fiscal Quarter and for the period from the beginning of the then current Fiscal Year to the end of such Fiscal Quarter, setting forth, in each case, in comparative form the corresponding figures for the corresponding periods of the previous Fiscal Year, all in reasonable detail and in accordance with GAAP in all material respects (subject to normal year-end audit adjustments and the absence of footnotes), together with a Financial Officer Certification and a Narrative Report with respect thereto.
- (c) <u>Financial Plan.</u> As soon as practicable and in any event no later than ninety (90) days after the beginning of each Fiscal Year after the Closing Date, commencing with Fiscal Year 2018, a consolidated plan and financial forecast for such Fiscal Year (a "**Financial Plan**") that includes (i) a forecasted consolidated balance sheet and forecasted consolidated statements of comprehensive income and cash flows of the Borrower and the Subsidiaries and Unrestricted Subsidiaries for such Fiscal Year and an explanation of the assumptions on which such forecasts are based and (ii) forecasted consolidated statements of income and cash flows of the Borrower and the Subsidiaries and Unrestricted Subsidiaries for each Fiscal Quarter of such Fiscal Year, together with an explanation of the assumptions on which such forecasts are based.
- (d) <u>Information Regarding Unrestricted Subsidiaries</u>. Notwithstanding anything to the contrary in this Section 5.1, if the Borrower has any Unrestricted Subsidiaries as of the last date on which the financial statements or Financial Plan for any fiscal period are required to be delivered pursuant to Section 5.1(a), 5.1(b) or 5.1(c), then the Borrower will include, together with delivery of such financial statements or Financial Plan, consolidating information (which shall be audited or unaudited, as applicable) that shows in reasonable detail in accordance with GAAP the breakdown of assets and liabilities, and revenues and expenses, between the Borrower and the Subsidiaries, on the one hand, and the Unrestricted Subsidiaries, on the other hand, as of the dates and for the periods covered by such financial statements or Financial Plan.
- (e) <u>Compliance Certificate</u>. Together with each delivery of financial statements of the Borrower and the Subsidiaries and Unrestricted Subsidiaries pursuant to Sections 5.1(a) and 5.1(b), a duly executed and completed Compliance Certificate; *provided* that the Compliance Certificate accompanying such financial statements will certify as to (and will include the information and calculations necessary for determining) compliance with the Financial Covenant for the Test Period ended as of the date of such financial statements only if the Financial Covenant Test Criteria for such Test Period are satisfied.
- (f) <u>Statements of Reconciliation after Change in Accounting Principles.</u> If, as a result of any change in GAAP from those used in the preparation of the Historical Financial Statements (other than converting or reconciling Swiss accounting principles to GAAP), the consolidated financial statements of the Borrower and the Subsidiaries and Unrestricted Subsidiaries delivered pursuant to this Section 5.1 will differ in any material respect from the consolidated financial statements that would have been delivered had no such change in GAAP occurred, then the Borrower will deliver, together with the first delivery of such financial statements after such change, one or more statements of reconciliation for all prior financial statements delivered for the Fiscal Year immediately preceding the Fiscal Year in which such change occurred.
- (g) <u>Accountants' Report.</u> Promptly upon receipt thereof, copies of all final management letters identifying a material weakness or significant deficiency submitted by the independent certified public accountants referred to in Section 5.1(a) in connection with each annual, interim or special audit or review of any type of the financial statements or related internal control systems of the Borrower or any Subsidiary made by such accountants.
 - (h) <u>Notice of Default</u>. Promptly upon an Executive Officer of the Borrower obtaining knowledge:
 - (i) of the occurrence of any Default or Event of Default;
 - (ii) that any Person has given any notice to the Borrower or any Subsidiary or taken any other action with respect to any event or condition set forth in Section 8.1(b); or
 - (iii) of the occurrence of any event or change that has caused or evidences, either in any case or in the aggregate, a Material Adverse Effect;

a certificate of an Authorized Officer of the Borrower specifying the nature and period of existence of such condition, event or change, or specifying the notice given and action taken by any such Person and the nature of such claimed Event of Default, Default, default, event or condition, and what action the Borrower has taken, is taking and proposes to take with respect thereto.

- (i) <u>Notice of Litigation and Judgments</u>. Promptly upon an Executive Officer of the Borrower obtaining knowledge of:
- (i) the institution of, or non-frivolous threat of, any Adverse Proceeding not previously disclosed in writing by the Borrower to the Administrative Agent; or
 - (ii) any material development in any Adverse Proceeding or the entry of any judgment;

that if adversely determined could be reasonably expected to result in a Material Adverse Effect, written notice thereof by the Borrower together with such other information as may be reasonably available to the Borrower to enable the Administrative Agent and its counsel to evaluate such matters.

- (j) Notices of ERISA Events. (i) Promptly upon an Executive Officer of the Borrower becoming aware of the occurrence of or forthcoming occurrence of any ERISA Event that would reasonably be expected to result in a material liability, a written notice specifying the nature thereof, what action the Borrower or any Subsidiary or any of their respective ERISA Affiliates has taken, is taking or proposes to take with respect thereto and, when known, any action taken or threatened by the Internal Revenue Service, the Department of Labor or the PBGC with respect thereto; and (ii) with reasonable promptness, copies of (A) each Schedule B (Actuarial Information) to the annual report (Form 5500 Series) filed by all notices received by the Borrower or any Subsidiary or any of their respective ERISA Affiliates with the Internal Revenue Service with respect to each Pension Plan; (B) all notices received by the Borrower or any Subsidiary or any of their respective ERISA Affiliates from a Multiemployer Plan sponsor concerning an ERISA Event that would reasonably be expected to result in a Material Adverse Effect; and (C) copies of such other documents or governmental reports or filings relating to any Employee Benefit Plan as the Administrative Agent will reasonably request.
- (k) Notices Related to OFAC, Etc. The Borrower will promptly notify the Administrative Agent if (i) an Executive Officer of the Borrower has knowledge that any Credit Party or any Subsidiary or its Unrestricted Subsidiaries or any of their respective directors, officers, and employees is listed on the OFAC Lists or otherwise becomes a Blocked Person, (ii) any Credit Party or any Subsidiary or its Unrestricted Subsidiaries or, to the their knowledge, any of their respective directors, officers, and, to the knowledge of an Executive Officer of the Borrower, employees is convicted on, pleads nolo contendere to, is indicted on, or is arraigned and held over on, charges involving money laundering or predicate crimes to money laundering, or (iii) any Credit Party or any Subsidiary or its Unrestricted Subsidiaries or, to the knowledge of the Credit Parties, any of their respective directors, officers, and, to the knowledge of an Executive Officer of the Borrower, employees is subject to or has received formal notice of any proceeding or investigation by any Governmental Authority in connection with any violation of Anti-Terrorism Laws.
- (l) <u>Notices Related to FDA Compliance</u>. The Borrower will promptly notify the Administrative Agent and each Lender of each of the following:
 - (i) any notice that the FDA or other similar Governmental Authority is limiting, suspending or revoking any Registration, changing the market classification or labeling of the products of the Credit Parties and their Subsidiaries, or considering any of the foregoing that would reasonably be expected to result in Liabilities in excess of \$5,000,000 or a Material Adverse Effect; and
 - (ii) any Credit Party or any of its Subsidiaries becoming subject to any administrative or regulatory action that could be reasonably expected to result in a Material Adverse Effect; any Credit Party or any of its Subsidiaries receiving a Form FDA 483, FDA warning letter, FDA notice of violation letter, or any other written or verbal communication from FDA (other than informal verbal communications from FDA investigators during the course of an inspection that are not documented in a Form FDA 483) or any comparable Governmental Authority alleging material noncompliance with any requirement of Law; any product of any Credit Party or any of its Subsidiaries being seized, withdrawn, recalled, detained, or subject to a suspension of manufacturing that would reasonably be expected to result in Liabilities in excess of \$5,000,000 or a Material Adverse Effect; or the commencement of any proceedings in the United States or any other jurisdiction seeking the withdrawal, recall, suspension, import detention, or seizure of any product of the Credit Parties or their Subsidiaries which would reasonably be expected to result in Liabilities in excess of \$5,000,000 or a Material Adverse Effect.

- (m) Other Material Indebtedness. Promptly after the delivery to the applicable Debt Representative for any Material Indebtedness (or any Refinancing Indebtedness in respect of any of the foregoing) of the definitive documentation evidencing such Indebtedness, the Borrower will deliver to the Administrative Agent copies of all such executed definitive documents and all material amendments, modifications, supplements, waivers or other material documents delivered pursuant to the terms of the definitive documentation for any such Material Indebtedness (including any such security documentation related thereto).
- (n) Other Information. The Borrower will deliver to the Administrative Agent, promptly upon request therefor, such other information and data with respect to the Borrower, any Subsidiary or any Unrestricted Subsidiary the Administrative Agent may from time to time reasonably request (including on behalf of any Lender) relating to the Loans.
- (o) Certification of Public Information. Concurrently with the delivery of any document or notice required to be delivered pursuant to this Section 5.1, the Borrower will indicate in writing whether such document or notice contains Public Information; provided that, unless the Borrower has indicated that such document or notice contains Public Information, each Lender acknowledges that each such document or notice shall be presumed to contain Nonpublic Information. The Borrower and each Lender acknowledge that certain of the Lenders may be "public-side" Lenders (Lenders that do not wish to receive Nonpublic Information, a "Public Lender") and, if documents or notices required to be delivered pursuant to this Section 5.1 or otherwise are being distributed by Electronic Transmission (including, through IntraLinks/IntraAgency, SyndTrak or another relevant website or other information platform approved by the Administrative Agent (the "Platform")), any document or notice that the Borrower has delivered will not be posted on that portion of the Platform designated for such Public Lenders unless the Borrower expressly indicated that such document or notice contains Public Information. If the Borrower has not indicated whether a document or notice delivered pursuant to this Section 5.1 contains Public Information, the Administrative Agent reserves the right to post such document or notice solely on that portion of the Platform designated for Lenders who wish to receive Nonpublic Information with respect to the Borrower and the Subsidiaries and their respective securities. Notwithstanding the foregoing or anything to the contrary in this Agreement, the following documentation, notices and information shall be deemed not to contain Nonpublic Information: (i) the Credit Documents, (ii) notification of changes in the terms of the Credit Documents and (iii) all information delivered pursuant to Section 5.1(a), (b) or (e).
 - (p) <u>Substitution of SEC Reports; Purchase Accounting.</u> Notwithstanding anything to the contrary in this Section 5.1:
 - (i) The filing by the Borrower of a Form 10-K or Form 10-Q (or any successor or comparable forms) with the Securities and Exchange Commission (or any successor thereto) with respect to any Fiscal Year or Fiscal Quarter will be deemed to satisfy the obligations under Section 5.1(a) or 5.1(b), as applicable, as to the Credit Parties and Subsidiaries covered by such filing to deliver financial statements and a Narrative Report; and
 - (ii) any financial statements required to be delivered pursuant to Sections 5.1(a) or 5.1(b) will not be required to contain purchase accounting adjustments relating to the Transactions or any other any transaction(s) permitted hereunder (including Permitted Acquisitions or other Investments permitted under Section 6.6).
- (q) <u>Confidentiality and Privilege.</u> Notwithstanding anything to the contrary in any Credit Document, neither the Borrower nor any Subsidiary will be required to deliver or disclose to the Administrative Agent or any Lender any financial information or data (i) that constitutes non-financial trade secrets or non-financial proprietary information, (ii) in respect of which disclosure is prohibited by applicable Laws, (iii) that is subject to bona fide attorney client or similar privilege or constitutes attorney work product or (iv) the disclosure of which is prohibited by binding agreements not entered into primarily for the purpose of qualifying for the exclusion in this clause (iv); *provided* the foregoing will not limit the Borrower's obligation to deliver financial statements or forecasts pursuant to Section 5.1(a), 5.1(b) and 5.1(c).
- **5.2** Existence. Except as otherwise permitted under Section 6.8, each Credit Party will, and will cause each of the Subsidiaries to, at all times preserve and keep in full force and effect its existence and all rights (charter and statutory), franchises, licenses, permits and approvals unless (other than with respect to the preservation of the existence of the Borrower) the failure to do so could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.
- **5.3 Payment of Taxes and Claims**. The Borrower will, and will cause each of its Subsidiaries to, pay all material Taxes when due; *provided* that no such Tax or claim need be paid if it is being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as adequate reserve or other appropriate provision, as may be required pursuant to GAAP has been made therefor.
- **5.4 Maintenance of Properties**. Except as otherwise permitted under Section 6.8, the Borrower will, and will cause each of the Subsidiaries to, maintain or cause to be maintained in good repair, working order and

condition, ordinary wear and tear excepted, all properties that are necessary in the operation of the business of such Person and from time to time will make or cause to be made all necessary repairs, renewals and replacements thereof in Borrower's reasonable discretion, and prosecute, protect, defend, preserve, maintain, renew and enforce all Intellectual Property (except to the extent the Borrower reasonably determines in good faith that (a) such actions are not necessary or (b) the cost of such actions is excessive in relation to the value of such Intellectual Property).

5.5 Insurance.

- (a) The Borrower will maintain or cause to be maintained, with financially sound and reputable unaffiliated insurers, such liability insurance, third party property damage insurance, business interruption insurance and casualty insurance with respect to liabilities, losses or damage in respect of the assets, properties and Business of the Borrower and the Subsidiaries as may customarily be carried or maintained under similar circumstances by Persons engaged in similar Business, in each case, in such amounts (giving effect to self-insurance), with such deductibles, covering such risks and otherwise on such terms and conditions as may be customary for such Persons. Without limiting the generality of the foregoing, the Borrower will maintain or cause to be maintained casualty insurance on the Collateral under such policies of insurance, with such insurance companies, in such amounts, with such deductibles, and covering such risks as are at all times carried or maintained under similar circumstances by Persons engaged in similar Business. Subject to Section 5.17, each such policy of insurance will, (i) in the case of liability insurance, name the Collateral Agent, on behalf of the Secured Parties, as an additional insured thereunder as its interests may appear and (ii) in the case of each casualty insurance policy, contain a lender loss payable clause or endorsement that names the Collateral Agent, on behalf of the Secured Parties, as the lender loss payee thereunder for any covered loss. The Borrower will use commercially reasonable efforts to cause such policy of insurance to provide for at least 30 days' prior written notice to the Collateral Agent of any cancellation of the policy (10 days in the case of non-payment). To the extent that the requirements of this Section 5.5 are not satisfied on the Closing Date, the Borrower may satisfy such requirements within ninety (90) days of the Closing Date (as extended by the Administrative Agent in its reasonable discretion).
- (b) If any portion of any improved Material Real Estate Asset subject to a Mortgage located in the United States is at any time located in an area identified by the Federal Emergency Management Agency (or any successor agency) as a Special Flood Hazard Area with respect to which flood insurance has been made available under the National Flood Insurance Act of 1968 (as in effect on the Closing Date or thereafter or any successor act thereto), then the Borrower shall, or shall cause each applicable Credit Party to, (i) maintain, or cause to be maintained, with a financially sound and reputable insurer, flood insurance in an amount and otherwise sufficient to comply with all applicable rules and regulations promulgated pursuant to the Flood Insurance Laws and (ii) deliver to the Collateral Agent evidence of such compliance in form and substance reasonably acceptable to the Collateral Agent.
- 5.6 Books and Records; Inspections. Each Credit Party will, and the Borrower will cause each of the Subsidiaries to, keep proper books of record and accounts in which full, true and correct entries will be made of all material dealings and transactions in relation to its business and activities. Subject to the last paragraph of Section 5.1, each Credit Party will, and the Borrower will cause each of the Subsidiaries to, permit the Administrative Agent and any Lender and their respective authorized representatives to visit and inspect any of the properties of such Person, to inspect, copy and take extracts from its and their financial and accounting records, and to discuss its and their affairs, finances and accounts with its and their officers and independent public accountants, all upon reasonable notice and at such reasonable times during normal business hours and as often as may reasonably be requested; *provided* that (a) unless an Event of Default has occurred and is continuing, only the Administrative Agent on behalf of the Lenders may exercise rights under this Section 5.6; *provided further* that unless an Event of Default has occurred and be continuing, the Administrative Agent shall not exercise such rights more often than two (2) times during any calendar year and only one (1) such time shall be at the Borrower's expense and (b) in respect of any such discussions with any independent accountants, the Borrower or such Subsidiary, as the case may be, must receive reasonable advance notice thereof and a reasonable opportunity to participate therein and such discussions will be subject to the execution of any indemnity, non-reliance letter or other than requirements of such accountants.

5.7 Compliance with Laws.

- (a) The Borrower will comply, and will cause each of the Subsidiaries to comply, with the requirements of all applicable Laws, rules, regulations and orders of any Governmental Authority (including all applicable Environmental Laws and ERISA, but excluding Export Controls, Anti-Terrorism Laws and Anti-Corruption Laws), noncompliance with which could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. The Borrower will comply, and will cause each of the Subsidiaries to comply, in all material respects with the requirements of all Export Controls, Anti-Terrorism Laws and Anti-Corruption Laws.
- (b) Without limiting the generality of the foregoing, each Credit Party shall, and shall cause each of its Subsidiaries to, comply in all material respects with all applicable statutes, rules, regulations, standards,

guidelines, policies and orders administered or issued by the FDA ("FDA Laws") or any comparable Governmental Authority. All products developed, manufactured, tested, distributed or marketed by or on behalf of the Credit Parties and their Subsidiaries that are subject to the jurisdiction of the FDA or comparable Governmental Authority have been and shall be developed, tested, manufactured, distributed and marketed in compliance in all material respects with the requirements of Law of the jurisdiction in which the applicable product is marketed or commercialized, including, without limitation, pre-market notification, good manufacturing practices, labeling, advertising, record-keeping, and adverse event reporting.

5.8 Anti-Terrorism Laws and Anti-Corruption Laws. The Borrower will maintain in effect and enforce, and will procure that each of the Subsidiaries maintains in effect and enforces, policies, procedures and internal controls designed to ensure compliance by the Borrower, the Subsidiaries and their respective directors, officers, and employees with Anti-Terrorism Laws and Anti-Corruption Laws.

5.9 [Reserved].

5.10 Additional Subsidiaries.

- (a) In the event that any Person becomes a Subsidiary (which, for purposes of the foregoing reference to "Subsidiary" only, will be deemed to include an Unrestricted Subsidiary) of the Borrower, such Person will be deemed to be a Subsidiary hereunder until such time as the Borrower has designated such Subsidiary as an Unrestricted Subsidiary in accordance with the terms hereof. In the event that any Person becomes a Subsidiary (other than an Excluded Subsidiary), the Borrower will, within 45 days (or such longer time as the Administrative Agent may agree in its sole discretion):
 - (i) cause such Subsidiary to become a Guarantor hereunder and a Grantor under the Pledge and Security Agreement by executing and delivering to the Administrative Agent and the Collateral Agent a Counterpart Agreement and such other Collateral Documents (including the deliverables set forth in Section 5.11 below) and an acknowledgement to any Pari Passu Lien Intercreditor Agreement or Junior Lien Intercreditor Agreement then applicable, in each case as may be reasonably requested by the Collateral Agent and take and cause such Domestic Subsidiary to take such actions (including the actions set forth in Section 5.11 below) as are required by the Collateral Documents or are reasonably requested by the Collateral Agent to perfect the security interests created by the Collateral Documents;
 - (ii) upon reasonable request by the Administrative Agent, take all such actions and execute and deliver, or cause to be executed and delivered, all appropriate resolutions, secretary certificates, certified Organizational Documents and customary legal opinions relating to the matters described in this Section 5.10(b); and
 - (iii) deliver to the Administrative Agent a supplement to <u>Schedule 4.10(b)</u>, which will be deemed to supplement <u>Schedule 4.10(b)</u> for all purposes hereof.
- (b) In the event that any Person becomes an Excluded Foreign Subsidiary of the Borrower, and the ownership interests of such Excluded Foreign Subsidiary are owned directly by the Borrower or by any Guarantor Subsidiary, the Borrower will, or will cause such Guarantor Subsidiary to (in the absence of any other applicable limitation hereunder), within 45 days (or such longer time as the Administrative Agent may agree in its sole discretion), deliver all such applicable documents, instruments and agreements necessary in the reasonable determination of the Administrative Agent to grant to the Collateral Agent a perfected Lien in such ownership interests in favor of the Collateral Agent, for the benefit of the Secured Parties, under the Pledge and Security Agreement; *provided* that in no event will more than 65.0% of the Voting Capital Stock of any such Excluded Foreign Subsidiary be required to be delivered or granted or perfected as a Lien for the benefit of the Secured Parties; *provided further* that in no event will the Borrower or any Subsidiary be required to execute any document, instrument or agreement, complete any filing or take any other action (i) with respect to the creation or perfection of the Collateral Agent's security interest in such ownership interests in any jurisdiction outside of the United States or any State thereof, (ii) that would violate applicable Law or (iii) that would provide any Lien in respect of Excluded Assets (as defined in the Pledge and Security Agreement).
- **5.11 Material Real Estate Assets**. In the event that any Credit Party acquires a Material Real Estate Asset or an Executive Officer of the Borrower discovers that a Real Estate Asset (other than Excluded Real Estate Assets) owned on the Closing Date becomes a Material Real Estate Asset and such interest has not otherwise been made subject to the Lien of the Collateral Documents in favor of the Collateral Agent, for the benefit of the Secured Parties, then such Credit Party, no later than ninety (90) days (or such later date agreed to by the Administrative Agent) following the acquisition of such Material Real Estate Asset or such discovery, will take all such actions and execute and deliver, or cause to be executed and delivered, all such applicable Mortgages covering, among other things, such interest in real property (*provided* that to the extent any property to be subject to a Mortgage is located in a jurisdiction which imposes mortgage recording taxes, intangibles tax, documentary tax or similar tax, if such tax will be owed on the entire amount of the indebtedness evidenced hereby, the

Collateral Agent will, to the extent permitted by applicable law, limit the amount secured by the Mortgage to the fair market value of the Material Real Estate Asset at the time the Mortgage is entered into if such limitation results in such tax being calculated based upon such fair market value), title insurance policies and endorsements thereto reasonably requested by the Collateral Agent and to the extent available in the applicable jurisdiction at reasonable cost (*provided* that any title insurance amounts shall not exceed the reasonably ascertainably fair market value of the applicable Material Real Estate Asset) based on readily available information, appraisals (solely to the extent required under the Financial Institutions Reform Recovery and Enforcement Act of 1989), Phase I environmental assessments (to the extent reasonably requested by the Collateral Agent), A.L.T.A. survey plans (provided that new or updated surveys will not be required if an existing survey, ExpressMap or other similar documentation is available and is sufficient for the title insurer to provide full survey coverage and issue the survey-based endorsements attached to the title insurance policies without the need for such new or updated surveys), "Life-of Loan" Federal Emergency Management Agency Standard Flood Hazard Determinations under Regulation H of the Federal Reserve Board (together with evidence of flood insurance for any improved Material Real Estate Asset located in a flood hazard area to the extent required by the Flood Insurance Laws, and in accordance with Section 5.5(b) hereof), legal opinions and certificates that the Administrative Agent will reasonably request to create in favor of the Collateral Agent, for the benefit of the Secured Parties, a valid and perfected lien and security interest in such Material Real Estate Assets, with each of the foregoing documents in form and substance reasonably satisfactory to the Collateral Agent.

- **5.12 Further Assurances**. At any time or from time to time upon the request of the Administrative Agent, each Credit Party will, at its expense, promptly execute, acknowledge and deliver such further documents and do such other acts and things as the Administrative Agent or the Collateral Agent may reasonably request in order to effect fully the purposes of the Credit Documents. In furtherance and not in limitation of the foregoing, each Credit Party will take such actions as the Administrative Agent or the Collateral Agent may reasonably request from time to time to ensure that the Obligations are guaranteed by the Guarantors and are secured by the Collateral, including all of the outstanding Capital Stock of the Borrower and each of the Subsidiaries to the extent constituting Collateral.
- 5.13 Designation of Subsidiaries and Unrestricted Subsidiaries. The Borrower may designate any Subsidiary as an Unrestricted Subsidiary or re-designate any Unrestricted Subsidiary as a Subsidiary, in each case, so long as immediately before and after giving effect to such designation or re-designation, (a) no Default or Event of Default will have occurred and be continuing or would immediately result therefrom and (b) the Borrower is in compliance on a Pro Forma Basis with the Financial Covenant (whether or not then in effect); provided that (i) no Subsidiary may be designated as an Unrestricted Subsidiary if such Subsidiary or any of its Subsidiaries owns any equity interests of, or owns or holds any Lien on any property of, the Borrower or any other Subsidiary of the Borrower that is not a Subsidiary of the Subsidiary to be so designated, (ii) no Subsidiary previously designated as an Unrestricted Subsidiary hereunder may thereafter be re-designated as an Unrestricted Subsidiary and (iii) the Investment resulting from the designation of such Subsidiary as an Unrestricted Subsidiary as described in the definition of "Unrestricted Subsidiary" shall be permitted by Section 6.6.
- **5.14** Quarterly Lender Calls. Quarterly, but not more than one time each Fiscal Quarter, at a time to be mutually agreed with, and at the written request of, the Administrative Agent that is promptly after the delivery of the information required pursuant to Sections 5.1(a) and (b) above, the Borrower will participate in a conference call for Lenders to discuss the financial condition and results of operations of the Borrower and the Subsidiaries for the most recently-ended Fiscal Quarter or Fiscal Year, as applicable, for which financial statements have been delivered.
- **5.15 Maintenance of Ratings**. The Borrower will use commercially reasonable efforts to maintain (a) a public corporate credit rating (but not a specific rating) from S&P and a public corporate family rating (but not a specific rating) from Moody's, in each case in respect of the Borrower, and (b) a public rating (but not a specific rating) in respect of the credit facilities provided to the Borrower under this Agreement from each of S&P and Moody's.
- **5.16** Use of Proceeds. All proceeds of the Term Loans and the Revolving Loans will be used in accordance with Section 2.6 (including that no part of the proceeds of any Loan will be used, whether directly or indirectly, for any purpose that would entail a violation of Regulation T, Regulation U or Regulation X).
- **5.17 Post-Closing Matters**. The Borrower will, and will cause each of the Subsidiaries to, take each of the actions set forth on <u>Schedule 5.17</u> within the time period prescribed therefor on such schedule (as such time period may be extended by the Administrative Agent).

SECTION 6. NEGATIVE COVENANTS

The Borrower and each Guarantor Subsidiary covenants and agrees that so long as the Commitments have not been terminated and until the principal of and interest on each Loan, all fees and all other expenses or amounts payable under any Credit Document (other than amounts in respect of indemnification, expense reimbursement, yield protection or tax gross-up and contingent obligations, in each case that are not then owing or with respect to

which no claim has been made) have been paid in full and all Letters of Credit have been cancelled, or have expired or have been Cash Collateralized or otherwise backstopped in a manner satisfactory to the applicable Issuing Bank and all amounts drawn thereunder have been reimbursed in full, it will perform, and the Borrower will cause each Subsidiary to perform (to the extent applicable to such Subsidiary), all covenants in this Section 6.

