UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the year ended December 31, 2021

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission File Number 001-36362

BioLife Solutions, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**94-3076866**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification No.)*

3303 Monte Villa Parkway, Suite 310, Bothell, Washington, 98021
(Address of registrant's principal executive offices, Zip Code)

(425) 402-1400
(Telephone number, including area code)

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

Title of each class	Trading symbol ($)	Name of exchange on which registered
Common Stock, par value $0.001 per share	BLFS	NASDAQ Capital Market

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (S232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such said files). Yes ☑ No ☐

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

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☑ Emerging Growth Company ☐

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

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

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

As of the registrant's most recently completed second fiscal quarter, the aggregate market value of common equity (based on closing price on June 30, 2021 of $44.51 per share) held by non-affiliates was approximately $1,433,451,805.

As of March 16, 2022, 42,094,963 shares of the registrant’s common stock were outstanding.

Table of Contents

		Page No.
	PART I	
ITEM 1.	BUSINESS	4
ITEM 1A.	RISK FACTORS	12
ITEM 1B.	UNRESOLVED STAFF COMMENTS	22
ITEM 2.	PROPERTIES	23
ITEM 3.	LEGAL PROCEEDINGS	23
ITEM 4.	MINE SAFETY DISCLOSURES	23
	PART II	
ITEM 5.	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	23
ITEM 6.	SELECTED CONSOLIDATED FINANCIAL DATA	24
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	24
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK	37
ITEM 8.	CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	38
	INDEX TO FINANCIAL STATEMENTS	38
	REPORTS OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRMS	39
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	80
ITEM 9A.	CONTROLS AND PROCEDURES	81
ITEM 9B.	OTHER INFORMATION	84
ITEM 9C.	DISCLOSURE REGARDING FOREIGN JURISDICTION THAT PREVENTS INSPECTIONS	84
	PART III	
ITEM 10.	DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE	82
ITEM 11.	EXECUTIVE COMPENSATION	87
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	95
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE	97
ITEM 14.	PRINCIPAL ACCOUNTING FEES AND SERVICES	97
	PART IV	
ITEM 15.	EXHIBITS AND FINANCIAL STATEMENT SCHEDULES	85
ITEM 16.	FORM 10-K SUMMARY	86
	SIGNATURES	87

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Form 10-K" or "Annual Report") contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The forward-looking statements in this Form 10-K do not constitute guarantees of future performance and actual results could differ materially from those contained in the forward-looking statements. These statements are based on current expectations of future events. Such statements include, but are not limited to, statements about our products, including our newly acquired products, customers, regulatory approvals, the potential utility of and market for our products and services, our ability to implement our business strategy and anticipated business and operations, in particular following our acquisitions in 2021, 2020, and 2019, future financial and operational performance, our anticipated future growth strategy, including the acquisition of other synergistic cell and gene therapy manufacturing tools and services or technologies or other companies or technologies, capital requirements, intellectual property, suppliers, joint venture partners, future financial and operating results, the impact of the COVID-19 pandemic, plans, objectives, expectations and intentions, revenues, costs and expenses, interest rates, outcome of contingencies, business strategies, regulatory filings and requirements, the estimated potential size of markets, capital requirements, the terms of any capital financing agreements and other statements that are not historical facts. You can find many of these statements by looking for words like "believes", "expects", "anticipates", "estimates", "may", "should", "will", "could", "plan", "intend", or similar expressions in this Form 10-K. We intend that such forward-looking statements be subject to the safe harbors created thereby.

These forward-looking statements are based on the current beliefs and expectations of our management and are subject to significant risks and uncertainties. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results may differ materially from current expectations and projections. Factors that might cause such a difference include those discussed under "Risk Factors", as well as those discussed elsewhere in the Form 10-K.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this Form 10-K or, in the case of documents referred to or incorporated by reference, the date of those documents.

All subsequent written or oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date of this Form 10-K or to reflect the occurrence of unanticipated events, except as may be required under applicable U.S. securities law. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

References throughout this Form 10-K to "BioLife Solutions, Inc.", "BioLife", "we", "us", "our", or the "Company" refer to BioLife Solutions, Inc. and its subsidiaries, taken as a whole, unless the context otherwise indicates.

PART I

ITEM 1. BUSINESS

The following discussion of our business contains forward-looking statements that involve risks and uncertainties (see the section entitled "Forward-Looking Statements" herein). Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those factors set forth under "Risk Factors" and elsewhere in this Form 10-K.

Overview

We develop, manufacture, and market bioproduction tools and services to the cell and gene therapy ("CGT") industry and broader biopharma market, which are designed to improve quality and de-risk biologic manufacturing, storage, and distribution. Our products are used in basic and applied research and commercial manufacturing of biologic-based therapies. Customers use our products to maintain the health and function of biologic material during sourcing, manufacturing, storage, and distribution.

We currently operate as one bioproduction tools and services business which supports several steps in the biologic material manufacturing and delivery process. We have a diversified portfolio of tools and services that focus on biopreservation, cell processing, frozen biologic storage products and services, cold-chain transportation, and thawing of biologic materials. We have in-house expertise in cryobiology and continue to capitalize on opportunities to maximize the value of our product platform for our extensive customer base through both organic growth innovations and acquisitions.