- **6.1 Indebtedness**. The Borrower will not, nor will it permit any Subsidiary to, directly or indirectly, create, incur, assume or guaranty, or otherwise become directly or indirectly liable with respect to any Indebtedness, except:
- (a) the Obligations (including Incremental Facilities, Refinancing Term Loans, Refinancing Revolving Loans, Extended Term Loans, Extended Revolving Credit Commitments, all obligations arising under any Secured Rate Contract and all Bank Product Obligations, in each case to the extent constituting Obligations);
 - (b) [reserved];
 - (c) Indebtedness of the Borrower or any Subsidiary described on Schedule 6.1 in existence on the Closing Date;
- (d) Indebtedness of the Borrower or any Subsidiary with respect to Capital Leases and Purchase Money Indebtedness in an aggregate amount at any time outstanding not to exceed the greater of (i) \$5,000,000 and (ii) an amount equal to 10% of TTM Consolidated Adjusted EBITDA, in each case determined at the time of incurrence (but not any refinancings thereof); provided that (A) such Indebtedness is issued and any Liens securing such Indebtedness are created within 180 days after the acquisition, construction, lease or improvement of the asset financed and (B) any such Indebtedness is secured only by the asset acquired, constructed, leased or improved in connection with the incurrence of such Indebtedness or proceeds thereof and related property; provided, further, that individual financings provided by a lender or group of lenders may be cross collateralized to other financings provided by such lender or group;
- (e) Indebtedness in respect of Rate Contracts entered into for non-speculative purposes;
- (f) Indebtedness of any Subsidiary owing to the Borrower or to any other Subsidiary, or of the Borrower owing to any Subsidiary; *provided* that (i) all such Indebtedness owed by a Credit Party is subject to the Intercompany Subordination Agreement and (ii) in the case of any Indebtedness created after the Closing Date of any such Subsidiary that is not a Guarantor Subsidiary owing to the Borrower or any Guarantor Subsidiary, such Indebtedness is permitted under Section 6.6;
 - (g) Incremental Equivalent Debt;
 - (h) Credit Agreement Refinancing Indebtedness that does not constitute Obligations;
 - (i) Permitted Ratio Debt;
- (j) Indebtedness of any Subsidiary owing to the Borrower or to any other Subsidiary in consideration for the Potential Transfers *provided* that all such Indebtedness owed by a Credit Party is subject to the Intercompany Subordination Agreement;
- (k) Indebtedness of a Person or Indebtedness attaching to assets of a Person that, in either case, becomes a Subsidiary, or Indebtedness attaching solely to assets that are acquired by the Borrower or any Subsidiary, in each case after the Closing Date; *provided* that (i) such Indebtedness existed at the time such Person became a Subsidiary or at the time such assets were acquired and, in each case, was not created in anticipation or contemplation thereof, (ii) such Indebtedness is not guaranteed by the Borrower or any of its Subsidiaries (other than by any Person that becomes a Subsidiary in connection with the foregoing and its Subsidiaries) and (iii) the Total Net Leverage Ratio (at the time of, and after giving effect to, the assumption thereof) does not exceed 5.25:1.00;
- (l) Indebtedness incurred by the Borrower or any Subsidiary in the form of indemnification, incentive, non-compete, consulting, adjustment of purchase price or similar obligations (including "earn-outs" or similar obligations in connection with acquisitions) and other contingent obligations (other than in respect of Indebtedness for borrowed money of another Person), or guaranty securing the performance of the Borrower or any Subsidiary (both before and after liability associated therewith becomes fixed), in each case, pursuant to any agreement entered into in connection with dispositions or acquisitions (including Permitted Acquisitions and other permitted Investments) of any business, assets or Subsidiary;
- (m) Indebtedness pursuant to any guaranties, performance, surety, statutory, appeal or similar bonds or obligations incurred in the ordinary course of business or any bankers' acceptance, bank guarantees, letter of credit, warehouse receipt or similar facilities (including in respect of workers compensation claims,

health, disability or other employee benefits or property, casualty or liability insurance or self-insurance or other Indebtedness with respect to reimbursement-type obligations regarding workers compensation claims) or tenant improvement loans incurred in the ordinary course of business;

- (n) guaranties of the obligations of suppliers, customers, franchisees, lessors and licensees of the Borrower or any Subsidiary incurred in the ordinary course of business;
- (o) to the extent constituting Indebtedness, royalties or milestone payments in connection with the commercialization of acquired technology or products;
- (p) Indebtedness of the Borrower or any Subsidiary in connection with Bank Products incurred in the ordinary course of business;
- (q) Indebtedness owing to any unaffiliated insurance company or a financing company in connection with the financing of insurance premiums;
- (r) Indebtedness incurred or assumed by the Borrower or any Subsidiary in connection with a Permitted Acquisition; *provided* that (i) in the case of such Indebtedness that is assumed, such Indebtedness was not created in anticipation or contemplation of such Permitted Acquisition and (ii) in the case of any such Indebtedness that is incurred or assumed, such Indebtedness would qualify as Permitted Ratio Debt;
- (s) earn-outs, milestone payments and similar obligations incurred in connection with Permitted Acquisitions and other permitted Investments on market terms (as reasonably determined by the Borrower);
- (t) to the extent constituting Indebtedness, Investments permitted under Section 6.6 (other than under Section 6.6(n) or 6.6(q));
- (u) Indebtedness of Foreign Subsidiaries owed to a third party (other than a Credit Party or a Subsidiary) in an aggregate principal amount at any time outstanding not to exceed the greater of (A) \$8,000,000 and (B) an amount equal to 10% of TTM Consolidated Adjusted EBITDA;
- (v) Indebtedness incurred in connection with deferred compensation or stock-based compensation;
 - (w) [reserved];
- (x) the incurrence by the Borrower or any Subsidiary of Indebtedness constituting a Permitted Refinancing in exchange for, or the net proceeds of which are used to renew, refund, refinance, replace, defease or discharge any Indebtedness (other than intercompany Indebtedness) that was permitted to be incurred under clause (c), (d), (g), (h), (i), (k), (r), (u) or (z) of this Section 6.1;
- (y) (i) guaranties by the Borrower of Indebtedness of a Guarantor Subsidiary, (ii) guaranties by any Subsidiary of Indebtedness of the Borrower or a Guarantor Subsidiary, or (iii) guaranties by the Borrower or a Guarantor Subsidiary of Indebtedness of any Non-Credit Party and that would have been permitted as an Investment by the Borrower or a Guarantor Subsidiary in such Subsidiary pursuant to Section 6.6, with respect, in each case, to Indebtedness otherwise permitted to be incurred pursuant to this Section 6.1; provided that if the Indebtedness that is being guarantied is unsecured and/or Subordinated Debt, the guaranty will also be unsecured and/or be expressly subordinated in right of payment to the Obligations; provided further that the foregoing clause (ii) shall not be construed to allow a Non-Credit Party to guarantee the obligations of a Credit Party in cases where such guarantee is otherwise restricted or limited hereunder by the definition of Incremental Equivalent Debt, Credit Agreement Refinancing Indebtedness, Permitted Ratio Debt or otherwise; and
- (z) additional Indebtedness of the Borrower or any Subsidiary in an aggregate principal amount, at any time outstanding, not to exceed the greater of (i) \$10,000,000 and (ii) an amount equal to 17.5% of TTM Consolidated Adjusted EBITDA;

provided that, the aggregate principal amount of Indebtedness of Non-Credit Parties incurred in reliance on clause (i), (k), (r) or (z) of this Section 6.1 will not exceed, at any one time outstanding, the greater of

(A) \$10,000,000 and (B) an amount equal to 17.5% of TTM Consolidated Adjusted EBITDA, and Permitted Refinancings of the foregoing;

For purposes of determining compliance with this Section 6.1:

- (1) the principal amount in Indebtedness outstanding under any clause of this Section 6.1 will be determined after giving effect to the application of proceeds of any such Indebtedness to refinance any such other Indebtedness;
- (2) guarantees of, or obligations in respect of letters of credit relating to, Indebtedness that are otherwise included in the determination of a particular amount of Indebtedness will not be included in the determination of such amount of Indebtedness;
- (3) (i) the accrual of interest, (ii) the payment of premiums, fees, expenses and charges and (iii) increases in the amount of Indebtedness outstanding solely as a result of fluctuations in the exchange rate of currencies, in each case, will not be deemed to be an incurrence of Indebtedness;
- (4) for purposes of determining compliance with any Cap on the incurrence of Indebtedness, the Dollar equivalent principal amount of Indebtedness denominated in a foreign currency will be calculated based on the relevant currency exchange rate in effect on the date such Indebtedness was incurred, in the case of term debt, or first committed or first incurred (whichever yields the lower Dollar equivalent), in the case of revolving credit debt; *provided* that if such Indebtedness is issued to refinance other Indebtedness denominated in a foreign currency, and such refinancing would cause the applicable Dollar denominated Cap to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such Dollar denominated Cap will be deemed not to have been exceeded so long as the principal amount of such Indebtedness being refinanced *plus* (ii) the aggregate amount of accrued but unpaid interest, fees, underwriting discounts, defeasance costs, premiums (including tender premiums) and other costs and expenses (including original issue discount, upfront fees or similar fees) incurred in connection with such refinancing;
- (5) the principal amount of any Indebtedness incurred to refinance other Indebtedness, if incurred in a different currency from the Indebtedness being refinanced, will be calculated based on the currency exchange rate applicable to the currencies in which such respective Indebtedness is denominated that is in effect on the date of such refinancing; the principal amount of any non-interest bearing Indebtedness or other discount security constituting Indebtedness at any date will be the principal amount thereof that would be shown on a balance sheet of the Borrower dated such date prepared in accordance with GAAP;
- (6) in the event that an item of Indebtedness (or any portion thereof) meets the criteria of more than one of the clauses of this Section 6.1, the Borrower may, in its sole discretion, at the time of incurrence, divide, classify or reclassify, or at any later time divide, classify or reclassify, such item of Indebtedness (or any portion thereof) in any manner that complies with this covenant; *provided* that all Indebtedness created pursuant to the Credit Documents will be deemed to have been incurred in reliance on the exception in clause (a) above, and shall not be permitted to be reclassified pursuant to this paragraph (other than in connection with a refinancing thereof pursuant to a separate exception to this covenant); *provided*, *further*, that any Indebtedness incurred under a Dollar-based Cap may not be reclassified as Indebtedness incurred in reliance on a financial ratio-based exception;
- (7) for the avoidance of doubt, if the Borrower or any Subsidiary incurs Indebtedness using a ratio-based test on the same date that it incurs Indebtedness under any Dollar-based Cap, then the ratio-based test will be calculated with respect to such incurrence under the ratio-based test without regard to any incurrence of Indebtedness under the Dollar-based Cap; and
- (8) in the case of any Permitted Refinancing of Indebtedness, (x) the original amount of Refinanced Indebtedness (including with respect to successive Permitted Refinancings) will continue to be considered to have been incurred under the clause of this Section 6.1 in reliance on which such Refinanced Indebtedness was initially incurred (or to which such Refinanced Indebtedness at such time has been classified, as applicable), and (y) if Refinanced Indebtedness was initially incurred in reliance on (or at such time has been classified to, as applicable) a clause of this Section 6.1 that is subject to a Cap, and such Permitted Refinancing would cause such Cap to be exceeded, then such Cap will be deemed not to be exceeded to the extent that the aggregate principal amount of the Refinancing Indebtedness incurred to replace the Refinanced Indebtedness does not exceed the Maximum Refinancing Amount.
- 6.2 Liens. The Borrower will not, nor will the Borrower permit any Subsidiary to, directly or indirectly, create, incur, assume or permit to exist any Lien on or with respect to any of its property or assets (including any document or instrument in respect of goods or accounts receivable) of the Borrower or any Subsidiary, whether now owned or hereafter acquired, or any income or profits therefrom, except the following (collectively, "Permitted Liens"):
- (a) Liens securing the Obligations (including Incremental Facilities, Refinancing Commitments, Refinancing Loans, Extended Revolving Credit Commitments, Extended Term Loans, and all obligations arising under any Secured Rate Contract and all Bank Product Obligations, in each case to the extent constituting Obligations); provided that Liens securing Secured Rate Contracts set forth in clause (b) of the definition thereof shall not exceed \$5,000,000 at any time;

- (b) [reserved];
- (c) Liens described on <u>Schedule 6.2</u> in existence on the Closing Date, including any modification, replacement, extension or renewal of any such Lien upon or in the same property subject thereto and the modification, replacement, extension, renewal or refinancing of the obligations secured or benefited by such Liens (including, if such Lien secures Indebtedness described on <u>Schedule 6.2</u>, Liens securing any Permitted Refinancing thereof);
- (d) Liens securing Indebtedness in respect of Capital Leases and Purchase Money Indebtedness, in each case permitted pursuant to Section 6.1(d), and Permitted Refinancings thereof;
- (e) Liens granted to (and in favor of) a Credit Party to secure intercompany Indebtedness permitted by Section 6.1; *provided* that, if such Liens encumber Collateral, such Liens shall rank junior in priority to the Liens securing the Obligations pursuant to intercreditor and/or subordination terms that are reasonably acceptable to the Administrative Agent;
- (f) Liens securing (i) Incremental Equivalent Debt or (ii) Credit Agreement Refinancing Indebtedness permitted under Sections 6.1(g) or (h), respectively, and Permitted Refinancings thereof;
- (g) Liens on assets acquired, or on assets of a Person that is acquired, securing Indebtedness permitted pursuant to Sections 6.1(k) or (r)(i) (provided that such (i) Liens were existing at the time of such acquisition and were not created in anticipation or contemplation of such acquisition and (ii) do not extend to property not subject to such Liens at the time of such acquisition (other than improvements thereon)) and Permitted Refinancings thereof;
- (h) Liens solely on any cash earnest money deposits made by the Borrower or any Subsidiary in connection with any letter of intent or purchase agreement permitted hereunder;
- (i) Liens of landlords, carriers, warehousemen, mechanics, repairmen, lessors, workmen and materialmen, and other Liens imposed by law (other than any such Lien imposed pursuant to Section 430(k) of the Internal Revenue Code or by ERISA), in each case incurred in the ordinary course of business overdue for a period of more than sixty (60) days or, if more than sixty (60) days overdue, are unfiled and no other action has been taken to enforce such Lien or that are being contested in good faith and by appropriate actions, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;
- (j) Liens for Taxes not more than 30 days past due or to the extent the Borrower and the Subsidiaries are in compliance with Section 5.3 with respect thereto;
- (k) deposits to secure the performance of (i) tenders, bids, trade contracts, governmental contracts, trade contracts, performance and return-of-money bonds and other similar contracts (other than obligations for the payment of Indebtedness for borrowed money) and (ii) leases, subleases, statutory obligations, surety, stay, judgment and appeal bonds, performance bonds and other obligations of a like nature, in each case incurred in the ordinary course of business;
- (l) Liens incurred by the Borrower or any Subsidiary in the ordinary course of business in connection with workers' compensation, unemployment insurance and other types of social security;
- (m) Liens created in the ordinary course of business on deposits to secure liability for premiums to insurance carriers or securing insurance premium financing arrangements;
- (n) (i) Liens that are contractual or common law rights of set-off or rights of pledge relating to (A) the establishment of depository relations in the ordinary course of business with banks or other deposit-taking financial institutions not given in connection with the incurrence of Indebtedness or
- (B) pooled deposit or sweep accounts of the Borrower or any Subsidiary to permit satisfaction of overdraft or similar obligations incurred in the ordinary course of business of the Borrower and the Subsidiaries, or (C) purchase orders and other agreements entered into with customers of the Borrower or any Subsidiary in the ordinary course of business or consistent with past practice and (ii) Liens securing cash management obligations (that do not constitute Indebtedness) and obligations in respect of Bank Products incurred in the ordinary course of business;
- (o) Liens (i) of a collection bank arising under Section 4-208 or 4-210 of the Uniform Commercial Code on the items in the course of collection, (ii) encumbering reasonable customary initial deposits and margin deposits, (iii) attaching to commodity trading accounts or other commodities brokerage accounts incurred in the ordinary course of business or consistent with past practice and not for speculative purposes and (iv) in favor of a banking or other financial institution arising as a matter of law encumbering deposits or other

funds maintained with a financial institution (including the right of set-off) and that are within the general parameters customary in the banking industry;

- (p) possessory Liens in favor of brokers and dealers arising in connection with the acquisition or disposition of Investments owned as of the Closing Date and in connection with Investments not otherwise prohibited by this Agreement; *provided* that such Liens (i) attach only to such Investments and (ii) secure only obligations incurred in the ordinary course and arising in connection with the acquisition or disposition of such Investments and not any obligation in connection with margin financing or otherwise;
- (q) survey exceptions, encumbrances, ground leases, easements or reservations of, or rights of others for, licenses, rights-of-way, servitudes, sewers, electric lines, drains, telegraph and telephone and cable television lines, gas and oil pipelines and other similar purposes, reservations of rights, or zoning, building codes or other restrictions (including, without limitation, minor defects or irregularities in title and similar encumbrances) as to the use of real properties or Liens incidental to the conduct of the business of such Person or to the ownership of its properties which do not and will not in the aggregate materially adversely interfere with the ordinary conduct of the business of the Borrower or any Subsidiary;
- (r) any zoning or similar land use restrictions or rights reserved to or vested in any governmental office or agency, including without limitation, site plan agreements, development agreements and contractual zoning agreements, to control or regulate the use of any real property;
 - (s) leases, subleases, licenses, sublicenses, occupancy agreements or assignments of or in respect of real or personal property;
- (t) Liens disclosed by the title insurance policies (and approved by the Collateral Agent) delivered on or subsequent to the Closing Date for any Material Real Estate Asset subject to a Mortgage and any replacement, extension or renewal of any such Liens (so long as the Indebtedness and other obligations secured by such replacement, extension or renewal Liens are permitted by this Agreement); provided that such replacement, extension or renewal Liens do not cover any property other than the property that was subject to such Liens prior to such replacement, extension or renewal;
- (u) any interest or title of a lessor or sublessor under any lease of real estate permitted hereunder or any Liens on such interest or title that do not affect the Borrower's or applicable Subsidiary's leasehold or subleasehold estate in any Real Estate Asset;
- (v) leases, licenses, subleases or sublicenses granted to others in the ordinary course of business or consistent with past practice (or other agreement under which the Borrower or any Subsidiary has granted rights to end users to access and use the Borrower or any Subsidiary products, technologies, facilities or services) which do not (A) interfere in any material respect with the business of the Borrower and the Subsidiaries, taken as a whole, or (B) secure any Indebtedness;
- (w) (i) non-exclusive outbound licenses or sub-licenses of patents, copyrights, trademarks and other Intellectual Property rights granted by the Borrower or any Subsidiary in the ordinary course of business and any interest or title in connection therewith, which do not interfere in any material respect with the ordinary conduct of business of the Borrower or any Subsidiary and (ii) exclusive licenses of Intellectual Property in connection with Asset Sales or where exclusivity is restricted to a limited field of use that does not prohibit Borrower and its Subsidiaries from commercializing the Intellectual Property rights so licensed in applications outside the limited field of use or in an application presently commercialized by the Borrower and its Subsidiaries, so long as such licenses are permitted pursuant to Section 6.8; provided that in the case of this clause (ii), (A) the Administrative Agent has a perfected first priority security interest in each such license and (B) no Event of Default or Event of Default shall exist at the time any Credit Party or any of its Subsidiaries enter into such license;
- (x) Liens arising in connection with conditional sale, title retention, consignment or similar arrangements for the sale of goods entered into by the Borrower or any Subsidiary in the ordinary course of business permitted by this Agreement, purchase orders and other agreements entered into with customers of the Borrower or any Subsidiary in the ordinary course of business;
- (y) purported Liens (i) evidenced by the filing of precautionary financing statements relating solely to operating leases of personal property entered into in the ordinary course of business or (ii) arising from equipment or other materials which are not owned by the Borrower or any Subsidiary located on the premises of the Borrower or a Subsidiary (but not in connection with, or as part of, the financing thereof) from time to time in the ordinary course of business and consistent with current practices of the Borrower and the Subsidiaries and precautionary financing statement filings in respect thereof;
- (z) Liens on cash or Cash Equivalents used to defease or to satisfy and discharge Indebtedness; *provided* that such defeasance or satisfaction and discharge is not prohibited hereunder;

- (aa) trustees' Liens granted pursuant to any indenture governing any Indebtedness not otherwise prohibited by this Agreement in favor of the trustee under such indenture and securing only obligations to pay compensation to such trustee, to reimburse such trustee of its expenses and to indemnify such trustee under the terms of such indenture;
- (bb) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods and Liens on specific items of inventory or other goods and proceeds thereof of any Person securing such Person's obligations in respect of bankers' acceptances or letters of credit permitted under Section 6.1 issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods in the ordinary course of business;
- (cc) Liens on Capital Stock in joint ventures securing obligations of such joint venture or customary buy / sell arrangements set forth in joint venture agreements and similar binding agreements;
 - (dd) judgment Liens not constituting an Event of Default under Section 8.01(h);
- (ee) Liens on property subject to a Permitted Sale Leaseback Transaction securing obligations of the Borrower and/or its Subsidiaries under any lease entered into in connection with such Permitted Sale Leaseback Transaction;
 - (ff) Liens securing Rate Contracts incurred under Section 6.1(e) in an aggregate amount not to exceed \$3,000,000;
 - (gg) Liens on assets of Non-Credit Parties securing Indebtedness of Non-Credit Parties permitted to be incurred under Section 6.1;
- (hh) Liens securing Permitted Ratio Debt or Indebtedness incurred in connection with a Permitted Acquisition in reliance on Section 6.1(r), in any such case to the extent incurred as Pari Passu Lien Indebtedness or Junior Lien Indebtedness, and Permitted Refinancings thereof; and
- (ii) Liens securing obligations, including Indebtedness, in an aggregate amount not to exceed, on the date such Liens are granted, the greater of (A) \$7,500,000 and (B) an amount equal to 15% of TTM Consolidated Adjusted EBITDA, and Permitted Refinancings thereof.

For purposes of determining compliance with this Section 6.2:

- (1) the increase in the amount of any obligation secured by a Lien as a result of fluctuations in the exchange rate of currencies will not be deemed to be an incurrence or existence of additional Liens;
- (2) in the case of any Permitted Refinancing of Indebtedness or other obligations secured by a Lien, (x) the original amount of Refinanced Indebtedness or other obligations (including with respect to successive Permitted Refinancings) will continue to be considered to have been incurred under the clause of this Section 6.2 in reliance on which such Lien was initially incurred (or to which such Lien at such time has been classified, as applicable), and (y) if any Liens securing obligations are incurred to refinance Liens securing obligations initially incurred in reliance on a clause of this Section 6.2 measured by a Cap, and such refinancing would cause such Cap to be exceeded, then such clause will be deemed not to be exceeded to the extent that the aggregate principal amount of the new obligations incurred to replace such existing obligations does not exceed the Maximum Refinancing Amount;
- (3) for the avoidance of doubt, if the Borrower or any Subsidiary incurs any Lien securing Indebtedness using a ratio-based test on the same date that it incurs any Lien securing Indebtedness under any Dollar-based Cap, then the ratio-based test will be calculated with respect to such incurrence under the ratio-based test without regard to any incurrence of Indebtedness under the Dollar-based Cap; and
- (4) in the event that any Lien (or any portion thereof) meets the criteria of more than one of the clauses of this Section 6.2, the Borrower may, in its sole discretion, at the time of incurrence, divide, classify or reclassify, or at any later time divide, classify or reclassify, such Lien (or any portion thereof) in any manner that complies with this covenant; *provided* that all Liens created pursuant to the Credit Documents will be deemed to have been incurred in reliance on the exception in clause (a) above and shall not be permitted to be reclassified pursuant to this paragraph (other than in connection with a permitted refinancing thereof); *provided*, *further*, that any such Lien incurred under a Dollar-based Cap may not be reclassified as a Lien incurred in reliance on a financial ratio-based exception.
- **6.3** No Further Negative Pledges. The Borrower will not, nor will it permit any Guarantor Subsidiary to, enter into any agreement prohibiting the creation or assumption of any Lien upon any of its properties or assets, whether now owned or hereafter acquired, to secure the Obligations other than:

- (a) specific property encumbered to secure payment of particular Indebtedness or to be sold pursuant to an executed agreement with respect to a permitted Asset Sale or other disposition described in the definition of "Asset Sale";
- (b) restrictions by reason of customary provisions restricting assignments, subletting or other transfers contained in leases, licenses, joint venture agreements, asset sale agreements, stock sale agreements and similar agreements entered into to the extent permitted hereunder; *provided* that such restrictions are limited to the property or assets secured by such Liens or the property or assets subject to such leases, licenses, joint venture agreements, asset sale agreements, stock sale agreements or similar agreements, as the case may be;
 - (c) restrictions contained in licenses of Intellectual Property otherwise permitted under this Agreement;
- (d) restrictions set forth in any document governing Incremental Equivalent Debt, Permitted Ratio Debt and Credit Agreement Refinancing Indebtedness, in each case, so long as such restrictions do not restrict or otherwise impair the rights of the Agents, the Lenders or any other Secured Party under this Agreement or any other Credit Document or any refinancing thereof;
- (e) restrictions under any subordination or intercreditor agreement reasonably acceptable to the Administrative Agent with respect to Indebtedness permitted under Section 6.1;
- (f) restrictions on Non-Credit Parties pursuant to Indebtedness permitted under Section 6.1;
- (g) restrictions on Persons or property at the time such Person or property is acquired (including under Indebtedness permitted to be incurred pursuant to Section 6.1(k)); *provided* such restrictions were existing at the time of such acquisition and were not created in anticipation or contemplation thereof and are limited to the Person or property so acquired;
- (h) restrictions on assets financed or acquired pursuant to Section 6.1(d) (to the extent such restrictions do not extend to any assets other than such assets so acquired except to the extent permitted by Section 6.1(d));
- (i) restrictions that exist on the Closing Date and (to the extent not otherwise permitted by this Section 6.3) are listed on Schedule 6.3 hereto and to the extent such restrictions are set forth in an agreement evidencing Indebtedness, are set forth in any agreement evidencing any permitted modification, replacement, renewal, extension or refinancing of such Indebtedness so long as such modification, replacement, renewal, extension or refinancing does not expand the scope of such restrictions;
- (j) apply by reason of any applicable Law, rule, regulation or order or are required by any Governmental Authority having jurisdiction over the Borrower or any Subsidiary;
- (k) restrictions arise in connection with cash or other deposits permitted under Section 6.2; and
- (l) restrictions imposed by any agreement governing Indebtedness entered into after the Closing Date and permitted under Section 6.1 that are, taken as a whole, in the good faith judgment of the Borrower, not materially more restrictive with respect to the Borrower or any Subsidiary than customary market terms for Indebtedness of such type (and, in any event, are no more restrictive than the restrictions contained in this Agreement), so long as the Borrower shall have determined in good faith that such restrictions will not affect its obligation or ability to make any payments required or to provide security hereunder.
- **6.4** Restricted Junior Payments. The Borrower will not, nor will it permit any Subsidiary to, directly or indirectly, pay or make any Restricted Junior Payment except:
- (a) (i) so long as no Event of Default has occurred and is continuing or would be caused thereby, redemptions and repurchases by the Borrower of Capital Stock of the Borrower from officers, directors, employees, advisors or consultants or their respective estates, trusts, family members or former spouses of any Credit Party or any Subsidiary (or their Affiliates), upon termination of employment, in connection with the exercise of stock options, stock appreciation rights or other equity incentives or equity based incentives or in connection with the death or disability of such officers, directors, employees, advisors or consultants (or Affiliate); provided that in all such cases the aggregate amount of such payments in respect of all such Capital Stock so redeemed or repurchased does not exceed in any Fiscal Year (with unused amounts in any Fiscal Year rolled over to the immediately succeeding Fiscal Year) the greater of (A) \$7,500,000 and (B) an amount equal to 15% of TTM Consolidated Adjusted EBITDA, <u>plus</u> (1) an amount not to exceed the cash proceeds of key man life insurance

policies received by the Borrower or any Guarantor Subsidiary after the Closing Date, (2) the amount of net cash proceeds from the sale of Capital Stock of the Borrower (other than Disqualified Capital Stock) to officers, directors, employees, advisors or consultants, to the extent not otherwise used under this Agreement or applied to the Available Amount and (3) the amount of any cash bonuses or other compensation otherwise payable to any future, present or former director, employee, consultant or distributor of the Borrower or any Subsidiary that are foregone in return for the redemption of Capital Stock of the Borrower; and (ii) cashless repurchases of Capital Stock deemed to occur upon the exercise of stock options, warrants, settlements or vesting if such stock represents a portion of the exercise price thereof;

- (b) payments in the form of Capital Stock of the Borrower (other than Disqualified Capital Stock and to the extent not otherwise used under this Agreement or applied to the Available Amount);
- (c) payments in lieu of the issuance of fractional shares in connection with the exercise of warrants, options or other securities convertible into or exchangeable for Capital Stock;
- (d) subject to the terms of any applicable subordination provisions, the Borrower or any Subsidiary may (i) make all regularly scheduled payments of principal, interest, fees and premiums and all payments of indemnities and expenses in respect of any Junior Financing when due, (ii) pay customary closing, consent and similar fees related to any Junior Financing, (iii) make mandatory prepayments, mandatory redemptions and mandatory purchases, in each case pursuant to the terms governing any Junior Financing as in effect on the date of incurrence or issuance (including in connection with a refinancing thereof) of such Junior Financing, (iv) prepay Indebtedness (A) of the Borrower or any Subsidiary owed to the Borrower or any Guarantor Subsidiary, (B) of any Non-Credit Party owed to any Non-Credit Party or (C) of the Borrower or any Guarantor Subsidiary to any Non-Credit Party to the extent the amount of such prepayment is treated as an Investment in Non-Credit Parties and may be made in compliance with Section 6.6, (v) prepay or refinance any Junior Financing (including the payment of any premium in connection therewith) with the proceeds of any other Junior Financing otherwise permitted by Section 6.1 (including any Permitted Refinancing thereof) and (vi) convert any Junior Financing to Capital Stock (other than Disqualified Capital Stock) of the Borrower;
- (e) the declaration and payment of any dividend or other Restricted Equity Payment by any Subsidiary of the Borrower on a ratable basis to its equity holders;
- (f) Restricted Junior Payments in an aggregate amount not to exceed the Available Amount as in effect immediately before such Restricted Junior Payment; *provided* that (i) no Default or Event of Default has occurred and is continuing or would result therefrom and (ii) the Total Net Leverage Ratio at the time of (and after giving effect to) the making such Restricted Junior Payment is less than or equal to 5.25:1.00;
- (g) Restricted Equity Payments and Restricted Debt Payments, so long as (i) no Default or Event of Default has occurred and is continuing at such time or would result after giving effect to such Restricted Equity Payment or Restricted Debt Payment and (ii) the Total Net Leverage Ratio at the time of making such Restricted Junior Payment (taking into account the making of such Restricted Equity Payment or Restricted Debt Payment and the use of proceeds thereof) is less than or equal to 3.35:1.00; and
- (h) as long as no Default or Event of Default has occurred and is continuing at such time or would result after giving effect thereto, Restricted Junior Payments in an aggregate amount not to exceed \$10,000,000.

For purposes of determining compliance with this Section 6.4:

- (1) the amount set forth in Section 6.4(h) (without duplication) may, in lieu of Restricted Junior Payments, be utilized by the Borrower or any Subsidiary to make or hold any Investments without regard to Section 6.6;
- (2) for the avoidance of doubt, if the Borrower or any Subsidiary makes any Restricted Junior Payment using a ratio-based test on the same date that it makes any Restricted Junior Payment under any Dollar-based Cap, then the ratio-based test will be calculated with respect to such payment under the ratio-based test without regard to any payment under the Dollar-based Cap;
- (3) the payment of any Restricted Equity Payment within sixty (60) days after the date of declaration thereof shall be permitted if at the date of declaration such payment would have complied with the provisions of this Agreement; and
- (4) in the event that any Restricted Junior Payment (or any portion thereof) meets the criteria of more than one of the clauses of this Section 6.4, the Borrower may, in its sole discretion, at the time of making such payment, divide, classify or reclassify, or at any later time divide, classify or reclassify, such Restricted Junior Payment (or any portion thereof) in any manner that complies with this covenant; *provided* that any such Restricted

Junior Payment incurred under a Dollar-based Cap may not be reclassified as a Restricted Junior Payment using a ratio-based test.

- **6.5 Restrictions on Subsidiary Distributions**. Except as provided herein, the Borrower will not, nor will it permit any Subsidiary to, create or otherwise cause or suffer to exist or become effective any consensual encumbrance or restriction of any kind on the ability of any Subsidiary of the Borrower to (i) pay dividends or make any other distributions on any of such Subsidiary's Capital Stock owned by the Borrower or any other Subsidiary of the Borrower; (iii) repay or prepay any Indebtedness owed by such Subsidiary to the Borrower or any other Subsidiary of the Borrower; (iii) make loans or advances to the Borrower or any other Subsidiary of the Borrower, in each case, other than restrictions:
- (a) in agreements evidencing Indebtedness permitted in accordance with Section 6.1(a), (c), (d) (that impose restrictions on the property so acquired, constructed, leased or improved), (g), (h), (i), (k) (limited to such acquired Person or asset), (r), (u) and (z);
- (b) in agreements evidencing Permitted Refinancing of Indebtedness permitted in accordance with Section 6.1(x) or other Indebtedness issued or incurred (including by means of the extension or renewal of existing Indebtedness) to refinance, refund, extend, defease, discharge, renew or replace other Indebtedness; *provided* that the encumbrances, restrictions and conditions under any such refinancing are not materially more restrictive, taken as a whole, than those contained in the documentation governing the Indebtedness being refinanced (as determined by the Borrower in good faith);
- (c) by reason of customary provisions restricting assignments, subletting, or other transfers contained in leases, licenses, joint venture agreements and similar agreements entered into in the ordinary course of business;
- (d) that are or were created by virtue of any transfer of, agreement to transfer or option or right with respect to any property, assets or Capital Stock not otherwise prohibited under this Agreement;
- (e) apply by reason of any applicable Law, rule, regulation or order or are required by any Governmental Authority having jurisdiction over the Borrower or any Subsidiary;
- (f) restrictions on Non-Credit Parties pursuant to Indebtedness permitted under Section 6.1 and pursuant to restrictions in agreements related to Investments and acquisitions permitted by Section 6.6;
- (g) restrictions on Persons or property at the time such Person or property is acquired; *provided* such restrictions were existing at the time of such acquisition and were not created in anticipation or contemplation thereof;
- (h) under licensing, sub-licensing, leasing or sub-leasing agreements entered into by the Borrower or any Subsidiary, in each case entered into in the ordinary course of business, and provisions restricting assignment of any agreement entered into by the Borrower or any Subsidiary in the ordinary course of business;
 - (i) restrictions that exist on the Closing Date;
- (j) restrictions imposed by any agreement governing Indebtedness entered into after the Closing Date and permitted under Section 6.1 that are, taken as a whole, in the good faith judgment of the Borrower, no more restrictive with respect to the Borrower or any Subsidiary than customary market terms for Indebtedness of such type (and, in any event, are no more restrictive than the restrictions contained in this Agreement), so long as the Borrower shall have determined in good faith that such restrictions will not affect its obligation or ability to make any payments required hereunder;
 - (k) negative pledges that are permitted pursuant to Section 6.3;
 - (1) customary provisions restricting assignment of any agreement entered into in the ordinary course of business; and
- (m) restrictions on cash or other deposits imposed by customers under contracts entered into in the ordinary course of business and restrictions that arise in connection with cash or other deposits permitted hereunder.
- **6.6 Investments**. The Borrower will not, nor will it permit any Subsidiary to, directly or indirectly, make or own any Investment in any Person, including any Joint Venture, except:

- (a) cash and Cash Equivalents; *provided* that any Investment which when made complies with the requirements of the definition of "Cash Equivalents" may continue to be held notwithstanding that such Investment if made thereafter would not comply with such requirements;
- (b) Investments by the Borrower in any Subsidiary and by any Subsidiary in the Borrower or any other Subsidiary; provided that to the extent any Investment is made by any Credit Party in any Non-Credit Party, the aggregate amount of all such Investments made after the Closing Date after giving effect to the Transactions and in reliance on this Section 6.6(b) shall not exceed, together with any Investments made in reliance on the proviso in clause (c) of the definition of "Permitted Acquisition" (in each case determined as of the date of making any such Investment, and after giving effect to clause (1) in the last paragraph of this Section 6.6), the greater of (i) \$15,000,000 and (ii) an amount equal to 17.5% of TTM Consolidated Adjusted EBITDA;
- (c) accounts receivable arising and trade credit granted in the ordinary course of business or consistent with past practice (including with respect to intercompany sales in the ordinary course of business);
- (d) Investments received in satisfaction or partial satisfaction thereof from financially troubled account debtors or pursuant to any plan of reorganization or similar arrangement upon the bankruptcy or insolvency of such account debtors;
- (e) deposits, prepayments and other credits to suppliers made in the ordinary course of business;
- (f) capital expenditures in respect of the Borrower and the Subsidiaries in accordance with GAAP (other than any expenditure that involves the acquisition, whether by purchase, merger or otherwise, of all or a material portion of the assets of, all of the Capital Stock of, or a business line or unit or a division of, any Person);
- (g) (i) advances, loans or extensions of credit by the Borrower or any Subsidiary in compliance with applicable laws to officers, directors, and employees of the Borrower or any Subsidiary for reasonable and customary travel, entertainment or relocation, out-of-pocket or other business-related expenses in an aggregate amount outstanding at any date of determination not to exceed \$250,000, (ii) loans by the Borrower or any Subsidiary in compliance with applicable laws to officers, directors, and employees of the Borrower or any Subsidiary the proceeds of which are used to pay taxes owned in connection with the vesting of Capital Stock of the Borrower or any Subsidiary, and (iii) advances, loans or extensions of credit by the Borrower or any Subsidiary to officers, directors, and employees of the Borrower or any Subsidiary for any other purpose in an aggregate amount at any date of determination not to exceed \$500,000;
 - (h) [reserved];
 - (i) advances of payroll payments to employees in the ordinary course of business;
 - (j) Permitted Acquisitions;
- (k) Investments described on (i) <u>Schedule 6.6(k)(i)</u> in existence on the Closing Date and any modification, replacement, renewal, reinvestment or extension of any of such Investments; *provided* that the amount of any Investment permitted pursuant to this Section 6.6(k) is not increased from the amount of such Investment on the Closing Date except pursuant to the terms of such Investment as of the Closing Date or as otherwise permitted by another clause of this Section 6.6 and (ii) <u>Schedule 6.6(k)(ii)</u> not to exceed an aggregate amount of \$5,000,000;
- (l) Investments in an aggregate amount not to exceed the Available Amount as in effect immediately before such Investment; provided that (i) no Default or Event of Default has occurred and is continuing or would result therefrom and (ii) the Total Net Leverage Ratio (at the time of making such Investment and after giving effect thereto) is less than or equal to 5.25:1.00;
- (m) Investments of any Person that becomes a Subsidiary on or after the Closing Date; provided that (i) such Investments exist at the time such Person is acquired and (ii) such Investments are not made in anticipation or contemplation of such Person becoming a Subsidiary (it being understood and agreed that any consideration paid by a Credit Party in connection with a Permitted Acquisition that may be allocable directly or indirectly to Investments in Persons that are not Credit Parties (as determined in good faith by the Borrower at the time of closing such Investment (or at the time an LCA Election is made with respect thereto, if applicable) and without taking into account purchase accounting adjustments) must be permitted by clause (c) of the proviso appearing in the definition of "Permitted Acquisition");
 - (n) Indebtedness permitted by Section 6.1 (other than Indebtedness permitted by Section 6.1(f)(ii), 6.1(t) or 6.1(y)(iii));

- (o) bank deposits in the ordinary course of business;
- (p) Investments made as a result of the receipt of non-cash consideration from a disposition made in compliance with Section 6.8;
 - (q) Investments made to effect the Potential Transfers;
- (r) So long as no Default or Event of Default has occurred and is continuing or would result therefrom, Investments made by the Borrower or any Subsidiary in exchange for Capital Stock (other than Disqualified Capital Stock) of the Borrower, in each case to the extent not otherwise used under this Agreement or applied to the Available Amount;
 - (s) [reserved];
- (t) Guarantees by (i) the Borrower of obligations of any Subsidiary and (ii) any Subsidiary of obligations of the Borrower or any other Subsidiary, in each case which obligations do not constitute Indebtedness;
 - (u) Investments in Rate Contracts;
 - (v) Investments made to effect the Transactions, including any intercompany indebtedness arising from the Acquisition;
- (w) Investments (including debt obligations and Capital Stock) (i) received in connection with the bankruptcy, workout, recapitalization or reorganization of, or in settlement of delinquent obligations of, or other disputes with, the issuer of such Investment or an Affiliate thereof, (ii) arising in the ordinary course of business or consistent with past practice or upon the foreclosure with respect to any secured Investment, (iii) received in satisfaction of judgments against any other Person and
- (iv) as a result of the settlement, compromise or resolutions of litigation, arbitration or other disputes of the Borrower or any Subsidiary with Persons who are not Affiliates;
- (x) Investments in the ordinary course of business consisting of UCC Article 3 endorsements for collection or deposit and UCC Article 4 customary trade arrangements with customers consistent with past practices;
- (y) to the extent constituting Investments, purchases and acquisitions of inventory, supplies, materials and equipment or purchases of contract rights or licenses or leases of Intellectual Property, in each case in the ordinary course of business (including new technology for research and development);
 - (z) Investments made in reliance on clause (1) of the last paragraph of Section 6.4. (aa) Investments, so long as (i) no Default
 - or Event of Default has occurred and is

continuing at such time or would result after giving effect to such Investment and (ii) the Total Net Leverage Ratio (at the time of the making of such Investment and giving effect thereto and the use of proceeds thereof) is less than or equal 3.60:1.00; and

(bb) Investments that do not exceed, at any time outstanding, in the aggregate at any date of determination, the greater of (i) \$10,000,000 and (ii) an amount equal to 17.5% of TTM Consolidated Adjusted EBITDA.

For purposes of determining compliance with this Section 6.6:

- (1) except to the extent an Investment was made using the Available Amount, to the extent any Investment in any Person is made in compliance with this Section 6.6 in reliance on a clause above that is subject to a Cap and, subsequently, such Person returns to the Borrower, any other Credit Party or, to the extent applicable, any Subsidiary all or any portion of such Investment (in the form of a dividend, distribution, liquidation or otherwise but excluding intercompany Indebtedness), such return shall be deemed to be credited to the clause of this Section 6.6 against which the Investment is then charged, but in any event not in an amount that would result in the aggregate dollar amount able to be invested in reliance on such category to exceed such Cap;
- (2) for purposes of determining compliance with any Cap on the making of Investments, the Dollar equivalent amount of the Investment denominated in a foreign currency shall be calculated based on the relevant currency exchange rate in effect on the date such Investment was made:
- (3) the Borrower and any Subsidiary may make intermediate Investments in their respective Subsidiaries to facilitate an Investment otherwise permitted above;

- (4) for the avoidance of doubt, if the Borrower or any Subsidiary makes any Investment using a ratio-based test on the same date that it makes any Investment under any Dollar-based Cap, then the ratio-based test will be calculated with respect to such Investment under the ratio-based test without regard to any payment under the Dollar-based Cap; and
- (5) in the event that any Investment (or any portion thereof) meets the criteria of more than one of the clauses of this Section 6.6, the Borrower may, in its sole discretion, at the time of making such Investment, divide, classify or reclassify, or at any later time divide, classify or reclassify, such Investment (or any portion thereof) in any manner that complies with this covenant; *provided* that any such Investment made under a Dollar-based Cap may not be reclassified as an Investment using a financial ratio-based test.

6.7 Financial Covenant.

- Commencing with the Q4-2017 Test Period, the Borrower shall not permit the First Lien Net Leverage Ratio on the last day of each Test Period to be greater than 5.25:1.00 if, as of the last day of such Test Period, the aggregate outstanding principal amount of (a) Revolving Loans, (b) Letters of Credit (but excluding (i) all Letters of Credit that have been Cash Collateralized and (ii) up to \$2,500,000 of undrawn Letters of Credit) and/or (c) unreimbursed obligations with respect to drawn Letters of Credit, in each case then outstanding, exceeds (or exceeded) 25% of the then outstanding Revolving Credit Commitments in effect on such date (the "Financial Covenant Test Criteria"), and each last day of the Test Periods described above on which the Financial Covenant Test Criteria are met, a "Financial Covenant Test Date"); provided that, (i) so long as the Borrower has not made any Restricted Junior Payments after the Second Amendment Effective Date (other than Restricted Junior Payments pursuant to Section 6.4(a), (b), (c), (d) and (e)), the Financial Covenant set forth in this Section 6.7(a) shall not apply and shall not be tested for any Test Period ending during the Covenant Waiver Period, and (ii) so long as the Borrower has not made any Restricted Junior Payments after the Second Amendment Effective Date (other than (x) Restricted Junior Payments pursuant to Section 6.4(a), (b), (c), (d) and (e) or (y) other Restricted Junior Payments permitted hereunder where after giving pro forma effect thereto, Liquidity is equal to or greater than \$12,000,000), solely for purposes of calculating First Lien Net Leverage Ratio pursuant to this Section 6.7(a) after the expiration of the Covenant Waiver Period, Consolidated Adjusted EBITDA for each of the Fiscal Quarters ending March 31, 2020, June 30, 2020, September 30, 2020 and December 31, 2020 shall be deemed to be the Consolidated Adjusted EBITDA set forth in the Compliance Certificate delivered in accordance with Section 5.1(e) for the Fiscal Quarter ended December 31, 2019. Notwithstanding the foregoing, each Compliance Certificate delivered pursuant to Section 5.1(e) in respect of any Test Period that includes any of the Fiscal Quarters ending during the Covenant Waiver Period in such calculation shall include calculations necessary to determine the First Lien Net Leverage Ratio as adjusted in accordance with the proviso of the immediately preceding sentence and the First Lien Net Leverage Ratio as if such ratio had not been adjusted in accordance with the proviso of the immediately preceding sentence. For the avoidance of doubt, (i) the Financial Covenant set forth in this Section 6.7 shall not apply, and shall not be tested, if the Financial Covenant Test Criteria are not met as of the last date of the applicable Test Period and (ii) the adjustment of the Financial Covenant set forth in the proviso of the first sentence of this paragraph shall cease to apply upon the delivery of the audited financial statements and the related Compliance Certificate for the Fiscal Year ending December 31, 2021 pursuant to Sections 5.1(a) and 5.1(c).
- (b) (i) For the period commencing with the last Business Day of the first full calendar month ending during the Covenant Waiver Period through and including the last day of the Covenant Waiver Period, on the last Business Day of each calendar month during such period regardless of whether the Financial Covenant Test Criteria are met and (ii) for the period commencing with the last day of the Test Period ending March 31, 2021 through and including September 30, 2021, to the extent the Financial Covenant Test Criteria are met, on each Financial Covenant Testing Date (each such date in clause (i) or (ii), a "Minimum Liquidity Reporting Date"), the Borrower will not permit Liquidity to be less than \$12,000,000 (the "Minimum Liquidity Requirement"); provided that, for each period the Minimum Liquidity Requirement is required to be tested, within three (3) Business Days following each Minimum Liquidity Reporting Date, the Borrower shall deliver to the Administrative Agent, a certificate signed by a Financial Officer of the Borrower evidencing compliance with the Minimum Liquidity Requirement as of such Minimum Liquidity Reporting Date and setting forth such cash balances in reasonable detail.
- **6.8 Fundamental Changes; Disposition of Assets.** The Borrower will not, nor will it permit any Subsidiary to, (x) enter into any transaction of merger or consolidation, or liquidate, wind-up or dissolve itself (or suffer any liquidation or dissolution), (y) convey, sell, lease, exchange, transfer or otherwise dispose of, in one transaction or a series of transactions, all or any part of its business, assets or property of any kind whatsoever, whether real, personal or mixed and whether tangible or intangible, whether now owned or hereafter acquired or leased or (z) sell, assign, or otherwise dispose of any Capital Stock of any Subsidiary, except: any Subsidiary of the Borrower may merge or consolidate with the Borrower (including a merger, the purpose of which is to reorganize the Borrower into a new jurisdiction); *provided* that the Borrower may merge or consolidate with another Person (including a merger, the purpose of which is to reorganize the Borrower into a new jurisdiction); *provided further* that:

- (i) the Borrower is the surviving person or the Person formed by or surviving any such merger, consolidation or conversion (if other than the Borrower) or to which such sale, assignment, transfer, lease, conveyance or other disposition shall have been made is a corporation, partnership or limited liability company organized or existing under the laws of any state in the United States of America (the Borrower or such Person, as the case may be, being herein called the "Successor Company");
- (ii) the Successor Company (if other than the Borrower) expressly assumes all the Obligations of the Borrower under this Agreement and any other Loan Document to which the Borrower is a party pursuant to documents or instruments in form reasonably satisfactory to the Administrative Agent;
- (iii) if the Successor Company is not the Borrower, each Guarantor, unless it is the other party to such merger or consolidation, shall (A) have confirmed, pursuant to documents reasonably satisfactory to the Administrative Agent, that its Guarantee shall apply to the Successor Company's Obligations under the Loan Documents and (B) shall have by a supplement or amendment (or such other document reasonably satisfactory to the Collateral Agent) to the Security Agreement and other applicable Collateral Documents confirmed that its obligations thereunder shall apply to the Successor Company's Obligations under the Loan Documents;
 - (iv) immediately after giving pro forma effect to such transaction, no Default shall have occurred and be continuing;
- (v) the Successor Company (if not the Borrower) shall have delivered to the Administrative Agent an officer's certificate stating that such consolidation, merger or transfer and such amendments (if any) comply with this Agreement and any other Loan Document to which the Borrower is a party; and
- (vi) if the Successor Company is not the Borrower, prior to such merger or consolidation, the Administrative Agent shall have received all documentation and other information with respect to the Successor Company required by bank regulatory authorities under applicable "know-your-customer" and anti-money laundering rules and regulations, including the PATRIOT Act to the extent requested by any Lender from the Borrower at least ten

(10) Business Days prior to such merger or consolidation; *provided* that the Administrative Agent shall have been informed of the identity of such Successor Company at least twenty (20) Business Days prior to such merger or consolidation.

The Successor Company (if other than the Borrower) will succeed to, and be substituted for, the Borrower under this Agreement, any other Loan Document to which the Borrower is a party and the Loans, and in such event the Borrower shall be automatically released and discharged from its obligations under this Agreement, any other Loan Document to which the Borrower is a party and the Loans.

- (c) (i) any Non-Credit Party may merge or consolidate with or into any other Non-Credit Party, (ii) any Subsidiary may merge or consolidate with or into any other Subsidiary that is a Credit Party, (iii) any merger the sole purpose of which is to reincorporate or reorganize a Credit Party in another jurisdiction in the United States shall be permitted and (iv) any Subsidiary may liquidate or dissolve or change its legal form if the Borrower determines in good faith that such action is in the best interests of the Borrower and the Subsidiaries and is not materially disadvantageous to the Lenders, *provided*, in the case of clauses (ii) through (iv), that (A) no Change of Control shall result therefrom and (B) the surviving Person (or, with respect to clause (iv), the Person who receives the assets of such dissolving or liquidated Subsidiary that is a Guarantor) shall be a Credit Party;
- (d) any Subsidiary may dispose of all or substantially all of its assets to the Borrower or any other Subsidiary; *provided* that a Guarantor Subsidiary may not dispose of all or substantially all of its assets to a Non-Credit Party unless treated as an Investment that is permitted by Section 6.6.
 - (e) conveyances, sales, leases, licenses, exchanges, transfers or other dispositions that do not constitute Asset Sales;
- (f) Asset Sales so long as no Event of Default has occurred and is continuing; *provided* that (i) the consideration received for such assets is in an amount at least equal to the fair market value thereof (determined in good faith by the Borrower), (ii) no less than 75% of which will paid in cash (which may include royalties and milestones), and (iii) the Net Cash Proceeds thereof are applied as and to the extent required by Section 2.14(a); *provided further* that for the purposes of clause (ii),

(A) any liabilities (as shown on the Borrower's most recent balance sheet provided hereunder or in the footnotes thereto) of the Borrower and its Subsidiaries, other than liabilities that are by their terms subordinated to the payment in cash of the Obligations, that are assumed by the transferee with respect to the applicable Asset Sale and for which the Borrower and all of the Subsidiaries shall have been validly released by all applicable creditors in writing and (B) any Designated Non-Cash Consideration received in respect of such Asset Sale having an aggregate fair market value as reasonably determined by the Borrower in good faith, taken together with all other Designated Non-Cash Consideration received pursuant to this clause (B) that is at that time outstanding, not in excess of the greater of (1) \$2,500,000 and (2) an amount equal to 5.00% of TTM Consolidated Adjusted EBITDA at the time of the receipt of such Designated Non-Cash Consideration, with the fair market value of each item of Designated Non-Cash Consideration being measured at the time received and without giving effect to subsequent changes in value, shall be deemed to be cash; provided further that the Borrower and the Subsidiaries may not sell all or substantially all of their assets, taken as a whole, to any Person in reliance on this clause (e):

- (g) the Borrower and the Subsidiaries may lease (as lessee) or license (as licensee) real or personal property so long as any such lease or license does not create a Capital Lease except to the extent permitted by Section 6.1(d);
- (h) any transaction (other than an Asset Sale (determined without regard to the exceptions thereto in the definition thereof)) in connection with a Permitted Acquisition or other Investment permitted by Section 6.6; provided that (i) if the merging or consolidating Subsidiary is a Guarantor Subsidiary, the surviving entity is or becomes a Guarantor Subsidiary or (ii) if the merging or consolidating Credit Party is the Borrower, the surviving entity is the Borrower;
 - (i) dispositions to effect the Potential Transfers;
- (j) dispositions of Investments in Joint Ventures or Joint Venture Subsidiaries to the extent required by, or pursuant to, customary agreements between the joint venture parties set forth in binding agreements between such parties; and
 - (k) the Acquisition may be consummated on the Closing Date.
- **6.9 Transactions with Affiliates**. The Borrower will not, nor will it permit any Subsidiary to, directly or indirectly, enter into or permit to exist any transaction (including the purchase, sale, lease or exchange of any property or the rendering of any service) with any Affiliate of the Borrower, on terms that are less favorable to the Borrower or that Subsidiary, as the case may be, than those that might be obtained at the time from a Person who is not such an Affiliate; *provided* that the foregoing restriction will not apply to:
- (a) any transaction between or among any of the Credit Parties and/or any of their Subsidiaries to the extent not otherwise prohibited by this Agreement;
- (b) indemnity provided to and reasonable and customary fees and expense reimbursement paid to members of the board of directors (or similar governing body) of the Borrower or any Subsidiary;
- (c) (i) compensation, benefits and indemnification arrangements (including the payment of bonuses and other deferred compensation) for directors, officers and other employees of the Borrower or any Subsidiary entered into in the ordinary course of business or approved by the board of directors of the Borrower or the applicable Subsidiary, (ii) employment and severance agreements between the Borrower or any Subsidiary and their employees, officers or directors, entered in the ordinary course of business, (iii) any issuance of securities, or other payments, awards or grants in cash, securities or otherwise pursuant to, or the funding of, employment arrangements, stock options, stock ownership plans, including restricted stock plans, stock grants, directed share programs and other equity based plans and the granting and stockholder rights of registration rights approved by the Borrower's board of directors; and (iv) payments or loans (or cancellation of loans) to officers, directors and employees that are approved by a majority of the Borrower's board of directors, subject to the limitations set forth in Section 6.6;
 - (d) transactions described in <u>Schedule 6.9</u> in existence on the Closing Date;
- (e) the existence of, or the performance of obligations under the terms of, agreements entered into in connection with the Acquisition or a Permitted Acquisition or other Investment permitted by Section 6.6 (including payments of earnouts and other similar payments); and
- (f) Restricted Junior Payments permitted by Section 6.4, Investments permitted by Section 6.6, Indebtedness permitted by Section 6.1 and transactions permitted by Section 6.8 (including as a result of exceptions to the definition of "Asset Sale").
- **6.10 Conduct of Business**. The Borrower will not, nor will it permit any Subsidiary to, engage in any material business other than the Business.

- **6.11 Rate Contracts**. Neither the Borrower shall, nor shall the Borrower permit any of the Subsidiaries to, enter into any Rate Contracts, other than (a) Rate Contracts entered into in the ordinary course of business to hedge or mitigate risks to which the Borrower or any Subsidiary is exposed in the conduct of its business or the management of its liabilities and (b) Rate Contracts entered into in order to effectively cap, collar or exchange interest rates (from fixed to floating rates, from one floating rate to another floating rate or otherwise) with respect to any interest-bearing liability or investment of the Borrower or any Subsidiary.
- **6.12 Certain Amendments or Waivers**. The Borrower will not, nor will it permit any Subsidiary to, (a) amend, supplement, waive or otherwise modify any provision of its Organizational Documents in a manner that would be materially adverse to the interests of the Lenders or (b) change or amend the terms of the documentation with regard to any Material Indebtedness that is Junior Financing in a manner that would be materially adverse to the interests of the Lenders (except to the extent such changes or amendments are otherwise permitted by any applicable intercreditor or subordination provisions applicable to such Junior Financing).
- **6.13 Fiscal Year**. The Borrower will not, nor will it permit any Subsidiary to, make any change in fiscal year; *provided*, *however*, that the Borrower may, upon written notice to the Administrative Agent, change its fiscal year to any other fiscal year reasonably acceptable to the Administrative Agent, in which case, the Borrower and the Administrative Agent will, and are hereby authorized by the Lenders to, make any adjustments to this Agreement that are necessary to reflect such change in fiscal year (*provided* that no such change shall be effective until such adjustments have been made).

SECTION 7. GUARANTY

- **7.1 Guaranty of the Obligations**. Subject to the provisions of Section 7.2, Guarantors jointly and severally hereby irrevocably and unconditionally guaranty to the Administrative Agent for the ratable benefit of the Secured Parties the due and punctual payment in full of all Guaranteed Obligations when the same will become due, whether at stated maturity, by required prepayment, declaration, acceleration, demand or otherwise (including amounts that would become due but for the operation of the automatic stay under Section 362(a) of the Bankruptcy Code, 11 U.S.C. § 362(a)).
- 7.2 Contribution by Guarantors. All Guarantors desire to allocate among themselves (collectively, the "Contributing Guarantors"), in a fair and equitable manner, their obligations arising under this Guaranty. Accordingly, in the event any payment or distribution is made on any date by a Guarantor (a "Funding Guarantor") under this Guaranty such that its Aggregate Payments exceeds its Fair Share as of such date, such Funding Guarantor will be entitled to a contribution from each of the other Contributing Guarantors in an amount sufficient to cause each Contributing Guarantor's Aggregate Payments to equal its Fair Share as of such date. "Fair Share" means, with respect to a Contributing Guarantor as of any date of determination, an amount equal to (a) the ratio of (i) the Fair Share Contribution Amount with respect to such Contributing Guarantor (ii) the aggregate of the Fair Share Contribution Amounts with respect to all Contributing Guarantors multiplied by (b) the aggregate amount paid or distributed on or before such date by all Funding Guarantors under this Guaranty in respect of the Guaranteed Obligations. "Fair Share Contributing Amount" means, with respect to a Contributing Guarantor as of any date of determination, the maximum aggregate amount of the obligations of such Contributing Guarantor under this Guaranty that would not render its obligations hereunder or thereunder subject to avoidance as a fraudulent transfer or conveyance under Section 548 of Title 11 of the United States Code or any comparable applicable provisions of state law; provided that, solely for purposes of calculating the Fair Share Contribution Amount with respect to any Contributing Guarantor for purposes of this Section 7.2, any assets or liabilities of such Contributing Guarantor as of any date of determination, an amount equal to the sum of (A) the aggregate Payments" means, with respect to a Contributing Guarantor as of any date of determination, an amount equal to the sum of (A) the aggregate amount of all payments and distrib
- 7.3 Liability of Guarantors Absolute. Each Guarantor agrees that its obligations hereunder are irrevocable, absolute, independent and unconditional and will not be affected by any circumstance which constitutes a legal or equitable discharge of a guarantor or surety other than payment in full of the Guaranteed Obligations. In furtherance of the foregoing and without limiting the generality thereof, each Guarantor agrees as follows:
 - (a) this Guaranty is a guaranty of payment when due and not of collectability;

- (b) this Guaranty is a primary obligation of each Guarantor and not merely a contract of surety;
- (c) the Administrative Agent may enforce this Guaranty upon the occurrence of an Event of Default notwithstanding the existence of any dispute between the Borrower and any Secured Party with respect to whether such Event of Default has occurred and is continuing;
- (d) the obligations of each Guarantor hereunder are independent of the obligations of the Borrower and the obligations of any other guarantor (including any other Guarantor) of the obligations of the Borrower, and a separate action or actions may be brought and prosecuted against such Guarantor whether or not any action is brought against the Borrower or any of such other guarantors and whether or not the Borrower is joined in any such action or actions;
- (e) payment by any Guarantor of a portion, but not all, of the Guaranteed Obligations will in no way limit, affect, modify or abridge any Guarantor's liability for any portion of the Guaranteed Obligations which has not been paid. Without limiting the generality of the foregoing, if the Administrative Agent is awarded a judgment in any suit brought to enforce any Guarantor's covenant to pay a portion of the Guaranteed Obligations, such judgment will not be deemed to release such Guarantor from its covenant to pay the portion of the Guaranteed Obligations that is not the subject of such suit, and such judgment will not, except to the extent satisfied by such Guarantor, limit, affect, modify or abridge any other Guarantor's liability hereunder in respect of the Guaranteed Obligations;
- (f) any Secured Party, upon such terms as it deems appropriate, without notice or demand and without affecting the validity or enforceability hereof or giving rise to any reduction, limitation, impairment, discharge or termination of any Guarantor's liability hereunder, from time to time may (i) renew, extend, accelerate, increase the rate of interest on, or otherwise change the time, place, manner or terms of payment of the Guaranteed Obligations; (ii) settle, compromise, release or discharge, or accept or refuse any offer of performance with respect to, or substitutions for, the Guaranteed Obligations or any agreement relating thereto and/or subordinate the payment of the same to the payment of any other obligations; (iii) request and accept other guaranties of the Guaranteed Obligations and take and hold security for the payment hereof or the Guaranteed Obligations; (iv) release, surrender, exchange, substitute, compromise, settle, rescind, waive, alter, subordinate or modify, with or without consideration, any security for payment of the Guaranteed Obligations, any other guaranties of the Guaranteed Obligations, or any other obligation of any Person (including any other Guarantor) with respect to the Guaranteed Obligations; (v) enforce and apply any security now or hereafter held by or for the benefit of such Secured Party in respect hereof or the Guaranteed Obligations and direct the order or manner of sale thereof, or exercise any other right or remedy that such Secured Party may have against any such security, in each case as such Secured Party in its discretion may determine consistent herewith or the applicable Secured Rate Contract or Bank Product Agreement and any applicable security agreement, including foreclosure on any such security pursuant to one or more judicial or nonjudicial sales, whether or not every aspect of any such sale is commercially reasonable, and even though such action operates to impair or extinguish any right of reimbursement or subrogation or other rights or remedy of any Guar
- this Guaranty and the obligations of Guarantors hereunder will be valid and enforceable and will not be subject to any reduction, limitation, impairment, discharge or termination for any reason (other than payment in full of the Guaranteed Obligations), including the occurrence of any of the following, whether or not any Guarantor will have had notice or knowledge of any of them: (i) any failure or omission to assert or enforce or agreement or election not to assert or enforce, or the stay or enjoining, by order of court, by operation of law or otherwise, of the exercise or enforcement of, any claim or demand or any right, power or remedy (whether arising under the Credit Documents, the Secured Rate Contracts or the Bank Product Agreements, at law, in equity or otherwise) with respect to the Guaranteed Obligations or any agreement relating thereto, or with respect to any other guaranty of or security for the payment of the Guaranteed Obligations; (ii) any rescission, waiver, amendment or modification of, or any consent to departure from, any of the terms or provisions (including provisions relating to events of default) hereof, any of the other Credit Documents, any of the Secured Rate Contracts, the Bank Product Agreements or any agreement or instrument executed pursuant thereto, or of any other guaranty or security for the Guaranteed Obligations, in each case whether or not in accordance with the terms hereof or such Credit Document, such Secured Rate Contract, such Bank Product Agreements or any agreement relating to such other guaranty or security; (iii) the Guaranteed Obligations, or any agreement relating thereto, at any time being found to be illegal, invalid or unenforceable in any respect; (iv) the application of payments received from any source (other than payments received pursuant to the other Credit Documents, any of the Secured Rate Contracts, any Bank Product Agreements or from the proceeds of any security for the Guaranteed Obligations, except to the extent such security also serves as collater

or continue perfection of a security interest in any collateral which secures any of the Guaranteed Obligations; (vii) any defenses, set-offs or counterclaims which the Borrower may allege or assert against any Secured Party in respect of the Guaranteed Obligations, including failure of consideration, breach of warranty, payment, statute of frauds, statute of limitations, accord and satisfaction and usury; and (viii) any other act or thing or omission, or delay to do any other act or thing, which may or might in any manner or to any extent vary the risk of any Guarantor as an obligor in respect of the Guaranteed Obligations.