COVID-19 Considerations

In March 2020, the World Health Organization declared the COVID-19 outbreak to be a pandemic. In the second quarter of 2021, we believe our quarterly revenues were affected by COVID-19. Sales of portable freezers were significantly higher in the second quarter than the third and fourth quarters. The weight of these units and their compatibility with prevailing global electrical outlets attracted governments, scholarly institutions, and others to choose them for the distribution of drugs and drug materials in the pandemic. As the pandemic continues, customers who have secured enough freezers to achieve their objectives are tapering purchases with the intent to maintain their existing fleet. In the third and fourth quarters of 2021, our freezer and thaw systems product line experienced supply chain disruptions related to sheet metal and electronic components that incorporate semiconductor chips that led to increased supplier pricing and delays in production. We believe that the supply chain risks that were present in these quarters have been significantly mitigated through the diversification of sheet metal suppliers and strategic agreements with electronic component suppliers. However, we cannot provide any assurance that a continued or prolonged global pandemic will not have additional negative impacts on our manufacturing and shipping processes or our product costs. The extent to which the COVID-19 pandemic affects our future financial results and operations will depend on future developments which are highly uncertain and cannot be predicted, including the recurrence, severity and/or duration of the ongoing pandemic, and current or future domestic and international actions to contain and treat COVID-19.

We are following public and private sector policies and initiatives to reduce the transmission of COVID-19, such as the imposition of travel restrictions and the promotion of social distancing and work-from-home arrangements. We are taking a variety of measures to ensure the availability and functioning of our critical infrastructure, to promote the safety and security of our employees and to support the communities in which we operate. These measures include increasing our raw materials, manufacturing safety stock inventory for our biopreservation media and expanding availability of our biological and pharmaceutical storage, requiring remote working arrangements for employees who are not integral to physically making and shipping our products or who do not need specialized equipment to perform their work, restricting on-site visits by non-employees and implementing social distancing protocols, and investing in personal protective equipment. Beginning April 2, 2020, BioLife became actively engaged in managing the company COVID-19 response and protocols in accordance with federal, state and local regulations. BioLife has mandated mask wearing for all team members on-site throughout the pandemic per the guidelines and regulations in place. COVID-19 response is actively managed through daily reporting, contact tracing and quarantine guidelines as published by the CDC and state health departments in order to maintain safe working conditions. As a part of our COVID-19 response, on-site visitors have been limited to essential visitors only in order to reduce risk of transmission. Additionally, throughout the pandemic, BioLife has encouraged positions not essential to being on-site to work remotely in order to further reduce transmission rates and potential contact.

For further discussion of the risks relating to COVID-19, see "Our financial condition and results of operations may be adversely affected by the COVID-19 pandemic" in Item 1A. "Risk Factors", below.

Our products

Our bioproduction tools and services are comprised of three revenue lines that contain seven main offerings:

- Cell processing
  - Biopreservation media
  - Human platelet lysate media (“hPL”), cryogenic vials, and automated cell-processing fill machines
- Freezers and thaw systems
  - Ultra-low temperature freezers
  - Cryogenic freezers and accessories
  - Automated thawing devices
- Storage and cold chain services
  - Biological and pharmaceutical material storage
  - Cloud connected “smart” shipping containers

Cell processing

Biopreservation media

Our proprietary biopreservation media products, HypoThermosol® FRS and CryoStor®, are formulated to mitigate preservation-induced, delayed-onset cell damage and death, which result when cells and tissues are subjected to reduced temperatures. Our technology can provide our CGT customers with significant shelf life extension of biologic source material and final cell products, and can also greatly improve post-preservation cell and tissue viability and function. Our biopreservation media is serum-free, protein-free, fully defined, and manufactured under current Good Manufacturing Practices (cGMP). We strive to source wherever possible, the highest available grade, multi-compendium raw materials. We estimate our media products have been incorporated in more than 530 customer clinical applications, including numerous chimeric antigen receptor (CAR) T cell and other cell types.

Stability (i.e. shelf-life) and functional recovery are crucial aspects of academic research and clinical practice in the biopreservation of biologic-based source material, intermediate derivatives, and isolated/derived/expanded cellular products and therapies. Limited stability is especially critical in the CGT field, where harvested cells and tissues will lose viability over time, if not maintained appropriately at normothermic body temperature (37ºC) or stored in a hypothermic state in an effective preservation medium. Chilling (hypothermia) is used to reduce metabolism and delay degradation of harvested cells and tissues. However, subjecting biologic material to hypothermic environments induces damaging molecular stress and structural changes. Although cooling successfully reduces metabolism (i.e., lowers demand for energy), various levels of cellular damage and death occur when using suboptimal methods. Traditional biopreservation media range from simple “balanced salt” (electrolyte) formulations to complex mixtures of electrolytes, energy substrates such as sugars, osmotic buffering agents and antibiotics. The limited stability, which results from the use of these traditional biopreservation media formulations, is a significant shortcoming that our optimized proprietary products address with great success.

Our scientific research activities over the last 20+ years enabled a detailed understanding of the molecular basis for the hypothermic and cryogenic (low-temperature induced) damage/destruction of cells through apoptosis and necrosis. This research led directly to the development of our HypoThermosol® FRS and CryoStor® technologies. Our proprietary biopreservation media products are specifically formulated to:

- Minimize cell and tissue swelling
- Reduce free radical levels upon formation
- Maintain appropriate low temperature ionic balances
- Provide regenerative, high-energy substrates to stimulate recovery upon warming
- Avoid the creation of an acidic state (acidosis)
- Inhibit the onset of apoptosis and necrosis

A key feature of our biopreservation media products is their “fully-defined” profile. All of our cGMP products are serum-free, protein-free and are formulated and filled using aseptic processing. We strive to use USP/Multicompendial grade or the highest quality available synthetic components. All of these features benefit prospective customers by facilitating the qualification process required to incorporate our products into their regulatory filings.