7.4 Waivers by Guarantors. To the fullest extent permitted by law, each Guarantor hereby waives, for the benefit of the Secured Parties: (a) any right to require any Secured Party, as a condition of payment or performance by such Guarantor, to (i) proceed against the Borrower, any other guarantor (including any other Guarantor) of the Guaranteed Obligations or any other Person, (ii) proceed against or exhaust any security held from the Borrower, any such other guarantor or any other Person, (iii) proceed against or have resort to any balance of any credit on the books of any Secured Party in favor of the Borrower or any other Person, or (iv) pursue any other remedy in the power of any Secured Party whatsoever; (b) any defense arising by reason of the incapacity, lack of authority or any disability or other defense of the Borrower or any other Guarantor including any defense based on or arising out of the lack of validity or the unenforceability of the Guaranteed Obligations or any agreement or instrument relating thereto or by reason of the cessation of the liability of the Borrower or any other Guarantor from any cause other than payment in full of the Guaranteed Obligations; (c) any defense based upon any statute or rule of law which provides that the obligation of a surety must be neither larger in amount nor in other respects more burdensome than that of the principal; (d) any defense based upon any Secured Party's errors or omissions in the administration of the Guaranteed Obligations, except behavior which amounts to bad faith; (e) (i) any principles or provisions of law, statutory or otherwise, which are or might be in conflict with the terms hereof and any legal or equitable discharge of such Guarantor's obligations hereunder, (ii) the benefit of any statute of limitations affecting such Guarantor's liability hereunder or the enforcement hereof, (iii) any rights to set-offs, recoupments and counterclaims, and (iv) promptness, diligence and any requirement that any Secured Party protect, secure, perfect or insure any security interest or lien or any property subject thereto; (f) notices, demands, presentments, protests, notices of protest, notices of dishonor and notices of any action or inaction, including acceptance hereof, notices of default hereunder, the Secured Rate Contracts, the Bank Product Agreements or any agreement or instrument related thereto, notices of any renewal, extension or modification of the Guaranteed Obligations or any agreement related thereto, notices of any extension of credit to the Borrower and notices of any of the matters referred to in Section 7.3 and any right to consent to any thereof; and (g) any defenses or benefits that may be derived from or afforded by law which limit the liability of or exonerate guarantors or sureties, or which may conflict with the terms hereof.

7.5 Guarantors' Rights of Subrogation, Contribution, etc. Until the Guaranteed Obligations will have been indefeasibly paid in full in cash and the Revolving Credit Commitments will have terminated and all Letters of Credit have been cancelled, or have expired or have been Cash Collateralized or otherwise backstopped in a manner satisfactory to the applicable Issuing Bank and all amounts drawn thereunder have been reimbursed in full, each Guarantor hereby waives any claim, right or remedy, direct or indirect, that such Guarantor now has or may hereafter have against the Borrower or any of the Guarantor or any of its assets in connection with this Guaranty or the performance by such Guarantor of its obligations hereunder, in each case whether such claim, right or remedy arises in equity, under contract, by statute, under common law or otherwise and including (a) any right of subrogation, reimbursement or indemnification that such Guarantor now has or may hereafter have against the Borrower with respect to the Guaranteed Obligations, (b) any right to enforce, or to participate in, any claim, right or remedy that any Secured Party now has or may hereafter have against the Borrower, and

(c) any benefit of, and any right to participate in, any collateral or security now or hereafter held by any Secured Party. In addition, until the Guaranteed Obligations will have been indefeasibly paid in full in cash and the Revolving Credit Commitments will have terminated and all Letters of Credit have been cancelled, or have expired or have been Cash Collateralized or otherwise backstopped in a manner satisfactory to the applicable Issuing Bank and all amounts drawn thereunder have been reimbursed in full, each Guarantor will withhold exercise of any right of contribution such Guarantor may have against any other guarantor (including any other Guarantor) of the Guaranteed Obligations, including any such right of contribution as contemplated by Section 7.2. Each Guarantor further agrees that, to the extent the waiver or agreement to withhold the exercise of its rights of subrogation, reimbursement, indemnification and contribution as set forth herein is found by a court of competent jurisdiction to be void or voidable for any reason, any rights of subrogation, reimbursement or indemnification such Guarantor may have against the Borrower or against any collateral or security, and any rights of contribution such Guarantor may have against any such other guarantor, will be junior and subordinate to any rights any Secured Party may have against the Borrower, to all right, title and interest any Secured Party may have in any such collateral or security, and to any right any Secured Party may have against such other guarantor. If any amount will be paid to any Guarantor on account of any such subrogation, reimbursement, indemnification or contribution rights at any time when all Guaranteed Obligations will not have been finally and indefeasibly paid in full, such amount will be held in trust for the Administrative Agent on behalf of Secured Parties and will forthwith be paid over to the Administrative Agent for the benefit of Secured Parties to be credited and applied against the Guaranteed Obligations, whether m

solely out of an abundance of caution, and shall not be construed to mean that any of the above-referenced provisions of California law are in any way applicable to this Guaranty or to any of the Guaranteed Obligations).

- 7.6 Subordination of Other Obligations. Any Indebtedness of the Borrower or any Guarantor now or hereafter held by any Guarantor (the "Obligee Guarantor") is hereby subordinated in right of payment to the Guaranteed Obligations, and any such Indebtedness collected or received by the Obligee Guarantor after an Event of Default has occurred and is continuing will be held in trust for the Administrative Agent on behalf of Secured Parties and will forthwith be paid over to the Administrative Agent for the benefit of Secured Parties to be credited and applied against the Guaranteed Obligations but without affecting, impairing or limiting in any manner the liability of the Obligee Guarantor under any other provision hereof.
- 7.7 Continuing Guaranty. This Guaranty is a continuing guaranty and will remain in effect until all of the Guaranteed Obligations will have been paid in full and the Revolving Credit Commitments will have terminated and all Letters of Credit have been cancelled, or have expired or have been Cash Collateralized or otherwise backstopped in a manner satisfactory to the Issuing Banks and all amounts drawn thereunder have been reimbursed in full. Each Guarantor hereby irrevocably waives any right to revoke this Guaranty as to future transactions giving rise to any Guaranteed Obligations.
- **7.8 Authority of Guarantors or the Borrower**. It is not necessary for any Secured Party to inquire into the capacity or powers of any Guarantor or the Borrower or the officers, directors or any agents acting or purporting to act on behalf of any of them.
- 7.9 Financial Condition of the Borrower. Any Credit Extension may be made to the Borrower or continued from time to time, and any Rate Contracts may be entered into from time to time, in each case without notice to or authorization from any Guarantor regardless of the financial or other condition of the Borrower at the time of any such grant or continuation or at the time such Rate Contracts is entered into, as the case may be. No Secured Party will have any obligation to disclose or discuss with any Guarantor its assessment, or any Guarantor's assessment, of the financial condition of the Borrower. Each Guarantor has adequate means to obtain information from the Borrower on a continuing basis concerning the financial condition of the Borrower and their ability to perform their obligations under the Credit Documents and the Rate Contracts, and each Guarantor assumes the responsibility for being and keeping informed of the financial condition of the Borrower and of all circumstances bearing upon the risk of nonpayment of the Guaranteed Obligations. Each Guarantor hereby waives and relinquishes any duty on the part of any Secured Party to disclose any matter, fact or thing relating to the business, operations or conditions of the Borrower now known or hereafter known by any Secured Party.

7.10 Bankruptcy, etc.

- (a) The obligations of the Guarantors hereunder will not be reduced, limited, impaired, discharged, deferred, suspended or terminated by any case or proceeding, voluntary or involuntary, involving the bankruptcy, insolvency, receivership, reorganization, liquidation or arrangement of the Borrower or any other Guarantor or by any defense which the Borrower or any other Guarantor may have by reason of the order, decree or decision of any court or administrative body resulting from any such proceeding.
- (b) Each Guarantor acknowledges and agrees that any interest on any portion of the Guaranteed Obligations which accrues after the commencement of any case or proceeding referred to in clause (a) above (or, if interest on any portion of the Guaranteed Obligations ceases to accrue by operation of law by reason of the commencement of such case or proceeding, such interest as would have accrued on such portion of the Guaranteed Obligations if such case or proceeding had not been commenced) will be included in the Guaranteed Obligations because it is the intention of the Guarantors and Secured Parties that the Guaranteed Obligations which are guaranteed by Guarantors pursuant hereto should be determined without regard to any rule of law or order which may relieve the Borrower of any portion of such Guaranteed Obligations. Guarantors will permit any trustee in bankruptcy, receiver, debtor in possession, assignee for the benefit of creditors or similar Person to pay the Administrative Agent, or allow the claim of the Administrative Agent in respect of, any such interest accruing after the date on which such case or proceeding is commenced.
- (c) In the event that all or any portion of the Guaranteed Obligations are paid by the Borrower, the obligations of Guarantors hereunder will continue and remain in full force and effect or be reinstated, as the case may be, in the event that all or any part of such payment(s) are rescinded or recovered directly or indirectly from any Secured Party as a preference, fraudulent transfer or otherwise, and any such payments which are so rescinded or recovered will constitute Guaranteed Obligations for all purposes hereunder.
- 7.11 Discharge of Guaranty upon Sale of Guarantor. If, in compliance with the terms and provisions of the Credit Documents, (a) all of the Capital Stock of any Guarantor or any of its successors in interest hereunder or (b) all or substantially all of the property of any Guarantor is sold, disposed of or otherwise transferred (such Guarantor, a "Transferred Guarantor") to any Person (other than any other Credit Party), such Transferred Guarantor will, upon the consummation of such sale, disposition or other transfer (including by merger or consolidation), automatically be discharged and released, without any further action by any Secured Party or any

other Person, effective as of the time of such sale, disposition or other transfer, from its obligations under this Agreement (including under Sections 10.2 and 10.3) and the other Credit Documents, including its obligations to pledge and grant any Collateral owned by it pursuant to any Collateral Document and, in the case of the sale of all of the Capital Stock of such Transferred Guarantor, the pledge of such Capital Stock to the Collateral Agent pursuant to the Collateral Documents will be released, and the Collateral Agent will take, and the Secured Parties hereby irrevocably authorize the Collateral Agent to take, such actions as are necessary or desirable to effect each discharge and release described in this Section 7.11 in accordance with the relevant provisions of the Collateral Documents.

- **7.12 Instrument for Payment of Money**. Each Guarantor hereby acknowledges that the guarantee in this Section 7 constitutes an instrument for the payment of money, and consents and agrees that any Lender or Agent, at its sole option, in the event of a dispute by such Guarantor in the payment of any moneys due hereunder, will have the right to bring a motion-action under New York CPLR Section 3213.
- 7.13 General Limitation on Guarantee Obligations. In any action or proceeding involving any state corporate limited partnership or limited liability company law, or any applicable state, federal or foreign bankruptcy, insolvency, reorganization or other Law affecting the rights of creditors generally, if the obligations of any Guarantor under Section 7.1 would otherwise be held or determined to be void, voidable, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under Section 7.1, then, notwithstanding any other provision to the contrary, the amount of such liability will, without any further action by such Guarantor, any Credit Party or any other Person, be automatically limited and reduced to the highest amount (after giving effect to the rights of subrogation and contribution established in Section 7.5) that is valid and enforceable, not void or voidable and not subordinated to the claims of other creditors as determined in such action or proceeding.
- **7.14 Keepwell**. Each Qualified ECP Guarantor hereby jointly and severally absolutely, unconditionally and irrevocably undertakes to provide such funds or other support as may be needed from time to time by each other Credit Party to honor all of its obligations under this Guaranty in respect of Swap Obligations (*provided*, *however*, that each Qualified ECP Guarantor will only be liable under this Section 7.14 for the maximum amount of such liability that can be hereby incurred without rendering its obligations under this Section 7.14, or otherwise under this Guaranty, voidable under applicable Law relating to fraudulent conveyance or fraudulent transfer, and not for any greater amount). The obligations of each Qualified ECP Guarantor under this Section 7.14 will remain in full force and effect until the Guaranteed Obligations have been paid in full and the Revolving Credit Commitments will have terminated, and all Loans or other Obligations hereunder which are accrued and payable have been paid or satisfied and all Letters of Credit will have expired (without any pending drawing) or have been cancelled or Cash Collateralized in accordance with the terms of this Agreement. Each Qualified ECP Guarantor intends that this Section 7.14 constitute, and this Section 7.14 will be deemed to constitute, a "keepwell, support, or other agreement" for the benefit of each other Credit Party for all purposes of Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

SECTION 8. EVENTS OF DEFAULT

- **8.1** Events of Default. Each of the events referred to in clauses (a) through (m) of this Section 8.1 shall constitute an "Event of Default":
- (a) <u>Failure to Make Payments When Due</u>. Failure by the Borrower to pay (i) when due any installment of principal of any Loan, whether at stated maturity, by acceleration, by mandatory prepayment or otherwise; or (ii) when due any amount payable to the applicable Issuing Bank in reimbursement of any drawing under a Letter of Credit (including any requirement to deposit Cash Collateral in connection therewith); or (iii) any interest on any Loan or any fee or any other amount due hereunder within five (5) Business Days after the date due; or

(b) <u>Default in Other Agreements</u>.

- (i) Failure of the Borrower or any other Credit Party to pay when due any principal of or interest on or any other amount payable in respect of one or more items of Indebtedness (other than Indebtedness referred to in Section 8.1(a)) constituting Material Indebtedness, in each case beyond the grace period, if any, provided therefor, or
- (ii) a breach or default by any Credit Party with respect to any other material term of (A) one or more items of Indebtedness constituting Material Indebtedness or (B) any loan agreement, mortgage, indenture or other agreement relating to Material Indebtedness, in each case beyond the grace period, if any, provided therefor, if the effect of such breach or default is to cause, or to permit the holder or holders of that Indebtedness (or a trustee or agent on behalf of such holder or holders), to cause, that Indebtedness to become or be declared due and payable (or redeemable) prior to its stated maturity;

provided that (1) Section 8.1(b)(ii) will not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Indebtedness and (2) such failure is unremedied or is not duly waived or cured prior to any termination of commitments or acceleration hereunder; or

(c) <u>Breach of Negative Covenants or Financial Covenant</u>. Failure of any Credit Party to perform or comply with (i) any term or condition contained in Section 6 (other than Section 6.7) or (ii) any term or condition contained in Section 6.7 (any such failure to observe any term, covenant or agreement contained in Section 6.7, a "**Financial Covenant Event of Default**"); provided that a Financial Covenant Event of Default shall not constitute an Event of Default with respect to Term Lenders (in their capacity as such) or Term Loans, Term Loan Commitments or Term Loan Exposure unless and until the date on which the Revolving Lenders have actually terminated the Revolving Credit Commitments and declared all Obligations in respect of the Revolving Credit Commitments and Revolving Credit Exposure to be immediately due and payable in accordance with this Agreement (a "**Financial Covenant Cross Default**"); or

(d) <u>Breach of Representations, Etc.</u>

- (i) Any Specified Representation was false in any material respect (except for those representations and warranties that are conditioned by materiality, which will proved to be false in any respect) or any Acquisition Agreement Representation was false as of the Closing Date; or
- (ii) Any representation, warranty, certification or other statement made or deemed made by any Credit Party in any Credit Document or in any statement or certificate at any time given by any Credit Party or any Subsidiary in writing pursuant to the terms of the Credit Documents (other than a Specified Representation or an Acquisition Agreement Representation) was false in any material respect (or, to the extent such representation and warranty contains qualifications as to materiality, it was false in any respect) as of the date made or deemed made; or
- (e) <u>Breach of Other Covenants.</u> Any Credit Party defaults in the performance of or compliance with (i) any covenant contained in Sections 5.1(a), (b), (d) and (e), 5.1(h)(i), Section 5.2 (as applicable only to the existence of the Borrower), Section 5.5, Section 5.6 or Section 5.16, or (ii) any other covenant in this Agreement or in any of the other Credit Documents, other than any such covenant referred to in subclause (i) above or any other provision of this Section 8.1, and such default is not remedied, cured or waived within thirty (30) days after the earlier to occur of the date on which a Responsible Officer has knowledge of such default and the date of receipt by the Borrower of notice from the Administrative Agent of such default; or
- (f) Involuntary Bankruptcy; Appointment of Receiver, Etc. (i) A court of competent jurisdiction enters a decree or order for relief in respect of the Borrower or any Subsidiary (other than an Immaterial Subsidiary) in an involuntary case under the Bankruptcy Code or under any other applicable bankruptcy, insolvency or similar law now or hereafter in effect, which decree or order is not stayed; or any other similar relief is granted under any applicable federal or state law; or (ii) an involuntary case is commenced against the Borrower or any Subsidiary (other than an Immaterial Subsidiary) under the Bankruptcy Code or under any other applicable bankruptcy, insolvency or similar law now or hereafter in effect; or a decree or order of a court having jurisdiction in the premises for the appointment of a receiver, liquidator, sequestrator, trustee, custodian or other officer having similar powers over the Borrower or any Subsidiary (other than an Immaterial Subsidiary), or over all or a substantial part of its property, is entered; or there occurs the involuntary appointment of an interim receiver, trustee or other custodian of the Borrower or any Subsidiary (other than an Immaterial Subsidiary) for all or a substantial part of its property; or a warrant of attachment, execution or similar process is issued against any substantial part of the property of the Borrower or any Subsidiary (other than an Immaterial Subsidiary), and any such event described in this clause (ii) continues for sixty (60) days without having been dismissed, bonded or discharged; or
- (g) <u>Voluntary Bankruptcy; Appointment of Receiver, Etc.</u> (i) The Borrower or any Subsidiary (other than an Immaterial Subsidiary) has an order for relief entered with respect to it or commences a voluntary case under the Bankruptcy Code or under any other applicable bankruptcy, nsolvency or similar law now or hereafter in effect, or consents to the entry of an order for relief in an involuntary case, or to the conversion of an involuntary case to a voluntary case, under any such law, or consents to the appointment of or taking possession by a receiver, trustee or other custodian for all or a substantial part of its property; or the Borrower or any Subsidiary (other than an Immaterial Subsidiary) makes any assignment for the benefit of creditors; or (ii) the Borrower or any Subsidiary (other than an Immaterial Subsidiary) becomes unable, or fails generally, or admits in writing its inability, to pay its debts as such debts become due; or the board of directors (or similar governing body) the Borrower or any Subsidiary (other than an Immaterial Subsidiary) (or any committee thereof) adopts any resolution or otherwise authorizes any action to approve any of the actions referred to herein or in Section 8.1(f); or

- (h) <u>Judgments and Attachments</u>. Any money judgment, writ or warrant of attachment or similar process involving in any individual case in an amount in excess of \$5,000,000 (to the extent not covered by insurance (as to which a solvent and unaffiliated insurance company has acknowledged and not denied coverage)) is entered or filed against the Borrower or any Subsidiary (other than an Immaterial Subsidiary) or any of their respective assets and remains undischarged, unvacated, unbonded or unstayed for a period of sixty (60) days; or
- (i) <u>Dissolution.</u> Any order, judgment or decree is entered against the Borrower or any Subsidiary (other than an Immaterial Subsidiary) decreeing the involuntary dissolution or split up of such Credit Party and such order remains undischarged or unstayed for a period in excess of sixty (60) days; or
- (j) <u>Employee Benefit Plans</u>. There occurs one or more ERISA Events, or, with respect to a Foreign Plan, a termination, withdrawal or noncompliance with applicable Law or plan terms, that individually or in the aggregate results in or could reasonably be expected to result in a Material Adverse Effect; or
 - (k) <u>Guaranties, Collateral Documents and other Credit Documents</u>. At any time after the execution and delivery thereof:
 - (i) the Guaranty for any reason, other than the satisfaction in full of all Obligations, ceases to be in full force and effect (other than in accordance with its terms) or is declared to be null and void or any Guarantor repudiates its obligations thereunder;
 - (ii) this Agreement or any Collateral Document ceases to be in full force and effect (other than by reason of a release of Collateral in accordance with the terms hereof or thereof or the satisfaction in full of the Obligations in accordance with the terms hereof) or is declared null and void, or the Collateral Agent does not have or ceases to have a valid and perfected Lien in any Collateral having a fair market value, individually or in the aggregate, in excess of \$2,500,000 purported to be covered by the Collateral Documents (except to the extent not required to be valid or perfected by the Credit Documents) with the priority required by the relevant Collateral Document, in each case, for any reason other than actions taken by or on behalf of the Collateral Agent or any Secured Party or the failure of the Collateral Agent or any Secured Party to take any action within its control and except as to Collateral consisting of real property to the extent that such losses are covered by a lender's title insurance policy; or
 - (iii) any Credit Party contests the validity or enforceability of any Credit Document in writing or denies in writing that it has any further liability, including with respect to future advances by the Lenders, under any Credit Document to which it is a party; or
- (l) <u>Junior Financing Documentation</u>. The payment or lien subordination provisions, as applicable, set forth in any Junior Lien Intercreditor Agreement or any Subordination Agreement to which a Debt Representative representing any Junior Financing is a party, cease to be effective or cease to be legally valid, binding and enforceable, against the lenders or holders of the Junior Financing represented by such Debt Representative; or
 - (m) Change of Control. A Change of Control occurs.

8.2 Remedies upon an Event of Default.

- (a) Upon the occurrence of any Event of Default, other than pursuant to Section 8.1(f) or 8.1(g) or a Financial Covenant Event of Default, at the request of the Required Lenders, upon notice to the Borrower by the Administrative Agent:
 - (i) the applicable Commitments and the obligation of the Issuing Banks to Issue any Letter of Credit will immediately terminate or be reduced (as specified by the Administrative Agent);
 - (ii) the aggregate principal of all applicable Loans, all accrued and unpaid interest thereon, all fees and all other Obligations under this Agreement and the other Credit Documents, together with an amount equal to the maximum amount that may at any time be drawn under all Letters of Credit then outstanding (regardless of whether any beneficiary under any such Letter of Credit will have presented, or will be entitled at such time to present, the drafts or other documents or certificates required to draw under such Letters of Credit), will become due and payable immediately, without presentment, demand, protest or further notice of any kind, all of which are hereby expressly waived by each Credit Party; *provided* that the foregoing will not affect in any way the obligations of the Lenders under Section 2.4(e);

- (iii) the Borrower will promptly comply with the provisions of Section 2.4(h) with respect to the deposit of Cash Collateral to secure the Letter of Credit Usage and future payment of related fees; and
- (iv) the Administrative Agent may, and may cause the Collateral Agent to, exercise any and all of its other rights and remedies under applicable law (including any applicable UCC) or at equity, hereunder and under the other Credit Documents.

provided that upon an Event of Default pursuant Section 8.1(f) or 8.1(g), the Commitments of each Lender and the obligations of the Issuing Bank to issue (or to cause it designee to issue) Letters of Credit shall automatically terminate, the unpaid principal amount of all outstanding Loans and all interest and other amounts as aforesaid shall automatically become due and payable and the obligation of the Borrower to Cash Collateralize the Letters of Credit as aforesaid shall automatically become effective, in each case without further act of the Administrative Agent, the Collateral Agent or any Lender.

- **8.3** Application of Proceeds. Notwithstanding anything to the contrary contained in this Agreement or any other Credit Document, upon the occurrence and during the continuance of an Event of Default and after the acceleration of the principal amount of any of the Loans hereunder:
- (a) each Credit Party irrevocably waives the right to direct the application of any and all payments at any time or times thereafter received by the Administrative Agent, the Collateral Agent or any Issuing Bank from or on behalf of any Credit Party, and, as between each Credit Party on the one hand and the Administrative Agent, the Collateral Agent, each Issuing Bank and the Lenders on the other, the Administrative Agent and each Issuing Bank will have the continuing and exclusive right to apply and to reapply any and all payments received against the Obligations in such manner as the Administrative Agent (or, as applicable, such Issuing Bank) may deem advisable and consistent with this Agreement notwithstanding any previous application by Administrative Agent (or, as applicable, such Issuing Bank); and
- (b) subject to Section 2.15(d), any and all payments received by any Secured Party (other than through the Administrative Agent), including proceeds of Collateral, will be applied:
 - (i) *first*, to all fees, costs, indemnities, liabilities, obligations and expenses incurred by or owing to the Administrative Agent or the Collateral Agent with respect to this Agreement, the other Credit Documents or the Collateral;
 - (ii) *second*, to all fees, costs, indemnities, liabilities, obligations and expenses incurred by or owing to any Lender or Issuing Bank with respect to this Agreement, the other Credit Documents or the Collateral;
 - (iii) third, to accrued and unpaid interest on the Obligations (including any interest which, but for the provisions of the Bankruptcy Code, would have accrued on such amounts);
 - (iv) fourth, (A) to the principal amount of the Obligations, including, without limitation, with respect to the deposit of Cash Collateral to secure the Letter of Credit Usage and future payment of related fees in compliance with Section 2.4(h), (B) to any Obligations under any Secured Rate Contract and (C) to any Obligation under any Bank Product Agreement for which the Administrative Agent has received written notice of such Obligations as being outstanding;
 - (v) fifth, to any other Indebtedness or obligations of any Credit Party owing to the Administrative Agent, the Collateral Agent, any Lender or any other Secured Party under the Credit Documents or any Bank Product Agreement for which the Administrative Agent has received written notice of such Obligations as being outstanding under such Bank Product Agreement; and
 - (vi) sixth, to the Borrower or to whomever may be lawfully entitled to receive such balance or as a court of competent jurisdiction may direct.

In carrying out the foregoing, (1) amounts received will be applied in the numerical order provided until exhausted prior to the application to the next succeeding category and (2) each of the Persons entitled to receive a

payment in any particular category will receive an amount equal to its *pro rata* share of amounts available to be applied pursuant thereto for such category.

SECTION 9. AGENTS

9.1 Appointment and Duties.

- (a) Appointment of Agent. Each Lender and each Issuing Bank hereby appoints DBNY (together with any successor Agent pursuant to Section 9.9) as the Administrative Agent and the Collateral Agent hereunder and authorizes each such Agent to (i) execute and deliver the Credit Documents and accept delivery thereof on its behalf from any Credit Party, (ii) take such action on its behalf and to exercise all rights, powers and remedies and perform the duties as are expressly delegated to such Agent under such Credit Documents and (iii) exercise such powers as are reasonably incidental thereto. In furtherance of the foregoing, each of the Lenders (including in its capacity as a potential Secured Swap Provider or a Bank Product Provider) hereby irrevocably appoints and authorizes the Collateral Agent to act as the agent of (and to hold any security interest created by the Collateral Documents for and on behalf of or in trust for) such Lender for purposes of acquiring, holding and enforcing any and all Liens on Collateral granted by any of the Credit Parties to secure any of the Obligations, together with such powers and discretion as are reasonably incidental thereto. In this connection, the Collateral Agent (and any co-agents, sub-agents and attorneys-in-fact appointed by the Collateral Agent pursuant to Section 9.4 for purposes of holding or enforcing any Lien on the Collateral (or any portion thereof) granted under the Collateral Documents, or for exercising any rights and remedies thereunder at the direction of the Collateral Agent), will be entitled to the benefits of all provisions of this Section 9 (including Section 9.8(b), as though such co-agents, sub-agents and attorneys-in-fact were the "collateral agent" under the Credit Documents) as if set forth in full herein with respect thereto. The provisions of this Section 9 are solely for the benefit of the Agents, the Issuing Banks and the Lenders and no Credit Party will have any rights as a third party beneficiary of any of the provisions thereof. In performing i
- Agent and the Collateral Agent, as applicable, will each have the right and authority (to the exclusion of the Lenders and the Issuing Banks), and is hereby authorized, to (i) act as the disbursing and collecting agent for the Lenders and the Issuing Banks with respect to all payments and collections arising in connection with the Credit Documents (including in any proceeding described in Section 8.1(f) or (g) or any other bankruptcy, insolvency or similar proceeding), and each Person making any payment in connection with any Credit Document to any Secured Party is hereby authorized to make such payment to such Agent, (ii) file and prove claims and file other documents necessary or desirable to allow the claims of the Secured Parties with respect to any Obligation in any proceeding described in Section 8.1(f) or (g) or any other bankruptcy, insolvency or similar proceeding (but not to vote, consent or otherwise act on behalf of such Person), (iii) act as collateral agent for each Secured Party for purposes of the perfection of all Liens created by such agreements and all other purposes stated therein, (iv) manage, supervise and otherwise deal with the Collateral, (v) take such other action as is necessary or desirable to maintain the perfection and priority of the Liens created or purported to be created by the Credit Documents, (vi) except as may be otherwise specified in any Credit Document, exercise all remedies given to such Agent and the other Secured Parties with respect to the Credit Parties and/or the Collateral, whether under the Credit Documents, applicable Law or otherwise and (vii) execute any amendment, consent or waiver under the Credit Documents on behalf of any Lender that has consented in writing to such amendment, consent or waiver, provided, however, that each such Agent hereby appoints, authorizes and directs each Lender and the Issuing Bank to act as collateral subagent for such Agent, the Lenders and the Issuing Banks for purposes of the perfection of all Liens with respect to the Collater
- (c) <u>Limited Duties</u>. Under the Credit Documents, each of the Administrative Agent and the Collateral Agent (i) is acting solely on behalf of the Secured Parties (except to the limited extent provided in Section 2.7(b) with respect to the Register), with duties that are entirely administrative in nature, notwithstanding the use of the defined terms "Administrative Agent," "Collateral Agent," "Agent," the terms "agent" and "collateral agent" and similar terms in any Credit Document to refer to such Agent, which terms are used for title purposes only, (ii) is not assuming any obligation under any Credit Document other than as expressly set forth therein or any role as agent, fiduciary or trustee of or for any Lender, Issuing Bank or other Person and (iii) will have no implied functions, responsibilities, duties, obligations or other liabilities under any Credit Document, and each Secured Party, by accepting the benefits of the Credit Documents, hereby waives and agrees not to assert any claim against such Agent based on the roles, duties and legal relationships expressly disclaimed in clauses (i) through (iii) above. Without limiting the generality of the foregoing, the use of the term "agent" in this Agreement with reference to the Administrative Agent or the Collateral Agent is not intended to connote any fiduciary duty or other implied (or express) obligations arising under agency doctrine of any applicable law. Instead, such term is

used merely as a matter of market custom and is intended to create or reflect only an administrative relationship between independent contracting parties.

9.2 Binding Effect. Each Secured Party, by accepting the benefits of the Credit Documents, agrees that (a) any action taken by the Administrative Agent, the Collateral Agent, the Required Lenders or the Required Revolving Lenders (or, if expressly required hereby, a greater proportion of the Lenders) in accordance with the provisions of the Credit Documents, (b) any action taken by the Administrative Agent or the Collateral Agent in reliance upon the instructions of Required Lenders or of Required Revolving Lenders (or, where so required, such greater proportion) and (c) the exercise by the Administrative Agent, the Collateral Agent, the Required Lenders or the Required Revolving Lenders (or, where so required, such greater proportion) of the powers set forth herein or therein, together with such other powers as are reasonably incidental thereto, will be authorized and binding upon all of the Secured Parties.

9.3 Use of Discretion.

- (a) No Action without Instructions. Neither the Administrative Agent nor the Collateral Agent will be required to exercise any discretion or take, or to omit to take, any action, including with respect to enforcement or collection, except any action it is required to take or omit to take (i) under any Credit Document or (ii) pursuant to instructions from the Required Lenders or the Required Revolving Lenders (or, where expressly required by the terms of this Agreement, a greater proportion of the Lenders). Each Agent shall be entitled to rely, and shall be fully protected in relying, upon any communication, instrument or document believed by it to be genuine and correct and to have been signed or sent by the proper Person or Persons, and shall be entitled to rely and shall be protected in relying on opinions and judgments of attorneys (who may be attorneys for the Borrower and the Subsidiaries), accountants, experts and other professional advisors selected by it. No Lender shall have any right of action whatsoever against any Agent as a result of such Agent acting or (where so instructed) refraining from acting hereunder or any of the other Credit Documents in accordance with the instructions of the Required Lenders or the Required Revolving Lenders (or, where expressly required by the terms of this Agreement, a greater proportion of the Lenders).
- (b) Right Not to Follow Certain Instructions. Notwithstanding clause (a) above, neither the Administrative Agent nor the Collateral Agent will be required to take, or to omit to take, any action in connection herewith or any of the other Credit Documents or from the exercise of any power, discretion or authority vested in it hereunder or thereunder (i) unless, upon demand, such Agent receives an indemnification satisfactory to it from the Lenders (or, to the extent applicable and acceptable to such Agent, any other Person) against all Liabilities that, by reason of such action or omission, may be imposed on, incurred by or asserted against such Agent or any Related Person thereof or (ii) that is, in the opinion of such Agent or its counsel, may expose such Agent to liability or that is contrary to any Credit Document or applicable Law including, for the avoidance of doubt any action that may be in violation of the automatic stay or that may affect a foreclosure, modification or termination of property of a Defaulting Lender under any Bankruptcy Proceeding or under the Bankruptcy Code, and no Agent will have any duty to disclose or will be liable for the failure to disclose, any information relating to any Credit Party or any of its Affiliates that is communicated to or obtained by the Person serving as such Agent or any of its Affiliates in any capacity.
- (c) Exclusive Right to Enforce Rights and Remedies. Notwithstanding anything to the contrary contained herein or in any other Credit Document, the authority to enforce rights and remedies hereunder and under the other Credit Documents against the Credit Parties or any of them will be vested exclusively in, and all actions and proceedings in equity or at law in connection with such enforcement will be instituted and maintained exclusively by, the Administrative Agent and the Collateral Agent in accordance with the Credit Documents for the benefit of all the Lenders and the Issuing Banks; *provided* that the foregoing will not prohibit (i) each of the Administrative Agent and the Collateral Agent from exercising on its own behalf the rights and remedies that inure to its benefit (solely in its capacity as such Agent) hereunder and under the other Credit Documents, (iii) any Lender from exercising setoff rights in accordance with Section 10.4 or (iv) any Lender from filing proofs of claim or appearing and filing pleadings on its own behalf during the pendency of a proceeding relative to any Credit Party under any bankruptcy or other debtor relief law; *provided further* that if at any time there is no Person acting as the Administrative Agent hereunder and under the other Credit Documents, then (A) the Required Lenders will have the rights otherwise ascribed to the Administrative Agent pursuant to Section 9.1, (B) in addition to the matters set forth in clauses (ii), (iii) and (iv) of the preceding proviso and subject to Section 10.4, any Lender may, with the consent of the Required Lenders, enforce any rights and remedies available to it and as authorized by the Required Lenders and (C) notwithstanding the foregoing clauses

(A) and (B), only the Required Revolving Lenders may take any action with respect to a Financial Covenant Event of Default pursuant to Section 8.2(b) until a Financial Covenant Cross Default has occurred.

9.4 Delegation of Rights and Duties. Each of the Administrative Agent and the Collateral Agent may, upon any term or condition it specifies, delegate or exercise any of its rights, powers and remedies under, and delegate or perform any of its duties or any other action with respect to, any Credit Document by or through

any trustee, co-agent, employee, attorney-in-fact and any other Person (including any Secured Party). Any such Person will benefit from this Section 9 to the extent provided by such Agent.

9.5 Reliance and Liability.

- (a) Each of the Administrative Agent and the Collateral Agent may, without incurring any liability hereunder, (i) treat the payee of any Note as its holder until such Note has been assigned in accordance with Section 10.6, (ii) rely on the Register to the extent set forth in Section 10.6,
- (iii) consult with any of its Related Persons and, whether or not selected by it, any other advisors, accountants and other experts (including advisors to, and accountants and experts engaged by, any Credit Party) and (iv) rely and act upon any document and information (including those transmitted by Electronic Transmission) and any telephone message or conversation, in each case believed by it to be genuine and transmitted, signed or otherwise authenticated by the appropriate parties.
- (b) None of the Administrative Agent, the Collateral Agent and their respective Related Persons will be liable for any action taken or omitted to be taken by any of them under or in connection with any Credit Document, and each Secured Party, the Borrower and each other Credit Party hereby waive and will not assert (and the Borrower will cause each other Credit Party to waive and agree not to assert) any right, claim or cause of action based thereon, except to the extent of liabilities resulting primarily from the gross negligence or willful misconduct of such Agent or, as the case may be, such Related Person (each as determined in a final, non-appealable judgment by a court of competent jurisdiction) in connection with the duties expressly set forth herein. Without limiting the foregoing, neither the Administrative Agent nor the Collateral Agent:
 - (i) will be responsible or otherwise incur liability for any action or omission taken in reliance upon the instructions of the Required Lenders or the Required Revolving Lenders or for the actions or omissions of any of its Related Persons selected with reasonable care (other than employees, officers and directors of such Agent, when acting on behalf of such Agent);
 - (ii) will be responsible to any Lender, Issuing Bank or other Person for the due execution, legality, validity, enforceability, effectiveness, genuineness, sufficiency or value of, or the attachment, perfection or priority of any Lien created or purported to be created under or in connection with, any Credit Document;
 - (iii) makes any warranty or representation, or will be responsible, to any Lender, Issuing Bank or other Person for (A) any statement, document, information, including any written or oral statements or in any financial or other statements, instruments, reports or certificates or any other documents furnished or made by any Agent to Lenders or by or on behalf of any Credit Party to any Agent or any Lender in connection with the Credit Documents and the transactions contemplated thereby or for the financial condition or business affairs of any Credit Party or any other Person liable for the payment of any Obligations, (B) any representation or warranty made or furnished by or on behalf of any Credit Party or any Related Person of any Credit Party in connection herewith or with any Credit Document or any transaction contemplated herein or therein or any other document, certificate or information with respect to any Credit Party, whether or not transmitted or (except for documents expressly required under any Credit Document to be transmitted to the Lenders) omitted to be transmitted by such Agent, including as to completeness, accuracy, scope or adequacy thereof, or for the scope, nature or results of any due diligence performed by such Agent in connection with the Credit Documents, (C) the performance or observance of any of the covenants, agreements or other terms or conditions set forth in any Credit Document or the occurrence of any Default, (D) the execution, effectiveness, genuineness, validity, enforceability, collectability, sufficiency or genuineness hereof or of any Credit Document or any other agreement, instrument or document or (E) the satisfaction of any condition set forth in Section 3 or elsewhere in any other agreement, instrument or document or (E) the satisfaction of any condition set forth in Section 3 or elsewhere in any there agreement, and (F) and, for each of the items set forth in clauses (A) through (E) hereof, each Lender and Issuing Bank hereby waives and agrees not to assert any right,
 - (iv) will have any duty to ascertain or to inquire as to the performance or observance of any provision of any Credit Document, whether any condition set forth in any Credit Document is satisfied or waived, as to the financial condition of any Credit Party or as to the occurrence or continuation or possible occurrence or continuation of any Default or Event of Default or will be deemed to have notice or knowledge of such occurrence or continuation unless it has received a notice from the Borrower or any Lender or Issuing Bank describing such Default or Event of Default clearly labeled "notice of default" (in which case such Agent will promptly give notice of such receipt to all Lenders).

- (c) Each party to this Agreement acknowledges and agrees that the Administrative Agent may from time to time use one or more outside service providers for the tracking of all Uniform Commercial Code financing statements (and/or other collateral related filings and registrations from time to time) required to be filed or recorded pursuant to the Credit Documents and the notification to the Administrative Agent, of, among other things, the upcoming lapse or expiration thereof. No Agent will be liable for any action taken or not taken by any such service provider.
- 9.6 Agent Individually. Each of the Administrative Agent and the Collateral Agent and their Affiliates may make loans and other extensions of credit to, acquire Capital Stock of, engage in any kind of business, including but not limited to any type of financial advisory business, with any Credit Party or Affiliate thereof as though it were not acting as an Agent and may receive separate fees and other payments therefor. To the extent the Administrative Agent, the Collateral Agent or any of their respective Affiliates makes any Loan or otherwise becomes a Lender hereunder, it will have and may exercise the same rights and powers hereunder and will be subject to the same obligations and liabilities as any other Lender and the terms "Lender," "Required Lender," "Required Revolving Lender," and any similar terms will, except where otherwise expressly provided in any Credit Document, include such Agent or such Affiliate, as the case may be, in its individual capacity as Lender or as one of the Required Lenders or Required Revolving Lenders, respectively.

9.7 Lender Credit Decision.

- (a) Each Lender and Issuing Bank acknowledges that it will, independently and without reliance upon the Administrative Agent, the Collateral Agent, any Lender or Issuing Bank or any of their Related Persons or upon any document (including any offering and disclosure materials in connection with the syndication of the Loans) solely or in part because such document was transmitted by such Agent or any of its Related Persons, conduct its own independent investigation of the financial condition and affairs of each Credit Party and make and continue to make its own credit decisions in connection with entering into, and taking or not taking any action under, any Credit Document or with respect to any transaction contemplated in any Credit Document, in each case based on such documents and information as it will deem appropriate. Each Lender further represents and warrants that it has reviewed the confidential information memorandum and each other document made available to it on the Platform in connection with this Agreement and has acknowledged and accepted the terms and conditions applicable to the recipients thereof (including any such terms and conditions set forth, or otherwise maintained, on the Platform with respect thereto). Except for documents expressly required by any Credit Document to be transmitted by the Administrative Agent or the Collateral Agent to the Lenders or Issuing Banks, no such Agent will have any duty or responsibility to provide any Lender or Issuing Bank with any credit or other information concerning the business, prospects, operations, property, financial and other condition or creditworthiness of any Credit Party or any Affiliate of any Credit Party that may come in to the possession of such Agent or any of its Related Persons.
- (b) If any Lender or Issuing Bank has elected to abstain from receiving Nonpublic Information concerning the Credit Parties or their Affiliates, such Lender or Issuing Bank acknowledges that, notwithstanding such election, the Administrative Agent and/or the Credit Parties will, from time to time, make available syndicate-information (which may contain Nonpublic Information) as required by the terms of, or in the course of administering the Loans to the credit contact(s) identified for receipt of such information on the Lender's administrative questionnaire who are able to receive and use all syndicate-level information (which may contain Nonpublic Information) in accordance with such Lender's compliance policies and contractual obligations and applicable Law, including federal and state securities laws; provided that if such contact is not so identified in such questionnaire, the relevant Lender or Issuing Bank hereby agrees to promptly (and in any event within one (1) Business Day) provide such a contact to the Administrative Agent and the Credit Parties upon request therefor by the Administrative Agent or the Credit Parties. Notwithstanding such Lender's or Issuing Bank's election to abstain from receiving material non-public information, such Lender or Issuing Bank acknowledges that if such Lender or Issuing Bank chooses to communicate with the Administrative Agent, it assumes the risk of receiving Nonpublic Information concerning the Credit Parties or their Affiliates. In the event that any Lender has determined for itself to not access any information disclosed through the Platform or otherwise, such Lender acknowledges that (i) other Lender's decision to limit the scope of the information it has obtained in connection with this Agreement and the other Credit Documents.
- (c) Each Lender, by delivering its signature page to this Agreement or an Assignment Agreement and funding its Loan, will be deemed to have acknowledged receipt of, and consented to and approved, each Credit Document and each other document required to be approved by any Agent, the Required Lenders or the Lenders, as applicable, on the Closing Date.

9.8 Expenses; Indemnities; Withholding.

(a) Each Lender agrees to reimburse the Administrative Agent, the Collateral Agent and each of their respective Related Persons (to the extent not reimbursed by any Credit Party) promptly upon demand, severally and ratably, for any costs and expenses (including fees, charges and disbursements of financial, legal and

other advisors and Other Taxes paid in the name of, or on behalf of, any Credit Party) that may be incurred by such Agent or any of its Related Persons in connection with the preparation, syndication, execution, delivery, administration, modification, consent, waiver or enforcement of, or the taking of any other action (whether through negotiations, through any work-out, bankruptcy, restructuring or other legal or other proceeding (including preparation for and/or response to any subpoena or request for document production relating thereto) or otherwise) in respect of, or legal advice with respect to, its rights or responsibilities under, any Credit Document.

- (b) Each Lender further agrees to indemnify the Administrative Agent, the Collateral Agent and each of their respective Related Persons (to the extent not reimbursed by any Credit Party), severally and ratably, in proportion to its Pro Rata Share, from and against Liabilities (including, to the extent not indemnified pursuant to Section 9.8(c), taxes, interests and penalties imposed for not properly withholding or backup withholding on payments made to or for the account of any Lender) that may be imposed on, incurred by or asserted against such Agent or any of its Related Persons in any matter relating to or arising out of, in connection with or as a result of any Credit Document or any other act, event or transaction related, contemplated in or attendant to any such document, or, in each case, any action taken or omitted to be taken by such Agent or any of its Related Persons under or with respect to any of the foregoing (IN ALL CASES, WHETHER OR NOT CAUSED OR ARISING, IN WHOLE OR IN PART, OUT OF THE COMPARATIVE, CONTRIBUTORY OR SOLE NEGLIGENCE OF ANY AGENT OR RELATED PERSON); provided, however, that no Lender will be liable to the Administrative Agent, the Collateral Agent or any of their respective Related Persons to the extent such liability has resulted solely and directly for the payment of any portion of such liabilities, obligations, losses, damages, penalties, actions, claims, suits, judgments, litigations, investigations, inquiries or proceedings, costs, expenses or disbursements which have resulted from the gross negligence or willful misconduct of such Agent or, as the case may be, such Related Person, as determined by a court of competent jurisdiction in a final non-appealable judgment or order. No Lender shall be liable under this Section or otherwise for any failure of another Lender's obligations under the Credit Documents.
- (c) To the extent required by any applicable law, the Administrative Agent and the Collateral Agent may withhold from any payment to any Lender under a Credit Document an amount equal to any applicable withholding tax. If the Internal Revenue Service or any other Governmental Authority asserts a claim that such Agent did not properly withhold tax from amounts paid to or for the account of any Lender (because the appropriate certification form was not delivered, was not properly executed, or fails to establish an exemption from, or reduction of, withholding tax with respect to a particular type of payment, or because such Lender failed to notify such Agent or any other Person of a change in circumstances which rendered the exemption from, or reduction of, withholding tax ineffective, or for any other reason), or such Agent reasonably determines that it was required to withhold taxes from a prior payment but failed to do so, such Lender will promptly indemnify such Agent fully for all amounts paid, directly or indirectly, by such Agent as tax or otherwise, including penalties and interest, and together with all expenses incurred by such Agent, including legal expenses, allocated internal costs and out-of-pocket expenses. Each of the Administrative Agent and the Collateral Agent may offset against any payment to any Lender under a Credit Document, any applicable withholding tax that was required to be withheld from any prior payment to such Lender but which was not so withheld, as well as any other amounts for which such Agent is entitled to indemnification from such Lender under this Section 9.8(c).

9.9 Resignation of Administrative Agent, Collateral Agent or Issuing Bank.

- (a) Each of the Administrative Agent and the Collateral Agent may resign at any time by delivering notice of such resignation to the Lenders and the Borrower, effective on the date set forth in such notice or, if no such date is set forth therein, upon the date such notice will be effective, in accordance with the terms of this Section 9.9. If such Agent delivers any such notice, the Required Lenders will have the right, subject to the consent of the Borrower (such consent not to be unreasonably withheld, conditioned or delayed), at all times other than during the continuation of an Event of Default under Section 8.1(a), (f) or (g), to appoint a successor Administrative Agent or Collateral Agent, as applicable. The Administrative Agent's resignation shall become effective on the earliest of (i) 30 days after delivery of the notice of resignation (regardless of whether a successor has been appointed or not), (ii) the appointment of a successor Administrative Agent by the Required Lenders or (iii) such other date, if any, agreed to by the Required Lenders. If, after 30 days after the date of such retiring Agent's notice of resignation, no successor Administrative Agent or Collateral Agent, as applicable, has been appointed by the Required Lenders that has accepted such appointment, then such retiring Agent may, on behalf of the Lenders, appoint a successor Administrative Agent or Collateral Agent, as applicable, from among the Lenders or a commercial banking institution organized under the laws of the United States (or any State thereof) or a United States branch or agency of a commercial banking institution, in each case, having combined capital and surplus of at least \$500,000,000. Each appointment under this clause (a) will be subject to the prior consent of the Borrower, which will not be unreasonably withheld but will not be required during the continuance of an Event of Default.
- (b) Effective immediately upon its resignation, (i) any retiring Administrative Agent or Collateral Agent will be discharged from its duties and obligations under the Credit Documents, (ii) the Lenders will assume and perform all of the duties of such Agent until a successor Administrative Agent or Collateral Agent, as applicable, will have accepted a valid appointment hereunder, (iii) such retiring Agent and its Related Persons

will no longer have the benefit of any provision of any Credit Document as Administrative Agent or Collateral Agent, as applicable, other than with respect to any actions taken or omitted to be taken while such retiring Agent was, or because such Agent had been, validly acting as Administrative Agent or Collateral Agent, as applicable, under the Credit Documents and (iv) subject to its rights under Section 9.3, such retiring Agent will take such action as may be reasonably necessary to assign to the applicable successor Administrative Agent or Collateral Agent its rights as Administrative Agent or Collateral Agent, as applicable, under the Credit Documents. After any retiring Administrative Agent's or Collateral Agent's resignation hereunder as the Administrative Agent, the provisions of this Section 9 and Sections 10.2, 10.3, 10.4, 10.10, 10.14, 10.15, and 10.16 will inure to its benefit, its sub-agents and their respective affiliates benefit as to any actions taken or omitted to be taken by any of them while it was Administrative Agent or Collateral Agent hereunder. Effective immediately upon the acceptance of a valid appointment as Administrative Agent or Collateral Agent will succeed to, and become vested with, all the rights, powers, privileges and duties of such retiring Agent under the Credit Documents and the retiring Administrative Agent or Collateral Agent will promptly (A) transfer to its successor all sums, Securities and other items of Collateral held under the Collateral Documents, together with all records and other documents necessary or appropriate in connection with the performance of the duties of the successor Administrative Agent or Collateral Agent under the Credit Documents, and (B) execute and deliver to such successor Administrative Agent or Collateral Documents to financing statements, and take such other actions, as may be necessary or appropriate in connection with the assignment to such successor Administrative Agent or Collateral Documents.

(c) Any Issuing Bank may resign at any time by delivering notice of such resignation to the Administrative Agent, effective on the date set forth in such notice or, if no such date is set forth therein, on the date such notice will be effective. Upon such resignation, the applicable Issuing Bank will remain an Issuing Bank and will retain its rights and obligations in its capacity as such (other than any obligation to Issue Letters of Credit but including the right to receive fees or to have Lenders participate in any L/C Reimbursement Agreement Obligation thereof) with respect to Letters of Credit Issued by such Issuing Bank prior to the date of such resignation and will otherwise be discharged from all other duties and obligations under the Credit Documents.

9.10 Release of Collateral or Guarantors.

- (a) Each Lender and Issuing Bank hereby consents to the release and hereby directs the Administrative Agent and the Collateral Agent to release (or, in the case of clause (iii)(B) below, release or subordinate) the following:
 - (i) any Guarantor from its guaranty of any Obligation pursuant to Section 7.11 or if such Guarantor ceases to be a Subsidiary (including as a result of its designation as an Unrestricted Subsidiary in accordance with the terms of this Agreement), and such Guarantor will be automatically released from its Obligations thereunder; provided that no such release shall occur if such Guarantor continues to be a guarantor in respect of any Incremental Equivalent Debt, any Permitted Ratio Debt, any Credit Agreement Refinancing Indebtedness, any Material Indebtedness that is Junior Financing or any Permitted Refinancing in respect of any of the foregoing;
 - (ii) any Lien held by the Collateral Agent for the benefit of the Secured Parties against any Guarantor upon the release of such Guarantor from its guaranty pursuant to clause (i) above; and
 - (iii) any Lien held by the Collateral Agent for the benefit of the Secured Parties against (A) any Collateral that is sold, transferred, conveyed or otherwise disposed of by a Credit Party in a transaction permitted by the Credit Documents (including pursuant to a valid waiver or consent and including assets and equity interests sold, transferred, conveyed, disposed of and/or contributed as part of the Potential Transfers and which, in case of the Potential Transfers, shall be automatically released), (B) any property subject to a Lien permitted hereunder in reliance upon Section 6.1(d) and (C) all of the Collateral and all Credit Parties, upon (1) termination of the Revolving Credit Commitments, (2) payment and satisfaction in full of all Loans, all obligations to reimburse the Issuing Banks for drawings honored under Letters of Credit, all other Obligations under the Credit Documents (excluding contingent obligations as to which no claim has been asserted) and all Obligations arising under Secured Rate Contracts and Bank Product Agreements that the Administrative Agent has theretofore been notified in writing by the holder of such Obligations are then due and payable, (3) deposit of Cash Collateral with respect to all contingent Obligations (or, as an alternative to Cash Collateral, in the case of any Letter of Credit Obligation, receipt by the Administrative Agent of a back-up letter of credit) in amounts and on terms and conditions and with parties satisfactory to the Administrative Agent, the applicable Issuing Bank and each Indemnitee that is, or may be, owed such Obligations (excluding contingent Obligations (other than obligations to reimburse the

Issuing Banks for drawings honored under Letters of Credit) as to which no claim has been asserted), and, in the case of this clause (3), the Collateral Documents, the guarantees made herein, the Liens and all other security interests granted thereunder will automatically terminate, and (4) to the extent requested by the Administrative Agent, receipt by the Administrative Agent and the Secured Parties of liability releases from the Credit Parties each in form and substance acceptable to the Administrative Agent.

- (b) Each Lender and Issuing Bank hereby directs the Administrative Agent and the Collateral Agent, and each of the Administrative Agent and the Collateral Agent hereby agrees, upon receipt of reasonable advance notice from the Borrower, to execute and deliver or file such documents and to perform other actions reasonably necessary to release the guaranties and Liens when and as directed in this Section 9.10, subject to receipt by the Administrative Agent of a certification of the Borrower as to such matters as are reasonably required by the Administrative Agent. To the extent any Collateral is disposed of as permitted by this Section to any Person other than a Credit Party, such Collateral will be sold or disposed of free and clear of Liens created by the Credit Documents and the Administrative Agent will be authorized to take any actions deemed appropriate in order to effect the foregoing.
- (c) In the event of a foreclosure by the Collateral Agent on any of the Collateral pursuant to a public or private sale or other disposition, the Collateral Agent (at the direction of the Required Lenders) or any Lender may be the purchaser or licensor of any or all of such Collateral at any such sale or other disposition and the Collateral Agent, as agent for and representative of Secured Parties (but not any Lender or Lenders in its or their respective individual capacities unless Required Lenders will otherwise agree in writing), at the direction of the Required Lenders, will be entitled, for the purpose of bidding and making settlement or payment of the purchase price for all or any portion of the Collateral Sold at any such public sale, to use and apply any of the Obligations as a credit on account of the purchase price for any collateral payable by the Collateral Agent at such sale or other disposition (including pursuant to Section 363(k), Section 1129(b)(2)(a)(ii) or otherwise of the Bankruptcy Code), the Collateral Agent (or any Lender, except with respect to a "credit bid" pursuant to Section 363(k), Section 1129(b)(2)(a)(ii) or otherwise of the Bankruptcy Code). Any release of guarantee obligations will be deemed subject to the provision that such guarantee obligations will be reinstated if after such release any portion of any payment in respect of the Obligations guaranteed thereby will be rescinded or must otherwise be restored or returned upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of the Borrower or Guarantor, or upon or as a result of the appointment of a receiver, intervenor or conservator of, or trustee or similar officer for, the Borrower or Guarantor or any substantial part of its property, or otherwise, all as though such payment had not been made. The Collateral Agent will not be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priori

9.11 [Reserved].