The results of independent testing demonstrate that our biopreservation media products significantly extend shelf-life and improve cell and tissue post-thaw viability and function. Our products have demonstrated improved biopreservation outcomes, including greatly extended shelf-life and post-thaw viability, across a broad array of cell and tissue types.

Competing biopreservation media products are often formulated with simple isotonic media cocktails, animal serum, potentially a single sugar or human protein. A key differentiator of our proprietary HypoThermosol FRS formulation is the engineered optimization of the key ionic component concentrations for low temperature environments, as opposed to normothermic body temperature around 37°C, as found in culture media or saline-based isotonic formulas. Competing cryopreservation freeze media is often comprised of a single permeating cryoprotectant such as dimethyl sulfoxide ("DMSO"). Our CryoStor formulations incorporate multiple permeating and non-permeating cryoprotectant agents which allow for multiple mechanisms of protection and reduces the dependence on a single cryoprotectant. We believe that our products offer significant advantages over in-house formulations, or commercial "generic" preservation media, including, time savings, improved quality of components, more rigorous quality control release testing, cost effectiveness, and improved preservation efficacy.

We estimate that annual revenue from each customer commercial application in which our products are used could range from $500,000 to $2.0 million, if such application is approved and our customer commences large scale commercial manufacturing of the biologic-based therapy.

Human platelet lysate media, cryogenic vials and automated cell-processing fill machines

In September 2021, we acquired Sexton Biotechnologies, Inc. ("Sexton"), a producer of bioproduction tools. Sexton's bioproduction tools portfolio includes human platelet lysates for cell expansion reducing risk and improving downstream performance over fetal bovine serum, human serum, and other chemically defined media, CellSeal® closed system vials that are purpose-built rigid containers used in CGT that can be filled manually or with high throughput systems, and automated cell processing machines that bring multiple processes traditionally performed by manual techniques under a higher level of control to protect therapies from loss or contamination.

Freezers and thaw systems

Ultra-low temperature freezers

In May 2021, we acquired Global Cooling, Inc. ("Global Cooling"), a manufacturer of class defining ultra-low temperature freezers. Global Cooling carries a portfolio of freezers that range in size from portable units to stationary upright freezers to accommodate a wide variety of use cases. Users can configure these freezers to achieve temperatures between -20°C and -86°C. The portfolio was designed to be environmentally friendly and energy efficient, using as little as 2.8 kWh/day at temperatures of -80°C. The freezers do not use compressor-based or cascade refrigeration systems. Instead, they use patented free-piston Stirling engine technology that uses fewer moving parts.

Cryogenic freezers and accessories

In November 2019, we acquired Custom Biogenic Systems, Inc. ("CBS") a global leader in the design and manufacture of state-of-the-art liquid nitrogen laboratory freezers, cryogenic equipment and accessories. CBS's Isothermal LN2 freezers are constructed with a patented system which stores liquid nitrogen in a jacketed space in the walls of the freezer. This dry storage method eliminates liquid nitrogen contact with stored specimens, reduces the risk of cross-contamination and provides increased user safety in a laboratory setting. To accommodate customer requirements, we offer customizable features including wide bodied and extended height. CBS's high capacity controlled rate freezers ("HCFR") are designed for large volume storage with customizable freezing programs and the ability to monitor conditions in real time.

To accompany the offerings of cryogenic freezer equipment, we supply equipment for storing critically important biological materials. This storage equipment includes upright freezer racks, chest freezer racks, liquid nitrogen freezer racks, canisters/cassettes and frames as well as laboratory boxes and dividers. Due to our onsite design and manufacturing capability, racks and canisters can be customized to address customers' varying requirements.

In order to provide customers with a proactive approach to safety and monitoring of equipment containing liquefied gas, CBS offers Versalert™, a patented wireless remote asset monitoring system that can monitor and record temperatures. Versalert has an intelligent mesh network system that enables customers to view current equipment conditions and receive alarm notification on smartphones, tablets or personal computers and maintain permanent electronic records for regulatory compliance and legal verification.

Automated thawing devices

In April 2019, we acquired Astero Bio Corporation ("Astero"), a provider of automated thawing devices. The ThawSTAR® line includes automated vial and cryobag thawing products that control the heat and timing of the thawing process of biologic material. Our customizable, automated, water-free thawing products use algorithmic programmed, heating plates to consistently bring biologic material from a frozen state to a liquid state in a controlled and consistent manner. This helps reduce damage during the temperature transition. The ThawSTAR products can reduce risks of contamination versus using a traditional water bath.

Storage and cold chain services

Biological and pharmaceutical storage

In October 2020, we acquired SciSafe Holdings, Inc. (“SciSafe”), a premier provider of biological and pharmaceutical storage. In addition to providing storage services, SciSafe provides cold chain logistics that ensures materials are kept at target temperatures from the moment that the materials leave the customer’s premises to their ultimate return. State-of-the-art monitoring systems employed by SciSafe allow for customers to monitor the storage temperatures of their materials throughout the entire logistics chain.

We operate six storage facilities in the USA and one facility in the Netherlands.

Cloud connected “smart” shipping containers

In August 2019, we acquired the remaining shares of SAVSU Technologies, Inc. (“SAVSU”) we did not previously own. SAVSU is a leading developer and supplier of next generation cold chain management tools for cell and gene therapies. The evo.is cloud app allows biologic products to be traced and tracked in real time. Our evo platform consists of rentable cloud-connected shippers and include technologies that enable tracking software to provide real-time information on geolocation, payload temperature, ambient temperature, tilt of shipper, humidity, altitude, and real-time alerts when a shipper has been opened. Our internally developed evo.is software allows customers to customize alert notifications both in data measurements and user requirements. The evo Dry Vapor Shipper (“DVS”) is specifically marketed to cell and gene therapies. The evo DVS has improved form factor and ergonomics over the traditional dewar, including extended thermal performance, reduced liquid nitrogen recharge time, improved payload extractors and ability to maintain temperature for longer periods on its side.