- 9.12 Joint Lead Arrangers, Joint Bookrunners and Co-Documentation Agents. Notwithstanding any provision to the contrary contained elsewhere in this Agreement or in any other Credit Document, none of the Joint Lead Arrangers, Joint Bookrunners, Syndication Agent and Co-Documentation Agents will have any duties or responsibilities, nor will any of such Agents have or be deemed to have any fiduciary relationship with any Lender, and no implied covenants, functions, responsibilities, duties, obligations or liabilities will be read into this Agreement or any other Credit Document or otherwise exist against any of such Agents. At any time that any Lender serving (or whose Affiliate is serving) as Joint Lead Arranger, Joint Bookrunner, Syndication Agent or Co-Documentation Agent will have transferred to any other Person (other than any Affiliates) all of its interests in the Loans, such Lender (or an Affiliate of such Lender acting as Joint Lead Arranger, Joint Bookrunner Syndication Agent or Co-Documentation Agent) will be deemed to have concurrently resigned as such Joint Lead Arranger, Joint Bookrunner, Syndication Agent or Co-Documentation Agent.
- 9.13 Administrative Agent May File Bankruptcy Disclosure and Proofs of Claim. In the case of pendency of any proceeding under any Bankruptcy Proceeding relative to any Credit Party, the Administrative Agent (irrespective of whether the principal of any Loan will then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether the Administrative Agent will have made any demand on the Borrower) will be entitled and empowered (but not obligated) by intervention in such proceeding or otherwise:
- (a) to file a verified statement pursuant to the Federal Rules of Bankruptcy Procedure that, in its sole opinion, complies with such rule's disclosure requirements for entities representing more than one creditor;
- (b) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans and all other Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of the Lenders and the Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of the

Administrative Agent and its respective agents and counsel and all other amounts due the Administrative Agent under Section 2, Section 10.2 and Section 10.3) allowed in such judicial proceeding; and

(c) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender to make such payments to the Administrative Agent and, in the event that the Administrative Agent will consent to the making of such payments directly to the Lenders, to pay to the Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under this Agreement. To the extent that the payment of any such compensation, expenses, disbursements and advances of the Administrative Agent, its agents and counsel, and any other amounts due the Administrative Agent under this Agreement out of the estate in any such proceeding, will be denied for any reason, payment of the same will be secured by a Lien on, and will be paid out of, any and all distributions, dividends, money, securities and other properties that the Lenders may be entitled to receive in such proceeding whether in liquidation or under any plan of reorganization or arrangement or otherwise.

Nothing contained herein will be deemed to authorize the Administrative Agent to authorize or consent to or accept or adopt on behalf of any Lender any plan of reorganization, arrangement, adjustment or composition affecting the Obligations or the rights of any Lender or to authorize the Administrative Agent to vote in respect of the claim of any Lender in any such proceeding.

SECTION 10. MISCELLANEOUS

10.1 Notices.

- (a) Addresses. All notices and other communications required or expressly authorized to be made by this Agreement will be given in writing, unless otherwise expressly specified herein, and (i) addressed to the address set forth on Appendix B or otherwise indicated to the Borrower and the Administrative Agent in writing, (ii) posted to the Platform (to the extent such system is available and set up by or at the direction of the Administrative Agent prior to posting), (iii) posted to any other E-System approved by or set up by or at the direction of the Administrative Agent or (iv) addressed to such other address as will be notified in writing (A) in the case of the Borrower, the Administrative Agent and the Collateral Agent, to the other parties hereto and (B) in the case of all other parties, to the Borrower, the Administrative Agent and the Collateral Agent. Transmissions made by electronic mail or E-Fax to the Administrative Agent will be effective only (1) for notices where such transmission is specifically authorized by this Agreement, (2) if such transmission is delivered in compliance with procedures of the Administrative Agent applicable at the time and previously communicated to the Borrower, and (3) if receipt of such transmission is acknowledged by the Administrative Agent.
- (b) <u>Effectiveness.</u> (i) All communications described in clause (a) above and all other notices, demands, requests and other communications made in connection with this Agreement will be effective and be deemed to have been received (i) if delivered by hand, upon personal delivery, (ii) if delivered by overnight courier service, one (1) Business Day after delivery to such courier service, (iii) if delivered by mail, three (3) Business Days after deposit in the mail, (iv) if delivered by facsimile (other than to post to an E-System pursuant to clause (a)(ii) or (a)(iii) above), upon sender's receipt of confirmation of proper transmission, and (v) if delivered by posting to any E-System, on the later of the Business Day of such posting and the Business Day access to such posting is given to the recipient thereof in accordance with the standard procedures applicable to such E-System; *provided*, *however*, that no communications to the Administrative Agent pursuant to this Section 10.1 will be effective until received by the Administrative Agent.
 - (ii) The posting, completion and/or submission by any Credit Party of any communication pursuant to an E-System will constitute a representation and warranty by the Credit Parties that any representation, warranty, certification or other similar statement required by the Credit Documents to be provided, given or made by a Credit Party in connection with any such communication is true, correct and complete except as expressly noted in such communication or E-System.
- (c) Each Lender will notify the Administrative Agent and the Collateral Agent in writing of any changes in the address to which notices to such Lender should be directed, of addresses of its Lending Office, of payment instructions in respect of all payments to be made to it hereunder and of such other administrative information as the Administrative Agent will reasonably request.
 - (d) Electronic Transmissions.
 - (i) <u>Authorization</u>. Subject to the provisions of Section 10.1(a), each of the Administrative Agent, the Collateral Agent, the Lenders, each Credit Party and each of their

Related Persons, is authorized (but not required) to transmit, post or otherwise make or communicate, in its sole discretion, Electronic Transmissions in connection with any Credit Document and the transactions contemplated therein. Each Credit Party and each Secured Party hereto acknowledges and agrees that the use of Electronic Transmissions is not necessarily secure and that there are risks associated with such use, including risks of interception, disclosure and abuse and each indicates it assumes and accepts such risks by hereby authorizing the transmission of Electronic Transmissions.

- (ii) <u>Signatures</u>. Subject to the provisions of Section 10.1(a), (i) (A) no posting to any E-System will be denied legal effect merely because it is made electronically, (B) each E Signature on any such posting will be deemed sufficient to satisfy any requirement for a "signature" and (C) each such posting will be deemed sufficient to satisfy any requirement for a "writing," in each case including pursuant to any Credit Document, any applicable provision of any applicable UCC, the federal Uniform Electronic Transactions Act, the Electronic Signatures in Global and National Commerce Act and any substantive or procedural Law governing such subject matter, (ii) each such posting that is not readily capable of bearing either a signature or a reproduction of a signature may be signed, and will be deemed signed, by attaching to, or logically associating with such posting, an E-Signature, upon which the Administrative Agent, the Collateral Agent, each other Secured Party and each Credit Party may rely and assume the authenticity thereof, (iii) each such posting containing a signature, a reproduction of a signature or an E-Signature will, for all intents and purposes, have the same effect and weight as a signed paper original and (iv) each party hereto or beneficiary hereto agrees not to contest the validity or enforceability of any posting on any E-System or E-Signature on any such posting under the provisions of any applicable Law requiring certain documents to be in writing or signed; *provided*, *however*, that nothing herein will limit such party's or beneficiary's right to contest whether any posting to any E-System or E-Signature has been altered after transmission
- (iii) <u>Separate Agreements</u>. All uses of an E-System will be governed by and subject to, in addition to Section 10.1, the separate terms, conditions and privacy policy posted or referenced in such E-System (or such terms, conditions and privacy policy as may be updated from time to time, including on such E-System) and related Contractual Obligations executed by the Administrative Agent and Credit Parties in connection with the use of such E-System.
- (iv) LIMITATION OF LIABILITY. ALL E-SYSTEMS AND ELECTRONIC TRANSMISSIONS WILL BE PROVIDED "AS IS" AND "AS AVAILABLE." NONE OF THE ADMINISTRATIVE AGENT, THE COLLATERAL AGENT, ANY LENDER OR ANY OF THEIR RELATED PERSONS WARRANTS THE ACCURACY, ADEQUACY OR COMPLETENESS OF ANY E-SYSTEMS OR ELECTRONIC TRANSMISSION AND DISCLAIMS ALL LIABILITY (WHETHER OR NOT BASED ON STRICT LIABILITY AND INCLUDING DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES OR EXPENSES (WHETHER IN CONTRACT, TORT OR OTHERWISE)) FOR ERRORS OR OMISSIONS THEREIN. NO WARRANTY OF ANY KIND IS MADE BY THE ADMINISTRATIVE AGENT, THE COLLATERAL AGENT ANY LENDER OR ANY OF THEIR RELATED PERSONS IN CONNECTION WITH ANY E SYSTEMS OR ELECTRONIC COMMUNICATION, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD-PARTY RIGHTS OR FREEDOM

FROM VIRUSES OR OTHER CODE DEFECTS. The Borrower, each other Credit

Party executing this Agreement and each Secured Party agrees that the Administrative Agent has no responsibility for maintaining or providing any equipment, software, services or any testing required in connection with any Electronic Transmission or otherwise required for any E-System.

- (e) Each Credit Party agrees that the Administrative Agent may make the communications described in clause (a) above available to the other Agents, the Lenders or the Issuing Banks by posting such communications on any Platform.
- (f) Each Public Lender agrees to cause at least one individual at or on behalf of such Public Lender to at all times have selected the "Private Side Information" or similar designation on the content declaration screen of the Platform in order to enable such Public Lender or its delegate, in accordance with such Public Lender's compliance procedures and applicable law, including United States federal and state securities laws, to make reference to information that is not made available through the "Public Side Information" portion of the Platform and that may contain Nonpublic Information with respect to the Borrower, the Subsidiaries or their respective securities for purposes of United States federal or state securities laws. In the event that any Public Lender has determined for itself to not access any information disclosed through the Platform or otherwise, such Public Lender acknowledges that (i) other Lenders may have availed themselves of such information and (ii) neither the Borrower nor the Administrative Agent has any responsibility for such Public Lender's decision to limit the scope of the information it has obtained in connection with this Agreement and the other Credit Documents.

10.2 Expenses. The Borrower agrees to pay promptly, in each case for which an invoice has been delivered to the Borrower, (a) if the Closing Date occurs, all actual, reasonable and documented in reasonable detail out-of-pocket costs and expenses of the Administrative Agent, the Collateral Agent, the Issuing Banks and DBSI in the preparation of the Credit Documents and any consents, amendments, waivers or other modifications thereto (limited, in the case of legal fees and expenses, to the fees, expenses and disbursements of one primary counsel and, if reasonably necessary, one local counsel in each relevant jurisdiction (which may be a single local counsel acting in multiple jurisdictions) to such Persons taken as a whole); (b) all the costs of furnishing all opinions by counsel for the Borrower and the other Credit Parties; (c) the actual, reasonable and documented in reasonable detail out-of-pocket fees, expenses and disbursements of counsel to the Administrative Agent, the Collateral Agent, the Issuing Banks and the Joint Lead Arrangers in connection with the negotiation, preparation, execution and administration of the Credit Documents and any consents, amendments, waivers or other modifications thereto and any other documents or matters requested by the Borrower, limited to fees, expenses and disbursements of one primary counsel and, if reasonably necessary, one local counsel in each relevant jurisdiction (which may be a single local counsel acting in multiple jurisdictions); (d) all the actual documented out-of-pocket costs and reasonable expenses of creating, perfecting and recording Liens in favor of the Collateral Agent, for the benefit of the Secured Parties, including filing and recording fees, expenses and taxes, stamp or documentary taxes, search fees, title insurance premiums and actual, reasonable documented out-of-pocket fees, expenses and disbursements of counsel to each of the Administrative Agent and the Collateral Agent and of counsel providing any opinions that the Administrative Agent and the Collateral Agent or the Required Lenders may reasonably request in respect of the Collateral or the Liens created pursuant to the Collateral Documents; (e) [Reserved]; (f) all the actual, reasonable documented out-of-pocket costs and reasonable expenses (including the reasonable fees, expenses and disbursements of any agents employed or retained by the Collateral Agent and its counsel) in connection with the custody or preservation of any of the Collateral; (g) all other actual, reasonable documented out-of-pocket costs and expenses incurred by the Administrative Agent and DBSI in connection with the syndication of the Loans and Commitments and the transactions contemplated by the Credit Documents and any consents, amendments, waivers or other modifications thereto; and (h) after the occurrence and during the continuance of an Event of Default, all actual, documented out-of-pocket costs and expenses, including reasonable attorneys' fees, costs of settlement and fees, expenses and disbursements of any appraisers, consultants and other advisors incurred by any Agent, any Issuing Bank and the Lenders in enforcing any Obligations of or in collecting any payments due from any Credit Party hereunder or under the other Credit Documents by reason of such Event of Default (including in connection with the sale of, collection from, or other realization upon any of the Collateral or the enforcement of the Guaranty) or preservation of any right or remedy under any Credit Document or in connection with any refinancing or restructuring of the credit arrangements provided hereunder in the nature of a "work-out" or pursuant to any insolvency or bankruptcy cases or proceedings, limited, in the case of legal fees and expenses, to fees, disbursements and expenses of one counsel to the Agents, Issuing Banks and the Lenders taken as a whole (and, if reasonably necessary, one local counsel in any relevant jurisdiction (which may be a single local counsel acting in multiple jurisdictions) and, solely in the event of an actual or potential conflict of interest between any Agent and the Lenders, where the Person or Persons affected by such conflict of interest inform the Borrower in writing of such conflict of interest, one additional counsel in each relevant jurisdiction to each group of affected Persons similarly situated taken as a whole)). For the avoidance of doubt, this Section 10.2 will not apply with respect to Taxes other than as set forth in clause (d) above and any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

10.3 Indemnity; Certain Waivers.

(a) Indemnity. In addition to the payment of expenses pursuant to Section 10.2, each Credit Party agrees to indemnify, pay and hold harmless, each Agent, each Issuing Bank, each Lender and each of their respective Related Persons (each, an "Indemnitee"), from and against any and all Indemnified Liabilities; provided that no Credit Party will have any obligation to any Indemnitee hereunder with respect to any Indemnities to the extent such Indemnified Liabilities (i) arise from (A) the bad faith, gross negligence or willful misconduct of that Indemnitee or its Related Persons as determined by a court of competent jurisdiction in a final non-appealable order or (B) any material breach of the obligations of that Indemnitee or its Related Persons under this Agreement or any other Credit Document as determined by a court of competent jurisdiction in a final non-appealable order or (ii) relate to any dispute solely among Indemnitees other than (A) claims against an Agent, in its capacity as such or in fulfilling its role as an Agent, and (B) claims arising out of any act or omission on the part of any Credit Party or any Subsidiary or Affiliates; provided further that the Credit Parties, taken as a whole, shall be responsible hereunder for the fees and expenses of only one counsel for each similarly situated group of affected Indemnitees in connection with indemnification claims arising out of the same facts or circumstances and, if reasonably necessary or advisable in the judgment of the Agents, a single regulatory counsel in each applicable specialty and a single local or foreign counsel to the Indemnitees taken as a whole in each relevant jurisdiction and, solely in the case of an actual or perceived conflict of interest, one additional primary counsel, one additional regulatory counsel in each applicable specialty and one additional local or foreign counsel in each applicable jurisdiction, in each case, to each similarly situated group of affected Indemnitees. To the extent that the undertakings to defend, indemn

payment and satisfaction of all Indemnified Liabilities incurred by Indemnitees or any of them. The Credit Parties agree, jointly and severally, that, without the prior written consent of the Administrative Agent, which consent will not be unreasonably withheld or delayed, the Credit Parties will not enter into any settlement of a claim in respect of which indemnification could have been sought by an Indemnitee under this Section 10.3(a) unless such settlement includes an explicit and unconditional release from the party bringing such claim of all Indemnitees which could have sought indemnification with respect to such claim under this Section 10.3(a). This Section 10.3 will not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

- (b) To the extent that the Credit Parties fail to indefeasibly pay any amount required to be paid by them to the Agents or the Issuing Banks under Sections 10.3(a) in accordance with Section 9.8(b), each Lender severally agrees to pay to the applicable Agent or the applicable Issuing Bank such Lender's Pro Rata Share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount (such indemnity will be effective whether or not the related losses, claims, damages, liabilities and related expenses are incurred or asserted by any party hereto or any third party); *provided* that the unreimbursed claim was incurred by or asserted against any of the Agents or the Issuing Banks in its capacity as such.
- (c) No Indemnitee will be liable for any damages arising from the use by others of information or other materials obtained through electronic, telecommunications or other information transmission systems (including the Platform) and neither any Indemnitee nor any Credit Party (or any of their respective directors, officers, employees, controlling Persons, controlled affiliates or agents) will be liable for any indirect, special, punitive or consequential damages in connection with the Transactions, this Agreement or any other Credit Document (including the Facilities and the use of proceeds hereunder), or with respect to any activities or other transactions related to the Facilities, provided that nothing contained in this sentence limits the Credit Parties' indemnity and reimbursement obligations to the extent such special, indirect, punitive or consequential damages are included in any third party claim in connection with which such Indemnitee is entitled to indemnification hereunder.
- 10.4 Set-Off. In addition to any rights now or hereafter granted under applicable law and not by way of limitation of any such rights, upon the occurrence of any Event of Default each Lender is hereby authorized by each Credit Party at any time or from time to time subject to the consent of the Administrative Agent (such consent not to be unreasonably withheld or delayed), without notice to any Credit Party or to any other Person (other than the Administrative Agent), any such notice being hereby expressly waived, to set off and to appropriate and to apply any and all deposits (general or special, including Indebtedness evidenced by certificates of deposit, whether matured or unmatured, but not including trust accounts) and any other Indebtedness at any time held or owing by such Lender to or for the credit or the account of any Credit Party against and on account of the obligations and liabilities of any Credit Party to such Lender hereunder, the Letters of Credit and participations therein and under the other Credit Documents, including all claims of any nature or description arising out of or connected hereto, the Letters of Credit and participations therein or with any other Credit Document, irrespective of whether or not (a) such Lender will have made any demand hereunder or (b) the principal of or the interest on the Loans or any amounts in respect of the Letters of Credit or any other amounts due hereunder will have become due and payable pursuant to Section 2 and although such obligations and liabilities, or any of them, may be contingent or unmatured. Notwithstanding the foregoing, nothing contained in this Section 10.4 shall provide any Lender with any recourse against Excluded Assets (as defined in the Pledge and Security Agreement).

10.5 Amendments and Waivers.

- (a) Required Consents. No amendment, modification, termination or waiver of any provision of the Credit Documents, or consent to any departure by any Credit Party therefrom, will in any event be effective without the written concurrence of the Required Lenders (or, solely in the case of Section 6.7 and provisions related to the Financial Covenant, the Required Revolving Lenders), except the Administrative Agent may, with the consent of the Borrower only, amend, modify or supplement this Agreement (i) to cure any ambiguity, omission, defect or inconsistency, so long as such amendment, modification or supplement does not adversely affect the rights of any Lender or Issuing Bank, provided that no such amendment will become effective until the fifth Business Day after it has been posted to the Lenders, and then only if the Required Lenders (or, solely in the case of Section 6.7 and provisions related to the Financial Covenant, the Required Revolving Lenders) have not objected in writing within such five (5) Business Day period, (ii) to enter into additional or supplemental Collateral Documents, (iii) to release Collateral or Guarantors in accordance with Section 9 of this Agreement and the Collateral Documents and (iv) the Agency Fee Letter may be amended by the parties thereto without the consent of any other Person.
- (b) <u>Affected Lenders' Consent</u>. No amendment, modification, termination, or consent will be effective if the effect thereof would:
 - (i) extend the scheduled final maturity date of any Loan of any Lender without the written consent of such Lender; provided that no amendment, modification or waiver of any

condition precedent, covenant, Default or Event of Default will constitute an extension of a final maturity date;

- (ii) waive, reduce or postpone any scheduled repayment (but not prepayment or mandatory prepayment, which will be governed by Section 10.5(a)) of any Loan held by any Lender pursuant to Section 2.12 without the written consent of such Lender;
- (iii) extend the stated expiration date of any Letter of Credit beyond the Revolving Credit Commitment Termination Date without the written consent of the applicable Issuing Bank (it being acknowledged and agreed that each Issuing Bank may agree to extend such stated expiration date in connection with an Extension under Section 10.5(g));
- (iv) reduce the rate of interest on any Loan held by any Lender (other than (A) any waiver of any increase in the interest rate applicable to any Loan pursuant to Section 2.10 and (B) any amendment to the definition of "Eurodollar Rate" and related provisions amendments pursuant to Section 2.18(b)) or any fee payable to a Lender under this Agreement without the written consent of such Lender;
- (v) extend the time for payment of any such interest, fees or reimbursement obligation in respect of any Letter of Credit without the written consent of all the Lenders directly affected thereby (it being understood that the waiver of any mandatory prepayment will not constitute an extension of any time for payment of interest or fees);
- (vi) reduce the principal amount of any Loan held by a Lender without the written consent of such Lender or reduce any reimbursement obligation in respect of any Letter of Credit without the written consent of the applicable Issuing Bank to which such reimbursement obligation is payable;
- (vii) amend, modify, terminate or waive any provision of Section 10.5(a), this Section 10.5(b) or Section 10.5(c) without the written consent of all Lenders and, as applicable, all Issuing Banks;
- (viii) amend the definition of "Required Lenders" or "Pro Rata Share" without the written consent of all Lenders or amend the definition of "Required Revolving Lenders" without the written consent of all Revolving Lenders; provided that, with the consent of the Required Lenders, additional extensions of credit pursuant hereto may be included in the determination of "Required Lenders" or "Pro Rata Share" on substantially the same basis as the Initial Term Loan Commitments, the Initial Term Loans, the Revolving Credit Commitments and the Revolving Loans are included on the Closing Date; provided further that such definitions may also be amended in furtherance of any amendment permitted by another subsection of this Section 10.5(b) with the consent of such Persons as are required by such subsection;
 - (ix) amend, modify, terminate or waive any provision of Section 10.6(j) without the written consent of all Lenders;
- (x) release, or subordinate the Collateral Agent's Liens on, all or substantially all of the Collateral or release all or substantially all of the Guarantors from the Guaranty, except as expressly provided in the this Agreement or any of the Collateral Documents, or in connection with securing additional secured obligations equally and ratably with the other Obligations in accordance with the Credit Documents, without the written consent of all Lenders;
- (xi) consent to the assignment or transfer by any Credit Party of any of its rights and obligations under any Credit Document without the written consent of all Lenders;
- (xii) extend or increase any (A) Commitments of any Lender without the written consent of such Lender or (B) Specified Letter of Credit Commitment of any Issuing Bank without the written consent of such Issuing Bank;
- (xiii) subordinate the Obligations under the Credit Documents to any other Indebtedness without the written consent of all Lenders; or
- (xiv) amend or modify the definition of "Secured Swap Provider", "Obligations", "Secured Rate Contracts", "Bank Products" and "Bank Product Provider", in each case, in a manner materially adverse to any Secured Swap Provider or Bank Product Provider (as applicable) holding outstanding Obligations under Secured Rate Contracts or Bank Products (as applicable) at such time without the written consent of such Person;

provided that (1) any change to the definition of Total Net Leverage Ratio or in the component definitions thereof shall not constitute a reduction in the rate of interest and the agreement, consent or waiver by the Required Revolving Lenders of interest (including any increase in the rate thereof pursuant to Section 2.10) or unused commitment fees as set forth in the paragraph immediately succeeding the applicable tables in the definitions of "Applicable Margin" and "Applicable Commitment Fee Rate" in Section 1.1 shall not constitute a postponement of any date scheduled for, or a reduction in the amount of, any payment of interest or any payment of fees, (2) any change to the definition of Total Net Leverage Ratio or in the component definitions thereof shall not constitute a reduction in the rate of interest and the agreement, consent or waiver by the Required Initial Term Loan Lenders of interest (including any increase in the rate thereof pursuant to Section 2.10) as set forth in the paragraph immediately succeeding the applicable table in the definition of "Applicable Margin" in Section 1.1 shall not constitute a postponement of any date scheduled for, or a reduction in the amount of, any payment of interest, (3) the Required Lenders may waive any increase in the interest rate applicable to any Loan or other Obligation pursuant to Section 2.10, (4) the Required Revolving Lenders may waive any such increase as provided in the immediately preceding clause (v) and (5) the Required Initial Term Loan Lenders may waive any such increase as provided in the immediately preceding clause (2).

- (c) Other Consents. No amendment, waiver or consent will, unless in writing and signed by the Administrative Agent, the Collateral Agent or the Issuing Banks, as the case may be, in addition to the Required Lenders, Required Revolving Lenders or all Lenders directly affected thereby, as the case may be (or by Administrative Agent with the consent of the Required Lenders, the Required Revolving Lenders or all the Lenders directly affected thereby, as the case may be), affect the rights or duties of the Administrative Agent, the Collateral Agent or the Issuing Banks, as applicable, in its capacity as such, under this Agreement or any other Credit Document. Further, no amendment, modification, termination or waiver of any provision of the Credit Documents, or consent to any departure by any Credit Party therefrom, will:
 - (i) increase or extend any Term Loan Commitment or Revolving Credit Commitment of any Lender over the amount thereof then in effect without the consent of such Lender; provided that (A) no amendment, modification or waiver of any condition precedent, covenant, Default or Event of Default will constitute an increase in or extension of any Commitment of any Lender, (B) any change to the definition of Total Net Leverage Ratio or in the component definitions thereof shall not constitute an increase or extension of any Revolving Credit Commitment and the agreement, consent or waiver by the Required Revolving Lenders of interest or unused commitment fees as set forth in the paragraph immediately succeeding the applicable table in the definitions of "Applicable Margin" and "Applicable Commitment Fee Rate" in Section 1.1 shall not constitute an increase or extension of any Revolving Credit Commitment and (C) any change to the definition of Total Net Leverage Ratio or in the agreement, consent or waiver by the Required Initial Term Loan Lenders of interest as set forth in the paragraph immediately succeeding the applicable table in the definition of "Applicable Margin" in Section 1.1 shall not constitute an increase or extension of any Initial Term Loan Commitment;
 - (ii) [reserved];
 - (iii) alter the required application of any repayments or prepayments (including payments made from proceeds of Collateral) as between Classes pursuant to Section 2.15 or Section 8.3 or modify Section 2.17 without the consent of all Lenders, Bank Product Providers and Secured Swap Providers of each class which is being allocated a lesser repayment or prepayment (including payments made from proceeds of Collateral) as a result thereof; *provided* that Required Lenders may waive, in whole or in part, any prepayment so long as the application, as between Classes, of any portion of such prepayment which is still required to be made is not altered;
 - (iv) amend, modify, terminate or waive any obligation of the Lenders relating to the purchase of participations in Letters of Credit as provided in Section 2.4(e) without the written consent of the Administrative Agent and of the Issuing Banks and the Required Revolving Lenders;
 - (v) amend, modify, terminate or waive any provision of Section 9 as the same applies to any Agent, or any other provision hereof as the same applies to the rights or obligations of any Agent, in each case without the consent of such Agent; or
 - (vi) (A) amend, waive or otherwise modify any provision of the paragraph immediately succeeding the table in the definition of "Applicable Margin" that is applicable to Revolving Loans or the table in the definition of "Applicable Commitment Fee Rate" in Section 1.1 without the consent of the Required Revolving Lenders (but no consent of other Lenders, including the Required Lenders, shall be required) or (B) amend, waive or otherwise modify any provision of the paragraph immediately succeeding the table in the definition of "Applicable"

Margin" that is applicable to Initial Term Loans in Section 1.1 without the consent of the Required Initial Term Loan Lenders (but no consent of other Lenders, including the Required Lenders, shall be required); or

(vii) amend, modify or waive any condition precedent set forth in Section 3.2 with respect to making Revolving Loans or the issuance of Letters of Credit without the consent of the Required Revolving Lenders.

Notwithstanding the foregoing, unless and until a Financial Covenant Cross Default has occurred and remains continuing, only the consent of the Required Revolving Lenders shall be necessary to, and upon the occurrence of a Financial Covenant Cross Default, the consent of the Required Lenders shall be necessary to (i) waive or consent to any Financial Covenant Event of Default or amend or modify the terms of, or waive or consent to any Default or Event of Default with respect to, Section 8.2(b) (including the related definitions as used in such Section, but not as used in other Sections of this Agreement) and no such amendment, modification, waiver or consent shall be permitted (A) without the consent of the Required Revolving Lenders (unless and until a Financial Covenant Cross Default has occurred) and (B) without the consent of the Required Lenders (upon the occurrence and during the continuance of a Financial Covenant Cross Default) and/or (ii) amend this sentence. Notwithstanding that, upon the occurrence of a Financial Covenant Cross Default, the consent of the Required Lenders shall be necessary to waive or consent to any Default or Event of Default resulting from a Financial Covenant Event of Default as set forth in the immediately preceding sentence, only the consent of the Required Revolving Lenders shall be necessary to (A) amend or modify the terms and provisions of Section 6.7 (in each case, whether or not a Financial Covenant Cross Default has occurred) and/or (B) amend this sentence.

- (d) Execution of Amendments, etc. The Administrative Agent may, but will have no obligation to, with the concurrence of any Lender, execute amendments, modifications, waivers or consents on behalf of such Lender. Any waiver or consent will be effective only in the specific instance and for the specific purpose for which it was given. No notice to or demand on any Credit Party in any case will entitle any Credit Party to any other or further notice or demand in similar or other circumstances. Any amendment, modification, termination, waiver or consent effected in accordance with this Section 10.5 will be binding upon each Lender at the time outstanding, each future Lender and, if signed by a Credit Party, on such Credit Party. Without limiting the generality of the foregoing, the making of a Loan or issuance of a Letter of Credit will not be construed as a waiver of any Default, regardless of whether any Agent, any Lender or Issuing Bank may have had notice or knowledge of such Default at the time. No notice or demand on the Borrower or any other Credit Party in any case will entitle the Borrower or any other Credit Party to any other or further notice or demand in similar or other circumstances.
- (e) Intercreditor Agreements and Subordination Agreements. Notwithstanding anything to the contrary in this Agreement, no Lender consent is required to enter into, amend or supplement any Pari Passu Lien Intercreditor Agreement, any Junior Lien Intercreditor Agreement or any Subordination Agreement, in any such case that is (i) for the purpose of adding the holders of Pari Passu Lien Indebtedness, Junior Lien Indebtedness or Subordinated Debt (or a Debt Representative with respect thereto), as applicable, permitted hereunder as parties thereto (regardless of whether also constituting Incremental Equivalent Debt, Credit Agreement Refinancing Indebtedness, Permitted Ratio Debt or other category of Indebtedness hereunder), as expressly contemplated by the terms of such Pari Passu Lien Intercreditor Agreement, such Junior Lien Intercreditor Agreement or subordination Agreement (it being understood that any such amendment or supplement may make such other changes to the applicable intercreditor or subordination agreement as determined by the Administrative Agent, are required to effectuate the foregoing; provided that such other changes are not adverse, in any material respect, to the interests of the Lenders) or (ii) expressly contemplated by any Pari Passu Lien Intercreditor Agreement, any Junior Lien Intercreditor Agreement or any Subordination Agreement.

(f) Additional Amendments Provisions.

- (i) Nothing herein will be deemed to prohibit an amendment and/or amendment and restatement of this Agreement consented to by the Required Lenders, the Borrower and the Administrative Agent (A) to add one or more additional credit facilities (including any Incremental Term Facility) to this Agreement (it being understood that no Lender will have any obligation to provide or to commit to provide all or any portion of any such additional credit facility or Incremental Term Facility) and to permit the extensions of credit from time to time outstanding thereunder and the accrued interest and fees in respect thereof to share ratably in the benefits of this Agreement and the other Credit Documents with the Term Loans and Revolving Loans and the accrued interest and fees in respect thereof and (B) to effect the amendments contemplated by the proviso in Section 10.5(b)(viii) and such other amendments to this Agreement and the other Credit Documents as may be necessary or appropriate, in the opinion of the Administrative Agent to provide for such additional credit facility.
- (ii) In addition, notwithstanding the foregoing, this Agreement may be amended with the written consent of the Administrative Agent, the Borrower and the Lenders providing

the relevant Replacement Term Loans (as defined below) to permit the refinancing or exchange of all outstanding Term Loans of any tranche ("Refinanced Term Loans") with a replacement term loan tranche hereunder ("Replacement Term Loans"); provided that (A) the aggregate principal amount of such Replacement Term Loans will not exceed the aggregate principal amount of such Refinanced Term Loans plus any interest, premium or other amount due with respect to such Refinanced Term Loans, (B) the scheduled final maturity of such Replacement Term Loans will not be sooner than the scheduled final maturity of such Refinanced Term Loans at the time of such refinancing, (C) the Weighted Average Life to Maturity of such Replacement Term Loans will not be shorter than the Weighted Average Life to Maturity of such Refinanced Term Loans at the time of such refinancing, and (D) the other terms applicable to such Indebtedness are substantially identical to, or (taken as a whole as determined by the Borrower in good faith) are no more favorable to the lenders providing such Replacement Term Loans than, those applicable to the Initial Term Loans; *provided* that this clause (D) will not apply to (1) interest rate, fees, funding discounts and other pricing terms, (2) redemption, prepayment or other premiums, (3) optional prepayment terms, and (4) covenants and other terms that are (x) applied to the Term Loans existing at the time of incurrence of such Replacement Term Loans (so that existing Lenders also receive the benefit of such provisions) and/or (y) applicable only to periods after the Latest Term Loan Maturity Date at the time of incurrence of such Indebtedness; provided further, a certificate of the Borrower delivered to the Administrative Agent at least four (4) Business Days prior to the incurrence of such Indebtedness (or such shorter period as may be agreed by the Administrative Agent), together with a reasonably detailed description of the material covenants and events of default of such Indebtedness or drafts of the documentation relating thereto, stating that the Borrower has reasonably determined in good faith that such terms and conditions satisfy the foregoing requirement shall be conclusive evidence that such terms and conditions satisfy the foregoing requirement unless the Administrative Agent notifies the Borrower within such four (4) Business Day period that it disagrees with such determination (including a reasonably detailed description of the basis upon which it disagrees).

(g) <u>Extension</u>.

- Offer") made from time to time by the Borrower to all Lenders holding Term Loans with a like maturity date or all Lenders having Revolving Credit Commitments with a like commitment termination date, in each case on a pro rata basis (based on the aggregate outstanding principal amount of such respective Term Loans or amounts of Revolving Credit Commitments) and on the same terms to each such Lender, the Borrower is hereby permitted to consummate from time to time transactions with individual Lenders that accept the terms contained in such Extension Offers to extend the maturity date and/or commitment termination of each such Lender's Term Loans and/or Revolving Credit Commitments of such class, and, subject to the terms hereof, otherwise modify the terms of such Term Loans and/or Revolving Credit Commitments pursuant to the terms of the relevant Extension Offer (including by increasing the interest rate and/or fees payable in respect of such Term Loans and/or Revolving Credit Commitments (and related outstandings) and/or modifying the amortization schedule in respect of such Lender's Term Loans (each, an "Extension;" and each group of Term Loans or Revolving Credit Commitments, as applicable, in each case as so extended, as well as the original Term Loans and the original Revolving Credit Commitments (in each case not so extended), being a separate "tranche"), so long as the following terms are satisfied:
 - (A) no Default or Event of Default will have occurred and be continuing at the time the Extension Offer is delivered to the Lenders or at the time of such Extension;
 - (B) except as to interest rates, fees and final commitment termination date (which will be determined by the Borrower and set forth in the relevant Extension Offer, subject to acceptance by the applicable Lenders), the Revolving Credit Commitment of any Lender that agrees to an Extension with respect to such Revolving Credit Commitment extended pursuant to an Extension (an "Extended Revolving Credit Commitment") and the related outstandings will be a Revolving Credit Commitment (or related outstandings, as the case may be) with the same terms (or terms not less favorable to existing Lenders holding Revolving Credit Commitments) as the original Revolving Credit Commitments (and related outstandings); provided that (1) the borrowing and payments (except for (x) payments of interest and fees at different rates on Extended Revolving Credit Commitments (and related outstandings), (y) repayments required upon the commitment termination date of the non-extending tranche of Revolving Credit Commitments and (z) repayment made in connection with a

permanent repayment and termination of commitments) of Revolving Loans with respect to Extended Revolving Credit Commitments after the applicable Extension date will be made on a *pro rata* basis with all other Revolving Credit Commitments, (2) subject to Section 10.5(c), all Letters of Credit will be participated in on a *pro rata* basis by all Lenders with Revolving Credit Commitments (including Extended Revolving Credit Commitments) in accordance with their percentage of the Revolving Credit Commitments, (3) assignments and participations of Extended Revolving Credit Commitments and related Revolving Loans will be governed by the same assignment and participation provisions applicable to the other Revolving Credit Commitments and Revolving Loans and (4) at no time will there be Revolving Credit Commitments hereunder (including Extended Revolving Credit Commitments and any existing Revolving Credit Commitments) which have more than two (2) different maturity dates;

- (C) except as to interest rates, fees, amortization, final maturity date, premium, required prepayment dates and participation in prepayments (which will, subject to the immediately succeeding clauses (D), (E) and (F), be determined by the Borrower and set forth in the relevant Extension Offer, subject to acceptance by the Extended Term Lenders), the Term Loans of any Lender that agrees to an Extension with respect to such Term Loans owed to it (an "Extended Term Lender") extended pursuant to any Extension ("Extended Term Loans") will have the same terms as the tranche of Term Loans subject to such Extension Offer (except for covenants or other provisions contained therein or other provisions contained therein applicable only to periods after the then Latest Term Loan Maturity Date);
- (D) the final maturity date of any Extended Term Loans will be no earlier than the Latest Term Loan Maturity Date of the Term Loans extended thereby;
- (E) the Weighted Average Life to Maturity of any Extended Term Loans will be no shorter than the Weighted Average Life to Maturity of the Term Loans extended thereby;
- (F) any Extended Term Loans may participate on a *pro rata* basis or a less than *pro rata* basis (but not greater than a *pro rata* basis except for prepayments with the proceeds of Credit Agreement Refinancing Indebtedness and in respect of an earlier maturing tranche) with non-extending tranches of Term Loans in any mandatory prepayments hereunder, in each case as specified in the respective Extension Offer;
- (G) there will be no more than three (3) Extended Term Loan tranches at any time during the term of this Agreement; and
- (ii) if the aggregate principal amount of Term Loans (calculated on the outstanding principal amount thereof) or Revolving Credit Commitments in respect of which a Lender will have accepted the relevant Extension Offer will exceed the maximum aggregate principal amount of Term Loans or Revolving Credit Commitments offered to be extended by the Borrower pursuant to such Extension Offer, then the Term Loans or Revolving Credit Commitments of such Lender will be extended ratably up to such maximum amount based on the respective principal or commitment amounts with respect to which such Lender have accepted such Extension Offer. With respect to all Extensions consummated by the Borrower pursuant to this Section, (A) such Extension offer is required to be in any minimum amount or any minimum increment; provided that the Borrower may at its election specify as a condition to consummating any such Extension that a minimum amount (to be determined and specified in the relevant Extension Offer in the Borrower's sole discretion and may be waived by the Borrower) of Term Loans or Revolving Credit Commitments (as applicable) of any or all applicable tranches be tendered. The Administrative Agent, the Collateral Agent, the Issuing Banks and the Lenders hereby consent to the transactions contemplated by this Section (including, for the avoidance of doubt, payment of any interest, fees or premium in respect of any Extended Term Loans and/or Extended Revolving Credit Commitments on such terms as may be set forth in the relevant Extension Offer) and hereby waive the requirements of any other transaction contemplated by this Section.
- (iii) No consent of any Lender, any Issuing Bank, the Collateral Agent or the Administrative Agent will be required to effectuate any Extension, other than (A) the consent of each Lender agreeing to such Extension with respect to one or more of its Term Loans and/or Revolving Credit Commitments (or a portion thereof) and (B) with respect to any Extension of the Revolving Credit Commitments, the consent of the Issuing Banks. All Extended Term Loans,

Extended Revolving Credit Commitments and all obligations in respect thereof will be Obligations under this Agreement and the other Credit Documents and secured by the same Liens on the Collateral that secure all other applicable Obligations. The Lenders hereby irrevocably authorize the Administrative Agent and the Collateral Agent to enter into amendments to this Agreement and the other Credit Documents with the Borrower (on behalf of all Credit Parties) as may be necessary in order to establish new tranches or sub-tranches in respect of Term Loans or Revolving Credit Commitments so extended and such technical amendments as may be necessary in the reasonable opinion of the Administrative Agent and the Borrower in connection with the establishment of such new tranches or sub-tranches, in each case on terms consistent with this Section (any such amendment, an "Extension Amendment"). In addition, if so provided in such amendment and with the consent of the Issuing Banks, participations in Letters of Credit expiring on or after the applicable commitment termination date will be re-allocated from Lenders holding non-extended Revolving Credit Commitments to Lenders holding Extended Revolving Credit Commitments in accordance with the terms of such amendment; provided, however, that such participation interests will, upon receipt thereof by the relevant Lenders holding Revolving Credit Commitments, be deemed to be participation interests in respect of such Revolving Credit Commitments and the terms of such participation interests will be adjusted accordingly. Without limiting the foregoing, in connection with any Extensions the applicable Credit Parties will (at their expense) amend (and the Collateral Agent is hereby directed by the Lenders to amend) any Mortgage that has a maturity date (or such later date as may be advised by local counsel to the Collateral Agent). The Administrative Agent will promptly notify each Lender of the effectiveness of each such Extension Amendment.

(iv) In connection with any Extension, the Borrower will provide the Administrative Agent at least five (5) Business Days (or such shorter period as may be agreed by the Administrative Agent) prior written notice thereof, and will agree to such procedures (including regarding timing, rounding and other adjustments and to ensure reasonable administrative management of the credit facilities hereunder after such Extension), if any, as may be established by, or acceptable to, the Administrative Agent, in each case acting reasonably to accomplish the purposes of this Section 10.5(g). This Section 10.5(g) will supersede any provisions of this Section 10.5 or Section 2.17 or 10.4 to the contrary

10.6 Successors and Assigns; Participations.

- (a) <u>Generally.</u> This Agreement will be binding upon the parties hereto and their respective successors and assigns and will inure to the benefit of the parties hereto and the successors and assigns of the Lenders. No Credit Party's rights or obligations hereunder nor any interest therein may be assigned or delegated by any Credit Party without the prior written consent of all of the Lenders. Nothing in this Agreement, expressed or implied, will be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby and, to the extent expressly contemplated hereby, Affiliates of each of the Administrative Agent and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.
- (b) Register. Each Credit Party, the Administrative Agent and the Lenders will deem and treat the Persons listed as the Lenders in the Register as the holders and owners of the corresponding Commitments and Loans listed therein for all purposes hereof, and no assignment or transfer of any such Commitment or Loan (whether or not evidenced by a Note) will be effective, in each case, unless and until recorded in the Register following receipt of an Assignment Agreement effecting the assignment or transfer thereof, together with the required forms and certificates regarding tax matters and any fees payable in connection with such assignment, in each case, as provided in Section 10.6(d). Each assignment will be recorded in the Register on the Business Day the Assignment Agreement is received by the Administrative Agent, if received by 12:00 noon New York City time, and on the following Business Day if received after such time, prompt notice thereof will be provided to the Borrower and a copy of such Assignment Agreement will be maintained. The date of such recordation of a transfer will be referred to herein as the "Assignment Effective Date." Any request, authority or consent of any Person who, at the time of making such request or giving such authority or consent, is listed in the Register as a Lender will be conclusive and binding on any subsequent holder, assignee or transferee of the corresponding Commitments or Loans.
- (c) <u>Right to Assign</u>. Each Lender will have the right at any time to sell, assign or transfer all or a portion of its rights and obligations under this Agreement, including all or a portion of its Commitment or Loans owing to it or other Obligations (*provided* that, *pro rata* assignments will not be required, but each such assignment will be of a uniform, and not varying, percentage of all rights and obligations under and in respect of any Loan and any related Commitment):
 - (i) to any Person meeting the criteria of clause (a) or clause (c) of the definition of "Eligible Assignee" upon the giving of notice to the Borrower and the Administrative Agent

and, for any assignment of Revolving Credit Commitments and/or Revolving Loans, consented to by each of the Issuing Banks (such consent not to be unreasonably withheld or delayed); and

(ii) to any Person meeting the criteria of clause (b) of the definition of "Eligible Assignee" and consented to by each of the Borrower (except in the case of any assignment made in connection with the primary syndication of the Commitments) and the Administrative Agent and, for any assignment of Revolving Credit Commitments and/or Revolving Loans and the Issuing Banks (each such consent not to be (A) unreasonably withheld, delayed or conditioned and (B) in the case of the Borrower, required at any time an Event of Default will have occurred and then be continuing under Section 8.1(a), (f) or (g)); provided that (1) the Borrower's refusal to accept an assignment to a Disqualified Lender will be deemed to be reasonable, (2) the Borrower's consent will be required with respect to any assignments to Disqualified Lenders and (3) the Borrower will be deemed to have consented to any such assignment (other than to an assignment to a Disqualified Lender) unless it will object thereto by written notice to the Administrative Agent within ten (10) Business Days after having received written notice thereof; provided further that each such assignment pursuant to this Section 10.6(c)(ii) will be in an aggregate amount of not less than (x) \$5,000,000 (or such lesser amount as may be agreed to by the Borrower and the Administrative Agent or as will constitute the aggregate amount of the Revolving Credit Commitments and Revolving Loans of the assigning Lender) with respect to the assignment of the Borrower and the Administrative Agent or as will constitute the aggregate amount as may be agreed to by the Borrower and the Administrative Agent or as will constitute the aggregate amount of the Term Loan of the assigning Lender) with respect to the assignment of Term Loans.

Notwithstanding the foregoing, no assignment may be made (A) to a Natural Person or (B) to a Disqualified Lender and, to the extent that any assignment of any Loan and/or related Commitment is purported to be made to a Disqualified Lender, such Disqualified Lender shall be required immediately (and in any event within five (5) Business Days) to assign all Loans and Commitments then owned by such Disqualified Lender to another Lender (other than a Defaulting Lender), Eligible Assignee or, subject to Section 10.6(j), the Borrower at a purchase price equal to the lesser of (x) the principal amount thereof and (y) the amount that such Disqualified Lender paid to acquire such Loans or Commitments, in each case, plus accrued interest, accrued fees and all other amounts (other than principal amounts) payable to it hereunder (and the Borrower shall be entitled to seek specific performance in any applicable court of law or equity to enforce this sentence).

- (d) <u>Mechanics</u>. Assignments and assumptions of Loans and Commitments will only be effected by manual execution and delivery to the Administrative Agent of an Assignment Agreement and will be effective as of the applicable Assignment Effective Date. In connection with all assignments there will be delivered to the Administrative Agent such forms, certificates or other evidence, if any, as the assignee under such Assignment Agreement may be required to deliver pursuant to Section 2.20(f), together with payment to the Administrative Agent of a registration and processing fee of \$3,500; *provided* that the Administrative Agent may, in its sole discretion, elect to waive such processing and recordation fee in the case of any assignment.
- (e) Representations and Warranties of Assignee. Each Lender, upon execution and delivery hereof or upon succeeding to an interest in the Commitments and Loans, as the case may be, represents and warrants as of the Closing Date or as of the Assignment Effective Date that (i) (A) it is an Eligible Assignee and (B) it is not a Disqualified Lender, it being acknowledged by the Credit Parties, the Lenders and the other Secured Parties that the Administrative Agent will be entitled to rely on such representations and warranties set forth in this clause (i) without any diligence in respect to the accuracy of such representations and warranties and any breach of such representations and warranties by such Lender will not give rise to any liability on the part of the Administrative Agent; and (ii) it has experience and expertise in the making of or investing in commitments or loans such as the applicable Commitments or Loans, as the case may be.
- (f) Effect of Assignment. Subject to the terms and conditions of this Section 10.6, as of the Assignment Effective Date (i) the assignee thereunder will have the rights and obligations of a "Lender" hereunder to the extent of its interest in the Loans and Commitments as reflected in the Register and will thereafter be a party hereto and a "Lender" for all purposes hereof; (ii) the assigning Lender thereunder will, to the extent that rights and obligations hereunder have been assigned to the assignee, relinquish its rights (other than any rights which survive the termination hereof under Section 10.8) and be released from its obligations hereunder (and, in the case of an assignment covering all or the remaining portion of an assigning Lender's rights and obligations hereunder, such Lender will cease to be a party hereto on the Assignment Effective Date; provided that anything contained in any of the Credit Documents to the contrary notwithstanding, (A) the Issuing Banks will continue to have all rights and obligations thereof with respect to such Letters of Credit until the cancellation or expiration of such Letters of Credit and the reimbursement of any amounts drawn thereunder and (B) such assigning Lender will continue to be entitled to the benefit of all indemnities hereunder as specified herein with respect to matters arising out of the prior involvement of such assigning Lender as a Lender hereunder); (iii) the Commitments will be modified to reflect the Commitment of such assigning Lender will, upon

the effectiveness of such assignment or as promptly thereafter as practicable, surrender its applicable Notes to the Administrative Agent for cancellation, and thereupon the Borrower will issue and deliver new Notes, if so requested by the assignee and/or assigning Lender, to such assignee and/or to such assigning Lender, with appropriate insertions, to reflect the new Revolving Credit Commitments and/or outstanding Loans of the assignee and/or the assigning Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with clauses (b) through (f) will be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with clause (g).

(g) Participations. Each Lender will have the right at any time to sell one or more participations to any Person (other than to a Disqualified Lender) in all or any part of its Commitments, Loans or in any other Obligation; provided that (i) the Administrative Agent may provide a list of Disqualified Lenders to any Lender upon the request of such Lender pursuant to Section 2.7(c) and (ii) with respect to any participation by a Lender to a Disqualified Lender or, to the extent the Borrower's consent is required under this Section 10.6, to any other Person, such participation will not be rendered void as a result but the Borrower shall be entitled to pursue any remedy available to them (whether at law or in equity, but excluding specific performance to unwind such participation) against the Lender and such Disqualified Lender, but in no case shall the Borrower or any other Person be entitled to pursue any remedy against the Administrative Agent. The holder of any such participation, other than an Affiliate of the Lender granting such participation, will not be entitled to require such Lender to take or omit to take any action hereunder except with respect to any amendment, modification or waiver that would (A) extend the scheduled maturity of any Loan, Note or Letter of Credit (unless such Letter of Credit is not extended beyond the Revolving Credit Commitment Termination Date) in which such participant is participating, or reduce the rate or extend the time of payment of interest or fees thereon (except in connection with a waiver of applicability of any post-default increase in interest rates) or reduce the principal amount thereof, or increase the amount of the participant's participation over the amount thereof then in effect (it being understood that a waiver of any Default or Event of Default or of a mandatory reduction in the Commitment will not constitute a change in the terms of such participation, and that an increase in any Commitment or Loan will be permitted without the consent of any participant if the participant's participation is not increased as a result thereof), (B) consent to the assignment or transfer by any Credit Party of any of its rights and obligations under this Agreement or (C) release all or substantially all of the Collateral under the Collateral Documents (except as expressly provided in the Credit Documents) supporting the Loans hereunder or release all or substantially all of the guarantees in which such participant is participating. The Borrower agrees that each participant will be entitled to the benefits of Sections 2.18(c), 2.19 and 2.20 to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (c) of this Section; *provided* that (1) the participant agrees to be subject to the provisions of Sections 2.21 and 2.23 as if it were an assignee under Section 10.6(c), (2) a participant will not be entitled to receive any greater payment under Sections 2.19 or 2.20 than the applicable Lender would have been entitled to receive with respect to the participation sold to such participant, unless the sale of the participation to such participant is made with the Borrower's prior written consent to the participant and (3) a participant that would be a Non-U.S. Lender if it were a Lender will not be entitled to the benefits of Section 2.20 unless the Borrower is notified of the participation sold to such participant and such participant agrees, for the benefit of the Borrower, to comply with Section 2.20 as though it were a Lender (it being understood that the documentation required under Section 2.20(f) or Section 2.20(g) will be delivered to the participant). Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Sections 2.21 and 2.23 with respect to any participant. To the extent permitted by law, each participant also will be entitled to the benefits of Section 10.4 as though it were a Lender; *provided* that such participant agrees to be subject to Section 2.17 as though it were a Lender. Each Lender that sells a participation, acting solely for this purpose as a non-fiduciary agent of the Borrower, will maintain a register on which it records the name and address of each participant and the principal amounts (and stated interest) of each participant's interest in the Loans and Commitments (each, a "Participant Register"). The entries in the Participant Register will be conclusive absent manifest error, and such Lender, the Borrower and the Administrative Agent will treat each Person whose name is recorded in the Participant Register pursuant to the terms hereof as the owner of such Loans and Commitments for all purposes of this Agreement, notwithstanding any notice to the contrary. No Lender will have any obligation to disclose all or any portion of the Participant Register to any Person (including the identity of any participant or any information relating to a participant's interest in any commitments, loans, letters of credit or its other obligations under any Credit Document) except to the extent that such disclosure is necessary to establish that such commitment, loan, or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations.

(h) Certain Other Assignments and Participations. In addition to any other assignment or participation permitted pursuant to this Section 10.6, any Lender may assign and/or pledge all or any portion of its Loans, the other Obligations owed by or to such Lender, and its Notes, if any, to secure obligations of such Lender, including, without limitation, to any Federal Reserve Bank as collateral security pursuant to Regulation A of the Board of Governors and any operating circular issued by such Federal Reserve Bank or any central bank; provided that no Lender, as between the Borrower and such Lender, will be relieved of any of its obligations hereunder as a result of any such assignment and pledge; provided further, in no event will the applicable Federal Reserve Bank, central bank, pledgee or trustee be considered to be a "Lender" or be entitled to require the assigning Lender to take or omit to take any action hereunder. Without limiting the foregoing, in the case of any Lender that is a fund that invests in bank loans or similar extensions of credit, such Lender may, without the consent of the Borrower, the Issuing Bank, the Administrative Agent or any other Person, collaterally assign or

pledge all or any portion of its rights under this Agreement, including the Loans and Notes or any other instrument evidencing its rights as a Lender under this Agreement, to any holder of, trustee for, or any other representative of holders of, obligations owed or securities issued, by such fund, as security for such obligations or securities. For the avoidance of doubt, the Administrative Agent (in its capacity as the Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(i) [Reserved].

- (j) Any Lender may, so long as no Event of Default has occurred and is continuing or would result therefrom, assign all or a portion of its rights and obligations with respect to the Term Loans and the Term Loan Commitments under this Agreement to the Borrower or any Subsidiary through
- (x) Dutch auctions open to all Lenders in accordance with procedures of the type described in Section 2.25 or (y) open market purchase on a non-pro rata basis, in each case subject to the following limitations; provided that:
 - (i) (A) if the assignee is the Borrower or any of its Subsidiaries, upon such assignment, transfer or contribution, the applicable assignee will automatically be deemed to have contributed or transferred the principal amount of such Term Loans, <u>plus</u> all accrued and unpaid interest thereon, to the Borrower; or (B) if the assignee is the Borrower (including through contribution or transfers set forth in clause (A)), (1) the principal amount of such Term Loans, along with all accrued and unpaid interest thereon, so contributed, assigned or transferred to the Borrower will be deemed automatically cancelled and extinguished on the date of such contribution, assignment or transfer, (2) the aggregate outstanding principal amount of Term Loans of the remaining Lenders will reflect such cancellation and extinguishing of the Term Loans then held by the Borrower and (3) the Borrower will promptly provide notice to the Administrative Agent of such contribution, assignment or transfer of such Term Loans, and the Administrative Agent, upon receipt of such notice, will reflect the cancellation of the applicable Term Loans in the Register; and
 - (ii) purchases of Term Loans pursuant to this subsection (j) may not be funded with the proceeds of Revolving Loans.
- Notwithstanding anything to the contrary contained herein, any Lender (a "Granting Lender") may grant to a special purpose funding vehicle (an "SPC"), identified as such in writing from time to time by the Granting Lender to the Administrative Agent and the Borrower, the option to provide to the Borrower all or any part of any Loan that such Granting Lender would otherwise be obligated to make to the Borrower pursuant to this Agreement; provided that (i) nothing herein will constitute a commitment by any SPC to make any Loan and (ii) if an SPC elects not to exercise such option or otherwise fails to provide all or any part of such Loan, the Granting Lender will be obligated to make such Loan pursuant to the terms hereof; *provided further* that nothing herein will make the SPC a "Lender" for the purposes of this Agreement, obligate the Borrower or any other Credit Party or the Administrative Agent to deal with such SPC directly, obligate the Borrower or any other Credit Party in any manner to any greater extent than it was obligated to the Granting Lender, or increase costs or expenses of the Borrower. The Credit Parties and the Administrative Agent will be entitled to deal solely with, and obtain good discharge from, the Granting Lender and will not be required to investigate or otherwise seek the consent or approval of any SPC, including for the approval of any amendment, waiver or other modification of any provision of any Credit Document. The making of a Loan by an SPC hereunder will utilize the Commitment of the Granting Lender to the same extent, and as if, such Loan were made by such Granting Lender. Each party hereto hereby agrees that no SPC will be liable for any indemnity or similar payment obligation under this Agreement (all liability for which will remain with the Granting Lender). In furtherance of the foregoing, each party hereto hereby agrees (which agreement will survive the termination of this Agreement) that, prior to the date that is one year and one day after the payment in full of all outstanding commercial paper or other senior indebtedness of any SPC, it will not institute against, or join any other Person in instituting against, such SPC any bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings under the laws of the United States or any state thereof. In addition, notwithstanding anything to the contrary contained in this Section 10.06(k), any SPC may (i) with notice to, but without the prior written consent of, the Borrower and the Administrative Agent and without paying any processing fee therefor, assign all or a portion of its interests in any Loans to the Granting Lender or to any financial institutions (consented to by the Borrower and the Administrative Agent) providing liquidity and/or credit support to or for the account of such SPC to support the funding or maintenance of Loans and (ii) disclose on a confidential basis any non-public information relating to its Loans to any rating agency, commercial paper dealer or provider of any surety, guarantee or credit or liquidity enhancement to such SPC.
- (l) <u>Electronic Signatures, Etc.</u> The words "execution," "signed," "signature," and words of like import in any Assignment Agreement will be deemed to include electronic signatures or the keeping of records in electronic form, each of which will be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce

Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

- 10.7 Independence of Covenants; Interpretation. All covenants hereunder will be given independent effect so that if a particular action or condition is not permitted by any of such covenants, the fact that it would be permitted by an exception to, or would otherwise be within the limitations of, another covenant will not avoid the occurrence of a Default or an Event of Default if such action is taken or condition exists. Any dispute regarding the occurrence or continuance of a Default or Event of Default will be resolved by the Borrower and the Required Lenders (or Administrative Agent), and no Person other than the Required Lenders (or the Administrative Agent) will assert that a Default or Event of Default will have occurred and be continuing; provided that, solely in the case of Section 6.7 and provisions relating to any Financial Covenant Event of Default, references to "Required Lenders" in the immediately preceding text of this sentence will be replaced with "Required Revolving Lenders". Any Default or Event of Default that has been cured (including by means of delivery or performance of an obligation after the date by which such delivery or performance was due) or waived will be deemed to no longer be continuing.
- 10.8 Survival of Representations, Warranties and Agreements. All representations, warranties and agreements made herein will survive the execution and delivery hereof and the making of any Credit Extension. Notwithstanding anything herein or implied by law to the contrary, the agreements of each Credit Party set forth in Sections 2.18, 2.19, 2.20, 10.2, 10.3, 10.14, 10.15 and 10.16 and the agreements of the Lenders set forth in Sections 2.17, 9.5, 9.6 and 9.8 will survive the termination of all Commitments, the cancellation or expiration of the Letters of Credit and the reimbursement of any amounts drawn thereunder, and the termination hereof, and the payment in full of all other Obligations.
- 10.9 No Waiver; Remedies Cumulative. No failure or delay on the part of any Agent or any Lender in the exercise of any power, right or privilege hereunder or under any other Credit Document will impair such power, right or privilege or be construed to be a waiver of any default or acquiescence therein, nor will any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other power, right or privilege. The rights, powers and remedies given to each Agent and each Lender hereby are cumulative and will be in addition to and independent of all rights, powers and remedies existing by virtue of any statute or rule of law or in any of the other Credit Documents or any of the Secured Rate Contracts or any of the Bank Product Agreements. Any forbearance or failure to exercise, and any delay in exercising, any right, power or remedy hereunder will not impair any such right, power or remedy or be construed to be a waiver thereof, nor will it preclude the further exercise of any such right, power or remedy.
- 10.10 Marshalling; Payments Set Aside. No Agent or any Lender will be under any obligation to marshal any assets in favor of any Credit Party or any other Person or against or in payment of any or all of the Obligations. To the extent that any Credit Party makes a payment or payments to the Administrative Agent or the Lenders (or to the Administrative Agent, on behalf of the Lenders), or the Administrative Agent or the Lenders enforce any security interests or exercise their rights of setoff, and such payment or payments or the proceeds of such enforcement or setoff or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside and/or required to be repaid to a trustee, receiver or any other party under any bankruptcy law, any other state or federal law, common law, any equitable cause or any intercreditor arrangement contemplated hereunder, then, to the extent of such recovery, the obligation or part thereof originally intended to be satisfied, and all Liens, rights and remedies therefor or related thereto, will be revived and continued in full force and effect as if such payment or payments had not been made or such enforcement or setoff had not occurred.
- 10.11 Severability. In case any provision in or obligation hereunder or any Note will be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, will not in any way be affected or impaired thereby.