We utilize couriers who already have established logistic channels and distribution centers. Our strategy greatly reduces the cash need to build out specialized facilities around the world. Our partnerships with several white glove couriers allow us to scale our sales and marketing effort by utilizing their salesforce. Our courier partnerships market our evo platform to their existing cell and gene therapy customers as a cost effective and innovative solution. We also market directly to our existing and prospective customers who can utilize the evo platform through our courier partnerships.

Our market opportunity

The CGT market has been rapidly expanding, treating diseases once thought incurable. According to the Alliance for Regenerative Medicine (“ARM”), “2022 State of the Industry Report” there were over 2,200 ongoing clinical trials utilizing regenerative medicine at the end of Q3 2021, including over 1,100 industry-sponsored clinical trials. Six new products received approvals in 2021. ARM also reported there were over $23.1 billion in total global financings in the regenerative market raised in 2021. The FDA predicts ten to twenty cell and gene therapies per year will be approved by 2025.

These technologies change the way physicians treat patients. The manufacturing, distribution and the delivery process is significantly different from many other types of medicines and therapies. We believe we are well positioned to address many of the manufacturing difficulties in the process of producing cell and gene therapies.

The bioproduction process

Our products currently fulfill several steps in the bioproduction process for cell and gene therapies. See the diagram below from an illustration of this process and our product roles. We now offer products that integrate into the critical steps of preservation, thawing, fixed storage, and transportable storage under controlled conditions.

Complementary products portfolio

Expanding Participation in Customers' Workflow

Our strategy

We are focused on the development, production, and commercialization of differentiated, best-in-class products and services that facilitate the manufacturing, delivery and storage of cell and gene therapies and biologic materials. Our products are designed to increase our customers' product yield and we are committed to supporting our customers with strong customer service and applications expertise.

We leverage our numerous relationships with the leading cell and gene therapy companies that use our expanded product portfolio of bioproduction tools and services to cross-sell our parts of the portfolio. Over the last several years, we have built a strong reputation as a trusted supplier of critical tools used in cell and gene therapy manufacturing and the broader biopharma market. We believe that our relationships and reputation could enable us to drive incremental revenue growth through the sale of additional products to a captive customer base. Our products are designed to increase our customers' product yield and functionality, and we are committed to supporting our customers with strong customer service and our expertise associated with the clinical applications of our products.

Business Operations

Research and development

Our research and development activity is focused on evaluating new potential disruptive technologies which may be applicable throughout the cell and gene therapy manufacturing workflow. We routinely assess and analyze the strengths and weaknesses of competitive products and are typically engaged in business development discussions on an ongoing basis. We strive to continue to introduce differentiated and high-quality products that address specific difficulties in manufacturing, delivery and storage of biologic material.

Sales and marketing

We market and sell our products through direct sales and third-party distribution. We have significantly expanded our global commercial organization from 11 team members in 2019 to 43 team members as of December 31, 2021.

We have experienced field-based sales employees who market our growing product portfolio on a direct basis. Over time, we have expanded and anticipate continuing to expand our sales team. Our technical applications engineers and customer care support teams have extensive experience with the products and services that we offer.

Our products are also marketed and distributed by STEMCELL Technologies, MilliporeSigma, VWR, part of Avantor, Thermo Fisher and several other regional distributors under non-exclusive agreements. In 2021, 2020, and 2019, sales to third party distributors accounted for 46%, 45%, and 46% of our revenue, respectively.

In the years ended December 31, 2021, 2020, and 2019, we derived approximately 17%, 13%, and 15% of our revenue from one customer, one customer, and one customer, respectively.

The following table represents the Company's total revenue by geographic area (based on the location of the customer):

	Year Ended December 31,		
Revenue by customers' geographic locations	**2021**	**2020**	**2019**
United States	78%	73%	69%
Canada	7%	13%	16%
Germany	4%	4%	3%
Europe, Middle East, Africa (excluding Germany)	10%	8%	11%
Other	1%	2%	1%
Total revenue	100%	100%	100%

Manufacturing

Cell processing – We maintain and operate two independent cGMP clean room production suites for manufacturing sterile biopreservation media products in Bothell, Washington. Our quality management system ("QMS") in Bothell is certified to the ISO 13485:2016 standard. Our QMS takes guidance from applicable sections of 21 CFR Part 820 - Quality System Regulation for Good Manufacturing Practice of medical devices, 21 CFR Parts 210 and 211 - cGMP for Finished Pharmaceuticals, FDA Guidance - Sterile Drug Products, Volume 4, EU Guidelines Annex 1 - Manufacture of Sterile Medicinal Products, ISO 13408 - Aseptic Processing of Healthcare Products, and ISO 14644 - Clean Rooms and Associated Controlled Environments.

We also maintain and operate one cGMP clean room production suite for manufacturing hPL media in Indianapolis, Indiana. Our quality management system ("QMS") in Indianapolis is certified to the ISO 9001:2015 standard. Our QMS takes guidance from applicable sections of 21 CFR Part 820 - Quality System Regulation for Good Manufacturing Practice of medical devices, 21 CFR Parts 210 and 211 - cGMP for Finished Pharmaceuticals, Volume 4, EU Guidelines Annex 2 - Manufacture of Biological active substances and Medicinal Products for Human Use and ISO 14644 – Clean Rooms and Associated Controlled Environments.