10.12 Obligations Several; Independent Nature of the Lenders' Rights.

- (a) The obligations of the Lenders hereunder are several and no Lender will be responsible for the obligations or Commitment of any other Lender hereunder. Nothing contained herein or in any other Credit Document, and no action taken by the Lenders pursuant hereto or thereto, will be deemed to constitute the Lenders as a partnership, an association, a joint venture or any other kind of entity. The amounts payable at any time hereunder to each Lender will be a separate and independent debt, and each Lender will be entitled to protect and enforce its rights arising out hereof and it will not be necessary for any other Lender to be joined as an additional party in any proceeding for such purpose.
- (b) Each Lender acknowledges and agrees that it will act collectively through the Administrative Agent and, without limiting the delegation of authority to the Administrative Agent set forth herein, the Required Lenders will direct the Administrative Agent with respect to the exercise of rights and remedies hereunder (including with respect to alleging the existence or occurrence of, and exercising rights and remedies as a result of, any Default or Event of Default in each case that could be waived with the consent of the

Required Lenders), and such rights and remedies will not be exercised other than through the Administrative Agent; *provided* that, solely in the case of Section 6.7 and provisions relating to any Financial Covenant Event of Default, references to "Required Lenders" in the immediately preceding text of this sentence will be replaced with "Required Revolving Lenders".

- 10.13 Headings. Section headings herein are included herein for convenience of reference only and will not constitute a part hereof for any other purpose or be given any substantive effect.
- 10.14 Applicable Law. This Agreement and the rights and obligations of the parties hereunder will be governed by, and will be construed and enforced in accordance with, the laws of the State of New York.
- 10.15 Consent to Jurisdiction. All judicial proceedings brought against any Credit Party arising out of or relating hereto or any other Credit Document, or any of the Obligations, will be brought in any state or Federal court of competent jurisdiction in the State, County and City of New York. By executing and delivering this Agreement, each Credit Party, for itself and in connection with its properties, irrevocably (a) accepts generally and unconditionally the exclusive jurisdiction and venue of such courts; (b) waives any defense of forum non conveniens; (c) agrees that service of all process in any such proceeding in any such court may be made by registered or certified mail, return receipt requested, to the applicable Credit Party at its address provided in accordance with Section 10.1; (d) agrees that service as provided in clause (c) above is sufficient to confer personal jurisdiction over the applicable Credit Party in any such proceeding in any such court, and otherwise constitutes effective and binding service in every respect; and (e) agrees that Agents and Lenders retain the right to serve process in any other manner permitted by law or to bring proceedings against any Credit Party in the courts of any other jurisdiction.
- 10.16 WAIVER OF JURY TRIAL. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THE CREDIT DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED THEREBY AND AGREES THAT ANY SUCH ACTION OR PROCEEDING WILL BE TRIED BEFORE A COURT AND NOT BEFORE A JURY. EACH OF THE PARTIES HERETO ACKNOWLEDGES THAT THIS WAIVER IS A MATERIAL INDUCEMENT TO ENTER INTO A BUSINESS RELATIONSHIP, THAT EACH HAS RELIED ON THE WAIVER IN ENTERING INTO THIS AGREEMENT AND THE OTHER CREDIT DOCUMENTS, AND THAT EACH WILL CONTINUE TO RELY ON THIS WAIVER IN THEIR RELATED FUTURE DEALINGS. EACH OF THE PARTIES HERETO WARRANTS AND REPRESENTS THAT EACH HAS HAD THE OPPORTUNITY OF REVIEWING THIS JURY WAIVER WITH LEGAL COUNSEL, AND THAT EACH KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS.

10.17 Confidentiality; Tombstones; Etc.

Confidentiality. Each Agent, each Issuing Bank and each Lender will (i) not furnish any Nonpublic Information identified as such by the Borrower to any other Person and (ii) treat all Nonpublic Information with the same degree of care as it treats its own confidential information, it being understood and agreed by the Borrower that, in any event, an Agent, an Issuing Bank or a Lender may make (A) disclosures of such information to creditors of any such Lender, Affiliates of such Agent, such Issuing Bank or such Lender, to their and such Affiliates' shareholders, officers, directors, employees, legal counsel, independent auditors and other experts, advisors or agents who need to know such information in connection with the transactions contemplated hereby, are informed of the confidential nature of such information and are instructed to keep such information confidential (and to other Persons authorized by an Agent, Issuing Bank or Lender to organize, present or disseminate such information in connection with disclosures otherwise made in accordance with this Section 10.17) other than any Disqualified Lender, (B) disclosure to any rating agency when required by it, (C) disclosures required or requested by any Governmental Authority or self-regulatory authority or representative thereof or by the NAIC or pursuant to legal or judicial process, including in connection with assignments or pledges made pursuant to Section 10.6(h); provided that, unless specifically prohibited by applicable law, court order or any Governmental Authority or representative thereof, each Agent, each Issuing Bank and each Lender will notify the Borrower of any request by any Governmental Authority or representative thereof (other than any such request in connection with any examination of the financial condition or other routine examination of such Agent, such Issuing Bank or such Lender by such Governmental Authority or representative thereof or self-regulatory authority or any such request pursuant to the Right to Financial Privacy Act of 1978) for disclosure of any such Nonpublic Information prior to disclosure of such information, (D) disclosures in connection with the enforcement of its rights under any Credit Document, (E) disclosures to any other party to this Agreement, (F) disclosures to an actual or prospective assignee, participant or investor in an SPC (provided that such assignee, participant or investor is not a Disqualified Lender and is advised of and agrees to be bound by either the provisions of this Section 10.17 or other provisions at least as restrictive as this Section 10.17), (G) disclosures with the consent of the Borrower, (H) disclosures to the extent such Nonpublic Information (x) becomes publicly available other than as a result of a breach of this Section 10.17 or (y) becomes available to such Agent, such Issuing Bank or such Lender on a non-confidential basis from a source other than the Borrower or any Subsidiary or any of their respective Affiliates that is not known by such Agent, such Issuing Bank or such Lender to be

subject to confidentiality obligations to the Borrower or any Subsidiary or their respective Affiliate and (I) to a Person that is a trustee, investment advisor, collateral manager, servicer, noteholder or secured party in a Securitization (as hereinafter defined) in connection with the administration, servicing and reporting on the assets serving as collateral for such Securitization. For the purposes of this Section, "Securitization" shall mean a public or private offering by a Lender or any of its Affiliates or their respective successors and assigns, of securities which represent an interest in, or which are collateralized, in whole or in party, by the Loans. In addition, each Agent, each Issuing Bank and each Lender may disclose the existence of this Agreement and the information about this Agreement to market data collectors, similar services providers to the lending industry, and service providers to the Agents, the Issuing Banks and the Lenders in connection with the administration and management of this Agreement and the other Credit Documents. For the avoidance of doubt, in no event will any Agent, any Issuing Bank or any Lender disclose Nonpublic Information to any Disqualified Lender unless such disclosure is otherwise consented to by the Borrower.

- (b) <u>Tombstones</u>. Each Credit Party consents to the publication by each Joint Lead Arranger of advertisements in financial and other newspapers and periodicals or on a home page or similar place for dissemination of information on the Internet or worldwide web as it may choose, and the circulation of similar promotional materials, on and following the Closing Date in the form of a "tombstone" or otherwise, containing information customarily included in such advertisements and materials, including (i) the names of the Borrower and its Affiliates (or any of them), (ii) the Joint Lead Arrangers and their respective Affiliates' titles and roles in connection with the Transactions and (iii) the amount, type and closing date of the Commitments and the Loans.
- 10.18 Usury Savings Clause. Notwithstanding any other provision herein, the aggregate interest rate charged with respect to any of the Obligations, including all charges or fees in connection therewith deemed in the nature of interest under applicable law will not exceed the Highest Lawful Rate. If the rate of interest (determined without regard to the preceding sentence) under this Agreement at any time exceeds the Highest Lawful Rate, the outstanding amount of the Loans made hereunder will bear interest at the Highest Lawful Rate until the total amount of interest due hereunder equals the amount of interest which would have been due hereunder if the stated rates of interest set forth in this Agreement had at all times been in effect. In addition, if when the Loans made hereunder are repaid in full the total interest due hereunder (taking into account the increase provided for above) is less than the total amount of interest which would have been due hereunder if the stated rates of interest set forth in this Agreement had at all times been in effect, then to the extent permitted by law, the Borrower will pay to the Administrative Agent an amount equal to the difference between the amount of interest paid and the amount of interest which would have been paid if the Highest Lawful Rate had at all times been in effect. Notwithstanding the foregoing, it is the intention of the Lenders and the Borrower to conform strictly to any applicable usury laws. Accordingly, if any Lender contracts for, charges, or receives any consideration which constitutes interest in excess of the Highest Lawful Rate, then any such excess will be cancelled automatically and, if previously paid, will at such Lender's option be applied to the outstanding amount of the Loans made hereunder or be refunded to the Borrower.
- 10.19 Counterparts. This Agreement may be executed in any number of counterparts, each of which when so executed and delivered will be deemed an original, but all such counterparts together will constitute but one and the same instrument. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart. Delivery of an executed signature page of this Agreement by facsimile transmission or Electronic Transmission will be as effective as delivery of a manually executed counterpart hereof.
- 10.20 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement will be construed as if drafted jointly by the parties hereto and no presumption or burden of proof will arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.
- 10.21 Effectiveness; Entire Agreement. This Agreement will become effective upon the execution of a counterpart hereof by each of the parties hereto and receipt by the Borrower and the Administrative Agent of written or telephonic notification of such execution and authorization of delivery thereof.
- 10.22 No Fiduciary Duty. Each Agent, each Lender and their Affiliates (collectively, solely for purposes of this paragraph, the "Lenders"), may have economic interests that conflict with those of the Credit Parties. Each Credit Party acknowledges and agrees:
- (a) nothing in the Credit Documents or otherwise will be deemed to create an advisory, fiduciary or agency relationship or fiduciary or other implied duty between the Lenders and each Credit Party, its stockholders or its affiliates;
- (b) the transactions contemplated by the Credit Documents are arm's-length commercial transactions between the Lenders, on the one hand, and each Credit Party, on the other;

- (c) in connection therewith and with the process leading to such transaction each of the Lenders is acting solely as a principal and not the agent or fiduciary of any Credit Party, its management, stockholders, creditors or any other Person;
- (d) no Lender has assumed an advisory or fiduciary responsibility in favor of any Credit Party with respect to the transactions contemplated hereby or the process leading thereto (irrespective of whether any Lender or any of its affiliates has advised or is currently advising any Credit Party on other matters) or any other obligation to any Credit Party except the obligations expressly set forth in the Credit Documents;
 - (e) each Credit Party has consulted its own legal and financial advisors to the extent it deemed appropriate;
- (f) each Credit Party is responsible for making its own independent judgment with respect to such transactions and the process leading thereto; and
- (g) no Credit Party will claim that any Lender has rendered advisory services of any nature or respect, or owes a fiduciary or similar duty to any Credit Party, in connection with such transaction or the process leading thereto.
- 10.23 No Third Parties Benefit. This Agreement is made and entered into for the sole protection and legal benefit of the Borrower, the Lenders, the Issuing Banks party hereto, the Agents and each other Secured Party, and their permitted successors and assigns, and no other Person will be a direct or indirect legal beneficiary of, or have any direct or indirect cause of action or claim in connection with, this Agreement or any of the other Credit Documents. No Agent or any Lender will have any obligation to any Person not a party to this Agreement or the other Credit Documents.
- 10.24 PATRIOT Act. Each Lender and the Administrative Agent (for itself and not on behalf of any Lender) hereby notifies the Credit Parties that pursuant to the requirements of the PATRIOT Act, it is required to obtain, verify and record information that identifies the Credit Parties, which information includes the name and address of each Credit Party and other information that will allow such Lender or the Administrative Agent, as applicable, to identify the Credit Parties in accordance with the PATRIOT Act.
- 10.25 Acknowledgement and Consent to Bail-In of EEA Financial Institutions. Notwithstanding anything to the contrary in any Credit Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Lender that is an Affected Financial Institution arising under any Credit Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:
- (a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder which may be payable to it by any Lender that is an Affected Financial Institution; and
- (b) the effects of any Bail-In Action on any such liability, including, if applicable: (i) a reduction in full or in part or cancellation of any such liability; (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Credit Document; or (iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the applicable Resolution Authority.

10.26 Judgment Currency.

- (a) The Credit Parties' obligations hereunder and under the other Credit Documents to make payments in Dollars shall not be discharged or satisfied by any tender or recovery pursuant to any judgment expressed in or converted into any currency other than Dollars, except to the extent that such tender or recovery results in the effective receipt by the Administrative Agent, the respective Lender or the applicable Issuing Bank of the full amount of Dollars expressed to be payable to the Administrative Agent or such Lender or such Issuing Bank under this Agreement or the other Credit Documents. If, for the purpose of obtaining or enforcing judgment against any Credit Party in any court or in any jurisdiction, it becomes necessary to convert into or from any currency other than Dollars (such other currency being hereinafter referred to as the "Judgment Currency") an amount due in Dollars, the conversion shall be made at the Dollar Equivalent determined as of the Calculation Date immediately preceding the day on which the judgment is given.
- (b) If there is a change in the rate of exchange prevailing between the Calculation Date described in clause (a) above and the date of actual payment of the amount due, the Credit Parties shall pay, or cause to be paid, such additional amounts, if any (but in any event not a lesser amount) as may be necessary to ensure that the amount paid in the Judgment Currency, when converted at the rate of exchange prevailing on the

date of payment, will produce the amount of Dollars which could have been purchased with the amount of Judgment Currency stipulated in the judgment or judicial award at the rate of exchange prevailing on the Calculation Date.

(c) For purposes of determining the Dollar Equivalent or any other rate of exchange for this Section 10.26, such amounts shall include any premium and costs payable in connection with the purchase of Dollars.

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EXHIBIT B

Amended and Restated Exhibits A-1 and A-2

[Attached]

FORM OF FUNDING NOTICE

DEUTSCHE BANK AG NEW YORK BRANCH

as Administrative Agent for the Lenders referred to below 1 Columbus Circle,

New York, NY 10019

Attention: Agency Transactions (<u>Agency.Transactions@db.com</u>)

Re: Artivion, Inc. (f/k/a CryoLife, Inc.)

Reference is made to the Credit and Guaranty Agreement, dated as of December 1, 2017 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"; capitalized terms used herein without definition are used as defined in the Credit Agreement), among Artivion, Inc. (f/k/a CryoLife, Inc.), a Delaware corporation (the "Borrower"), certain Subsidiaries of the Borrower from time to time party thereto, as Guarantor Subsidiaries, the Lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as Administrative Agent and as Collateral Agent.

The Borrower hereby gives you irrevocable notice, pursuant to [Section 2.1(a)]¹ [Section 2.2(b)]² of the Credit Agreement, of its request of a Credit Extension (the "**Proposed Borrowing**") under the Credit Agreement and sets forth the following information:

	The da	ate of the Proposed Borrowing is,3 (the "Credit Date").		
		[The aggregate principal amount of requested Revolving Loans is Loans and \$ consists of SOFR Loans having an inths][twelve months] ⁴ [shorter periods] ⁵ .]		of which \$od of [one month][two mo	consists onths][three
and \$_ months]	II [six mo	[The aggregate principal amount of requested Term Loans is \$ consists of SOFR Loans having an inonths][twelve months] ⁶ [shorter periods] ⁷ .]	_, of which \$nitial Interest Period	consists of Base do d of [one month][two mo	Rate Loans onths][three

- 1 For borrowings of the Initial Term Loans on the Closing Date only.
- 2 For borrowings of the Revolving Loans.
- 3 Notices pursuant to Section 2.1(a) of the Credit Agreement must be delivered no later than 11:00 a.m. (New York City time) one Business Day prior to the date of the proposed Borrowing for Base Rate Loans and three Business Days prior to the date of the proposed Borrowing for SOFR Loans. Notices pursuant to Section 2.2(b) of the Credit Agreement must be delivered no later than 10:00 a.m. (New York City time) on the proposed Credit Date for Base Rate Loans and 11:00 a.m. (New York City time) three Business Days prior to the proposed Credit Date for SOFR Loans.
- 4 Available only with the consent of each applicable Lender.
- 5 Available only with the consent of the Administrative Agent.
- 6 Available only with the consent of each applicable Lender.
- 7 Available only with the consent of the Administrative Agent.

Exhibit A-1-1

AMERICAS 118495953

IV The undersigned hereby certifies that the following statements are true on and as of the Credit Date:
A [As may be limited in respect of certain conditions precedent set forth in Section 2.24(f) of the Credit Agreement were respect to Incremental Facilities or Section 1.5 of the Credit Agreement with respect to any Limited Condition Acquisition, to representations and warranties contained in the Credit Agreement and in the other Credit Documents are true and correct in all mater respects (except for those representations and warranties that are conditioned by materiality, which are true and correct in all respects) and as of the Credit Date to the same extent as though made on and as of the Credit Date, except to the extent such representations a warranties specifically relate to an earlier date, in which case such representations and warranties were true and correct in all mater respects (except for those representations and warranties that are conditioned by materiality, which were true and correct in all respects) and as of such earlier date;] ⁸
B [no Default or Event of Default has occurred and is continuing or will have occurred and be continuing immediate following the Proposed Borrowing]; and
C [after making the Credit Extension(s) requested on the Credit Date, the Total Utilization of Revolving Credit Commitment does not exceed the Revolving Credit Limit in effect]. 10
[Remainder of Page Intentionally Left Blank]
Net associated for homeonic and the Classics Date
Not required for borrowings on the Closing Date. Not required for borrowings on the Closing Date. For borrowings of the Revolving Loans.
Exhibit A-1-2

The requested funds are to be disbursed to the Borrower's account with [__] (Routing No. [__]; Account No. [__]).

III

AMERICAS 118495953

ARTIVION, INC.

By:			
Name:			
Title:			

[Signature Page to Form of Funding Notice]

FORM OF CONVERSION/CONTINUATION NOTICE

DEUTSCHE BANK AG NEW YORK BRANCH as Administrative Agent for the Lenders referred to below 1 Columbus Circle, New York, NY 10019

Attention: Agency Transactions (<u>Agency Transactions@db.com</u>)

	Re: Artivion, Inc. (f/k/a CryoLife, Inc.)					
Reference is made to the Credit and Guaranty Agreement, dated as of December 1, 2017 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"; capitalized terms used herein without definition are used as defined in the Credit Agreement), among Artivion, Inc. (f/k/a CryoLife, Inc.), a Delaware corporation (the "Borrower"), certain Subsidiaries of the Borrower from time to time party thereto, as Guarantor Subsidiaries, the Lenders from time to time party thereto, and Deutsche Bank AG New York Branch, as Administrative Agent and as Collateral Agent.						
7	The Borrower hereby gives you irrevocable notice ¹ , pursuant to Section 2.9(b) of the Credit Agreement, of its request for the following:					
F C S	I a continuation, on,, as SOFR Loans having an Interest Period of [one month][two months][three months][six months][twelve months] ² [shorter periods] ³ of [Term Loans][Revolving Loans] in an aggregate outstanding principal amount of \$having an Interest Period ending on the proposed date for such continuation;					
	II a conversion, on, to SOFR Loans having an Interest Period of [one months][two months][three months][six months][twelve months] ⁴ [shorter periods] ⁵ of [Term Loans][Revolving Loans] in an aggregate outstanding principal amount of; and					
[III a conversion, on, to Base Rate Loans, of [Term Loans] Revolving Loans] in an aggregate outstanding principal amount of \$					
l hereof.	n connection herewith, the undersigned hereby certifies that no Default or Event of Default has occurred and is continuing on the date					
	[Remainder of Page Intentionally Left Blank]					

Exhibit A-2-1

¹ Must be delivered no later than 11:00 a.m. (New York City time) one Business Day prior to the proposed conversion date for a conversion to a Base Rate Loan and three Business Days prior to the proposed conversion/continuation date for a conversion to, or a continuation of, a SOFR Loan).

2 Available only with the consent of each applicable Lender.

³ Available only with the consent of the Administrative Agent.

⁴ Available only with the consent of each applicable Lender.

⁵ Available only with the consent of the Administrative Agent.

ARTIVION, INC.

By:____ Name: Title:

CERTAIN INFORMATION HAS BEEN OMITTED FROM THE VERSION OF THIS EXHIBIT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION BECAUSE IT (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

AMENDMENT NO. 2 TO EXCLUSIVE DISTRIBUTION AGREEMENT

This Amendment No. 2 is dated December 30, 2022 (the "Amendment"), and is between JOTEC GmbH, a wholly-owned subsidiary of Artivion, Inc., located at Lotzenäcker 23, 72379 Hechingen, Germany ("Distributor") and Endospan, Ltd., located at Maskit St. 4 Herzlia Business Park, Herzlia, Israel 46733 (the "Company"). Each of Company and Distributor are sometimes hereinafter referred to individually as a "Party" and collectively as "Parties."

RECITALS

- a) The Parties desire to amend the Exclusive Distribution Agreement entered thereby dated September 11, 2019, as amended on August 31, 2020 (collectively, the "Distribution Agreement").
- b) Capitalized terms used in this Amendment and not otherwise defined herein are used as defined in the Distribution Agreement.

AGREEMENT

Accordingly, the Parties agree as follows:

- 1. Amendment to Exhibit A. Exhibit A of the Distribution Agreement is hereby amended in its entirety by replacing it with Exhibit A-1 attached hereto.
- 2. Continuation of the Distribution Agreement. This Amendment shall be deemed an integral part of the Distribution Agreement. Except for the amendments specifically and explicitly made in this Amendment, the Distribution Agreement remains unchanged and in full effect.
- 3. General.
- **3.1 Authority**. The Parties represent and warrant that they have the full power and authority to enter into this Amendment and that they can do so without violating or conflicting with any laws or other agreements to which they are a Party.
- **3.2 Entire Agreement**. This Amendment, including its Exhibits and any attachments, constitutes the final, exclusive agreement between the parties on the matters contained in this Amendment. All earlier and contemporaneous negotiations and agreements between the parties on the matters contained in this Amendment are expressly merged into and superseded by this Amendment. For clarification purposes, neither this Section 6.2 nor any other provision of this Amendment amends Section 11.2 of the Distribution Agreement.
- **3.3 Severability**. If any provision of this Amendment is determined to be illegal or unenforceable, the remaining provisions of this Amendment remain in full force, if the essential provisions of this Amendment for each Party remain legal and enforceable.
- **3.4 Choice of Law**. The laws of Delaware, U.S.A. (without regard to its conflict of law principles) govern all matters arising from or relating to this Amendment. The state or federal courts of Delaware, U.S.A. will have exclusive jurisdiction over any dispute arising from or relating to this Amendment. Each Party knowingly, voluntarily, and intentionally waives its right to a trial by jury in any legal proceeding arising from or relating to this Amendment. This waiver applies to any legal proceeding, whether sounding in contract, tort, or otherwise. Each Party acknowledges that it has received the advice of competent counsel.

Each Party is signing this Amendment on the date stated below that Party's signature.

Distributor:	Company:
JOTEC GmbH	Endospan, Ltd.
By:	By:
Name: Karl Will	Name: Kevin Mayberry
Title: Vice President of Sales & Marketing EMEA	Title: Chief Executive Officer
Date:	
	Date:

EXHIBIT A-1 PRODUCTS AND PRICES

[Omitted]

SUBSIDIARIES OF ARTIVION, INC.

Subsidiary	Jurisdiction
Artivion Colombia SAS	Colombia
Artivion Cyprus Limited	Cyprus
Artivion EMEA GmbH	Germany
Artivion Hellas Single Member Ltd.	Greece
Artivion Hong Kong, Limited	Hong Kong
Artivion LATAM Holdings Spain, SLU	Spain
Artivion Malaysia, Sdn. Bhd.	Malaysia
Artivion New Zealand	New Zealand
Ascyrus Medical GmbH	Germany
Ascyrus Medical LLC	Florida
AuraZyme Pharmaceuticals, Inc.	Florida
CryoLife Asia Pacific, PTE. Ltd	Singapore
CryoLife Beijing Medical Device Ltd.	China
CryoLife Canada, Inc.	Canada
CryoLife Europa, Ltd.	England and Wales
CryoLife France, SAS.	France
CryoLife Germany HoldCo GmbH	Germany
CryoLife Germany TopCo GmbH	Germany
CryoLife International, Inc.	Florida
CryoLife Korea Co., Ltd.	Korea
CryoLife Medical (Australia) Co. Pty, Ltd.	Australia
CryoLife Medical (Thailand) Co., Ltd.	Thailand
CryoLife Vietnam Co., Ltd.	Vietnam
Jolly Buyer Acquisition GmbH	Switzerland
JOTEC Cardiovascular S.L.	Spain
JOTEC do Brasil Ltda.	Brazil
JOTEC GmbH	Germany
JOTEC Polska Sp. z.o.o	Poland
JOTEC s.r.l.	Italy
JOTEC Sales GmbH	Switzerland
JOTEC UK Ltd.	England
On-X Life Technologies Holdings, Inc.	Delaware
On-X Life Technologies, Inc.	Delaware
Valve Special Purpose Co., LLC	Delaware

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- Registration Statement No. 333-265161 Form S-8 pertaining to the Artivion, Inc. Amended and Restated Employee Stock Plan, Registration Statement No. 333-258716 on Form S-3 filed on August 11, 2021, Registration Statement No. 333-244319 on Form S-8 pertaining to the CryoLife, Inc. 2020 Equity and Cash Incentive Plan,
- 3.

- Registration Statement No. 333-244319 on Form S-8 pertaining to the CryoLife, Inc. 2020 Equity and Cash Incentive Plan,
 Registration Statement No. 333-229881 on Form S-8 pertaining to the CryoLife, Inc. Equity and Cash Incentive Plan,
 Registration Statement No. 333-227473 on Form S-3 filed on September 21, 2018,
 Registration Statement No. 333-197545 on Form S-8 pertaining to the CryoLife, Inc. Second Amended and Restated 2009 Stock Incentive Plan,
 Registration Statement No. 333-182296 on Form S-8 pertaining to the Amended and Restated CryoLife, Inc. 2009 Stock Incentive Plan,
 Registration Statement No. 333-182297 on Form S-4 filed on June 22, 2012,
 Registration Statement No. 333-159608 on Form S-8 pertaining to the CryoLife, Inc. Employee Stock Purchase Plan,
 Registration Statement No. 333-159608 on Form S-8 pertaining to the CryoLife, Inc. 2009 Employee Stock Incentive Plan,
 Registration Statement No. 333-119137 on Form S-8 pertaining to the CryoLife, Inc. 2004 Employee Stock Incentive Plan, and
 Registration Statement No. 333-104637 on Form S-8 pertaining to the CryoLife, Inc. 2002 Stock Incentive Plan;

of our reports dated February 23 2023, with respect to the consolidated financial statements of Artivion, Inc. and subsidiaries and the effectiveness of internal control over financial reporting of Artivion, Inc. and subsidiaries included in this Annual Report (Form 10-K) of Artivion, Inc. and subsidiaries for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Atlanta, Georgia February 23, 2023

- I, James Patrick Mackin, certify that:
- 1. I have reviewed this annual report on Form 10-K of the registrant, Artivion, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- 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 23, 2023

/s/ J. PATRICK MACKIN

Chairman, President, and Chief Executive Officer

- I, David Ashley Lee, certify that:
- 1. I have reviewed this annual report on Form 10-K of the registrant, Artivion, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- 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 23, 2023

/s/ D. ASHLEY LEE

Executive Vice President, and Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Artivion, Inc. (the "Company") on Form 10-K for the year ending December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of James Patrick Mackin, the Chairman, President, and Chief Executive Officer of the Company, and David Ashley Lee, the Executive Vice President, and Chief Financial Officer of the Company, hereby certifies, pursuant to and for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ J. PATRICK MACKIN
J. PATRICK MACKIN
Chairman, President, and
Chief Executive Officer
February 23, 2023

/s/ D. ASHLEY LEE

D. ASHLEY LEE Executive Vice President, and Chief Financial Officer February 23, 2023