We seek to manage single-source supplier risk by regularly assessing the quality and capacity of our suppliers, implementing supply and quality agreements where appropriate and actively managing lead times and inventory levels of sourced components. Pursuant to our supply agreements, we are required to notify customers of any changes to our raw materials. For certain components in which we do not have a secondary supplier, we estimate that it would take up to six months to find and qualify a second source. Order quantities and lead times for externally sourced components are based on our forecasts, which are derived from historical demand and anticipated future demand. Lead times for components may vary depending on the size of the order, specific supplier requirements and current market demand for the materials and parts. Due to COVID-19, we have seen increased lead times for certain raw materials, particularly personal protective equipment used in our clean rooms and certain form factors of bottles and vials used in our finished products. To date, we have not experienced significant difficulties in obtaining raw materials for the manufacture of our biopreservation media products.

Freezers and thaw systems – Ultra-low temperature ("ULT") freezers are produced in our facility in Athens, Ohio and by a contract manufacturing organization ("CMO") based in Ohio. We believe this CMO has the skills, experience and capacity needed to meet our quality standards and demand expectations for the product line. We estimate that it would take up to six months to find and qualify an alternative CMO. To date, we have not experienced significant difficulties in obtaining our ULT freezer products from our CMO. In the year ended December 31, 2021, we experienced difficulties in obtaining sheet metal and electrical components that incorporate semiconductor chips for the manufacture of our ULT freezer products. These difficulties led to increased supplier pricing for these materials and reduced production levels of ULT freezers in the third and fourth quarters of 2021. We believe the supply chain challenges related to sheet metal that we experienced in 2021 have been substantially mitigated through the diversification of suppliers. The availability of components that incorporate semiconductor chips, however, continues to be a challenge in comparison to pre-pandemic availability levels. Our strategic partnerships with key suppliers have secured sufficient supply of these electrical components for our operations for the foreseeable future.

The majority of our isothermal LN2 freezers and related accessories are manufactured in our facility in Bruce Township, Michigan. We are reliant on certain critical suppliers for some components. Due to COVID-19, we have seen increased lead times for certain raw materials and components from our suppliers as well as increased costs on certain raw materials. To date, we have not experienced significant difficulties in obtaining raw materials for the manufacture of our LN2 freezers freezer and related accessories.

Our ThawSTAR automated, water-free thawing products are produced by a CMO based in the United States. We believe this CMO has the skills, experience and capacity needed to meet our quality standards and demand expectations for the product line. Due to COVID-19, we have seen increased lead times from our CMO due to increased lead times from our CMO's suppliers. We estimate that it would take up to six months to find and qualify an alternative CMO. To date, we have not experienced significant difficulties in obtaining our automated thaw products from our CMO.

Storage and cold chain services – Production of our evo cold chain management hardware products is performed by external CMOs and by personnel in our Albuquerque, New Mexico facility. Our QMS is certified to the ISO 9001:2015 standard. Due to COVID-19, we have seen increased lead times for certain raw materials and components from our suppliers. To date, we have not experienced significant difficulties in obtaining raw materials for the manufacture of our evo cold chain products.

We practice continuous improvement based on routine internal audits as well as external feedback and audits performed by our partners and customers. In addition, we maintain a business continuity management system that focuses on key areas such as contingency planning, security stocks and off-site storage of raw materials and finished goods to ensure continuous supply of our products.

SciSafe operates five cGMP compliant storage facilities and one state-of-the-art facility in the United States and one facility in the Netherlands. One facility in the United States is certified to the ISO 20387:2018 standard and one facility in the United States is certified to the ISO 9001:2015 standard. We rely on outside suppliers for the build out of our cold-storage chambers and stand-alone freezers. Due to COVID-19, we have experienced increased lead times in acquiring external stand-alone freezers, which we use to store customers' biologic materials.

Product regulatory status

Our products are not subject to any specific United States Food and Drug Administration ("FDA") or other international marketing regulations for drugs, devices, or biologics. We are not required to sponsor formal prospective, controlled clinical trials in order to establish safety and efficacy. However, to support our current and prospective clinical customers, we manufacture and release our products in compliance with cGMP and other relevant quality standards.

To assist customers with their regulatory applications, we maintain Type II Master Files at the FDA for CryoStor, HypoThermosol FRS, BloodStor 27, Stemulate, nLiven PR, T-Liven PR, CellSeal Closed System Cryogenic Vials, and our Cell Thawing Media products, which provide the FDA with information regarding our manufacturing facility and process, our quality system, stability and safety, and any additional testing that has been performed. Customers engaged in clinical and commercial applications may notify the FDA of their intention to use our products in their product development and manufacturing process by requesting a cross-reference to our master files.

A group of isothermal, standard, and carousel LN2 freezers in our freezers and thaw systems product line is currently regulated as Class 2 medical devices in the EU.

Intellectual property

The following table lists our granted and pending patents. We have also obtained certain trademarks and tradenames for our products to distinguish our genuine products from our competitors' products and we maintain certain details about our processes, products, and strategies as trade secrets. While we believe that the protection of patents and trademarks is important to our business, we also rely on a combination of trade secrets, nondisclosure and confidentiality agreements, scientific expertise and continuing technological innovation to maintain our competitive position. Despite these precautions, it may be possible for unauthorized third parties to copy certain aspects of our products and/or to obtain and use information that we regard as proprietary (see "Item 1A. Risk Factors" of this Annual Report for additional details). The laws of some foreign countries in which we may sell our products do not protect our proprietary rights to the same extent as do the laws of the United States.

	Issued Patents	Patents Applied For	Registered Trademarks
Cell processing	52	5	38
Freezers and thaw systems	90	48	27
Storage and cold chain services	11	8	7
Total	**153**	**61**	**72**

Competition

Our bioproduction products and services compete on the basis of value proposition, performance, quality, cost effectiveness, and application suitability with numerous established technologies. Additional products using new technologies that may be competitive with our products may also be introduced. Many of the companies selling or developing competitive products have greater financial and human resources, R&D, manufacturing and marketing experience than we do. They may undertake their own development of products that are substantially similar to or compete with our products and they may succeed in developing products that are more effective or less costly than any that we may develop. These competitors may also prove to be more successful in their production, marketing and commercialization activities. We cannot be certain that the research, development and commercialization efforts of our competitors will not render any of our existing or potential products obsolete.

Human capital

We view our employees and our culture as key to our success. As of December 31, 2021, we had 432 full time employees and 5 part-time employees. Our employees are not covered by any collective bargaining agreement. We consider relations with our employees to be good.

Corporate history

We were incorporated in Delaware in 1987 under the name Trans Time Medical Products, Inc. In 2002, the Company, then known as Cryomedical Sciences, Inc. was engaged in manufacturing and marketing cryosurgical products. The entity was merged with our wholly-owned subsidiary, BioLife Solutions, Inc., which was engaged as a developer and marketer of biopreservation media products for cells and tissues. Following the merger, we changed our name to BioLife Solutions, Inc.

Principal offices; available information

Our principal executive offices are located at 3303 Monte Villa Parkway, Suite 310, Bothell, Washington 98021 and the telephone number is (425) 402-1400. We maintain a website at www.biolifesolutions.com. The information contained on or accessible through our website is not part of this Annual Report on Form 10-K and is not incorporated in any manner into this Annual Report. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"), are available free of charge on our website as soon as reasonably practicable after we electronically file such reports with, or furnish those reports to, the Securities and Exchange Commission (the "SEC"). The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at http://www.sec.gov.

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information contained in this Annual Report, before deciding to invest in our common stock. If any of the following risks materialize, our business, financial condition, results of operation and prospects will likely be materially and adversely affected. In that event, the market price of our common stock could decline and you could lose all or part of your investment.

Risks related to our financial condition

Despite our increasingly diversified customer base, we have historically depended on a limited number of customers and products in a limited number of market sectors; if we lose any of these large customers or if there are problems in those market sectors, particularly as a result of the COVID-19 pandemic, our net product revenue and operating results could decline significantly.

In the years ended December 31, 2021, 2020 and 2019, we derived approximately 17%, 13%, and 15% of our revenue from one customer, one customer, and one customer, respectively. No other customer accounted for more than 10% of revenue in the years ended December 31, 2021, 2020, and 2019. Our principal customers may vary from period to period and such customers may not continue to purchase products from us at current levels or at all (particularly as a result of the COVID-19 pandemic). Further, the inability of some of our customers to consummate anticipated purchases of our products due to changes in end-user demand, and other unpredictable factors that may affect customer ordering patterns could lead to significant reductions in net product revenue which could harm our business. Because our revenue and operating results are difficult to predict (particularly as a result of the COVID-19 pandemic), we believe that period-to-period comparisons of our results of operations are not a good indicator of our future performance. Additionally, if revenue declines in a quarter, whether due to a delay in recognizing expected revenue, adverse economic conditions, the COVID-19 pandemic, supply chain issues or otherwise, our results of operations will be harmed because many of our expenses are relatively fixed. In particular, a large portion of our manufacturing costs, our research and development, sales and marketing and general and administrative expenses are not significantly affected by variations in revenue. Further, our cost of product revenue is dependent on product mix. If our quarterly operating results fail to meet investor expectations, the price of our common stock may decline.

We expect our operating results to fluctuate significantly from period to period.

Following our acquisitions in 2021, 2020 and 2019, we have increased our fixed costs and now sell products having higher costs of product revenue than our biopreservation media products. We expect that the result of these acquisitions will make it more difficult to predict our revenue and operating results from period-to-period and that, as a result, comparisons of our results of operations are not currently and will not be for the foreseeable future a good indicator of our future performance. For example, if revenue declines in a quarter, whether due to a delay in recognizing expected revenue, adverse economic conditions, the COVID-19 pandemic, supply chain issues or otherwise, our results of operations in such period will be harmed because many of our expenses are now relatively fixed. In particular, a large portion of our manufacturing costs, research and development expenses, sales and marketing expenses and general and administrative expenses are not significantly affected by variations in revenue. Further, a shift in product revenue concentration away from our CryoStor products and towards our new products with higher costs of product revenue will adversely affect our operating margin. If our quarterly operating results fail to meet investor expectations, the price of our common stock may decline.

Risks related to our acquisition strategy

We may engage in future acquisitions or strategic transactions which may require us to seek additional financing or financial commitments, increase our expenses and/or present significant distractions to our management.

In the last three years, we acquired six companies and made investments in two other companies. We are continuing to actively evaluate opportunities to grow our portfolio of bioproduction tools and services for the cell and gene therapy and broader biopharma markets. In the event we engage in an acquisition or strategic transaction, including by making an investment in another company, we may need to acquire additional financing. Obtaining financing through the issuance or sale of additional equity and/or debt securities, if possible, may not be at favorable terms and may result in additional dilution to our current stockholders. Additionally, any such transaction may require us to incur non-recurring or other charges, may increase our near and long-term expenditures and may pose significant integration challenges or disrupt our management or business, which could adversely affect our operations and financial results. For example, an acquisition or strategic transaction, may entail numerous operational and financial risks, including the risks outlined above and additionally:

- exposure to unknown financial or product liabilities;
- disruption of our business and diversion of our management's time and attention in order to develop acquired products or technologies;
- higher than expected acquisition and integration costs;
- write-downs of assets or goodwill or impairment charges;
- increased amortization expenses;
- difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
- inability to retain key employees of any acquired businesses.

Accordingly, although there can be no assurance that we will undertake or successfully complete any transactions of the nature described above, any transactions that we do complete could have a material adverse effect on our business, results of operations, financial condition and prospects.

If intangible assets and goodwill that we recorded in connection with our acquisitions become impaired, we may have to take significant charges against earnings.

In connection with the accounting for our completed acquisitions in 2021, 2020, and 2019, we recorded a significant amount of intangible assets, including developed technology, in-process research and development, and customer relationships relating to the acquired product lines, and goodwill. Under generally accepted accounting principles in the United States, we must assess, at least annually and potentially more frequently, whether the value of indefinite-lived intangible assets and goodwill have been impaired. Intangible assets and goodwill will be assessed for impairment in the event of an impairment indicator. Any reduction or impairment of the value of intangible assets and goodwill will result in a charge against earnings, which could materially adversely affect our results of operations and shareholders' equity in future periods.

Our acquisitions expose us to risks that could adversely affect our business, and we may not achieve the anticipated benefits of acquisitions of businesses or technologies.

As a part of our growth strategy, we have made and may continue to make selected acquisitions of complementary products and/or businesses. Any acquisition involves numerous risks and operational, financial, and managerial challenges, including the following, any of which could adversely affect our business, financial condition, or results of operations:

- difficulties in integrating new operations, technologies, products, and personnel;
- problems maintaining uniform procedures, controls and policies with respect to our financial accounting systems;
- lack of synergies or the inability to realize expected synergies and cost-savings;
- difficulties in managing geographically dispersed operations, including risks associated with entering foreign markets in which we have no or limited prior experience;
- underperformance of any acquired technology, product, or business relative to our expectations and the price we paid;
- negative near-term impacts on financial results after an acquisition, including acquisition-related earnings charges;
- the potential loss of key employees, customers, and strategic partners of acquired companies;
- claims by terminated employees and shareholders of acquired companies or other third parties related to the transaction;
- the assumption or incurrence of additional debt obligations or expenses, or use of substantial portions of our cash;
- the issuance of equity securities to finance or as consideration for any acquisitions that dilute the ownership of our stockholders (which in the case of certain of our prior acquisitions were significant);
- the issuance of equity securities to finance or as consideration for any acquisitions may not be an option if the price of our common stock is low or volatile which could preclude us from completing any such acquisitions;
- diversion of management's attention and company resources from existing operations of the business;
- inconsistencies in standards, controls, procedures, and policies;
- the impairment of intangible assets as a result of technological advancements, or worse-than-expected performance of acquired companies;
- assumption of, or exposure to, historical liabilities of the acquired business, including unknown contingent or similar liabilities, including product liability, that are difficult to identify or accurately quantify; and
- risks associated with acquiring intellectual property, including potential disputes regarding acquired companies' intellectual property.

In addition, the successful integration of acquired businesses requires significant efforts and expense across all operational areas, including sales and marketing, research and development, manufacturing, finance, legal, and information technologies. There can be no assurance that any of the acquisitions we may make will be successful or will be, or will remain, profitable. Our failure to successfully address the foregoing risks may prevent us from achieving the anticipated benefits from any acquisition in a reasonable time frame, or at all.

The integration of our acquisitions may result in significant accounting charges that adversely affect the announced results of our company.

The financial results of our company may be adversely affected by cash expenses and non-cash accounting charges incurred in connection with our acquisitions over the prior three years. In addition to the anticipated cash charges, costs associated with the amortization of intangible assets are expected. The price of our common stock could decline to the extent our financial results are materially affected by the foregoing charges or if the foregoing charges are larger than anticipated.

Our recent acquisitions may result in unexpected consequences to our business and results of operations.

Although we believe that our recently acquired businesses will generally be subject to risks similar to those to which we are subject to in our existing operations, we may not have discovered all risks applicable to these businesses during the due diligence process. Some of these risks could produce unexpected and unwanted consequences for us. Undiscovered risks may result in us incurring financial liabilities, which could be material and have a negative impact on our business operations.

Failure to realize the benefits expected from our recent acquisitions, and in particular our acquisition of Global Cooling, could adversely affect the value of our common stock.

The success of our recent acquisitions will depend, in part, on our ability to:

- capitalize on our cross-selling opportunities by leveraging our extensive relationships with cell and gene therapy companies to drive sales of our recently acquired products and leveraging the relationships of our recently acquired businesses to offer them our full portfolio of bioproduction tools and services;
- deploy Global Cooling's freezers in SciSafe global biorepositories and expand the reach of the Global Cooling sales team and distributors to provide access to our entire portfolio of bioproduction tools and services offered to the cell and gene therapy and biopharma markets;
- realize cost savings from reduced back-office and infrastructure expenses, elimination of duplicative company and management structure costs, and improved purchasing power through greater scale;
- operate our combined businesses efficiently, achieve the strategic operating objectives for our business and realize significant cost savings and synergies;
- realize the attractive risk-adjusted equity returns from our acquisitions for our stockholders; and
- capitalize on the embedded and/or underexploited expansion opportunities offered by our acquisitions that we can expand upon.

However, to realize the anticipated benefits of our acquisitions we must successfully integrate their businesses in a manner that permits those benefits and cost savings to be realized. Although we expect significant benefits to result from these acquisitions, there can be no assurance that we will be able to successfully realize these benefits. The challenges involved in this integration will be complex and time consuming and may require a disproportionate amount of resources and management attention and could result in the loss of valuable employees, the disruption of each company's ongoing business or inconsistencies in standards, controls, procedures, practices, and policies that could adversely impact our operations. If we do not successfully manage these and related issues and challenges, we may not achieve the anticipated benefits of these acquisitions and our revenue, expenses, operating results, financial condition and stock price could be materially adversely affected.

Risks related to our business and operations

Healthcare reform measures could adversely affect our business.

The efforts of governmental and third-party payors to contain or reduce the costs of healthcare may adversely affect the business and financial condition of pharmaceutical and biotechnology companies, including ours. Specifically, in both the United States and some foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Efforts by governments and other third-party payors to contain or reduce the costs of healthcare through various means may limit our commercial opportunities and adversely affect our operating results and result in a decrease in the price of our common stock or limit our ability to raise capital.

If our products do not perform as expected or the reliability of the technology on which our products are based is questioned, we could experience lost revenue, delayed or reduced market acceptance of our products, increased costs and damage to our reputation.

Our success depends on the market's confidence that we can provide reliable, high-quality products to our customers. We believe that customers in our target markets are likely to be particularly sensitive to product defects and errors. Our reputation and the public image of our products and technologies may be impaired if our products fail to perform as expected. Although our products are tested prior to shipment, defects or errors could nonetheless occur in our products. In the future, if our products experience, or are perceived to experience, a material defect or error, this could result in loss or delay of revenues, delayed market acceptance, damaged reputation, diversion of development resources, legal claims, increased insurance costs or increased service and warranty costs, any of which could harm our business. Such defects or errors could also narrow the scope of the use of our products, which could hinder our success in the market. Even after any underlying concerns or problems are resolved, any lingering concerns in our target market regarding our technology or any manufacturing defects or performance errors in our products could continue to result in lost revenue, delayed market acceptance, damaged reputation, increased service and warranty costs and claims against us.

We face significant competition.

The life sciences industry is highly competitive. We anticipate that we will continue to face increased competition as existing companies may choose to develop new or improved products and as new companies could enter the market with new technologies, any of which could compete with our product or even render our products obsolete. Many of our competitors are significantly larger than us and have greater financial, technical, research, marketing, sales, distribution and other resources than us. There can be no assurance that our competitors will not succeed in developing or marketing technologies and products that are more effective or commercially attractive than any that are being developed or marketed by us, or that such competitors will not succeed in obtaining regulatory approval, or introducing or commercializing any such products, prior to us. Such developments could have a material adverse effect on our business, financial condition and results of operations. Also, even if we can compete successfully, there can be no assurance that we can continue do so in a profitable manner.

We are dependent on outside suppliers for all our manufacturing supplies.

We rely on outside suppliers for all our manufacturing supplies, parts and components. Although we believe we could develop alternative sources of supply for most of these components within a reasonable period of time, there can be no assurance that, in the future, our current or alternative sources will be able to meet all our demands on a timely basis, particularly given the uncertainty surrounding the COVID-19 pandemic. Unavailability of necessary components could require us to re-engineer our products to accommodate available substitutions, which could increase costs to us and/or have a material adverse effect on manufacturing schedules, products performance and market acceptance. In addition, an uncorrected defect or supplier's variation in a component or raw material, either unknown to us or incompatible with our manufacturing process, could harm our ability to manufacture products. We might not be able to find a sufficient alternative supplier in a reasonable amount of time, or on commercially reasonable terms, if at all. If we fail to obtain a supplier for the components of our products, our operations could be disrupted.

In the year ended December 31, 2021, we experienced difficulties in obtaining sheet metal and electrical components that incorporate semiconductor chips for the manufacture of our ULT freezer products. These difficulties led to increased supplier pricing for these materials and reduced production levels of ULT freezers in the third and fourth quarters of 2021. The availability of components that incorporate semiconductor chips continues to be a challenge in comparison to pre-pandemic availability levels. Our strategic partnerships with key suppliers have secured sufficient supply of these electrical components for our operations for the foreseeable future.

Our success will depend on our ability to attract and retain key personnel.

In order to execute our business plan, we must attract, retain and motivate highly qualified managerial, scientific, manufacturing, and sales personnel. If we fail to attract and retain skilled scientific and sales personnel, our sales efforts will be hindered. Our future success depends to a significant degree upon the continued services of key scientific and technical personnel. If we do not attract and retain qualified personnel, we will not be able to achieve our growth objectives.

Difficulties in manufacturing could have an adverse effect upon our expenses and our product revenues.

We currently manufacture all of our biopreservation media products, freezer products and related components. We currently outsource the manufacturing of certain thaw products, certain cold chain products, two ULT freezer models, and components of our LN2 freezers. The manufacturing of our products is difficult and complex. To support our current and prospective clinical customers, we comply with and intend to continue to comply with cGMP in the manufacture of our products. Our ability to adequately manufacture and supply our products in a timely matter is dependent on the uninterrupted and efficient operation of our facilities and those of third-parties producing raw materials and supplies upon which we rely in our manufacturing. The manufacture of our products may be impacted by:

- availability or contamination of raw materials and components used in the manufacturing process, particularly those for which we have no other source or supplier;
- the ongoing capacity of our facilities;
- our ability to comply with new regulatory requirements, including our ability to comply with cGMP;
- inclement weather and natural disasters;
- changes in forecasts of future demand for product components;
- potential facility contamination by microorganisms or viruses;
- updating of manufacturing specifications;
- product quality success rates and yields; and
- global viruses and pandemics, including the current COVID-19 pandemic.

If efficient manufacture and supply of our products is interrupted, we may experience delayed shipments or supply constraints. If we are at any time unable to provide an uninterrupted supply of our products to customers, our customers may be unable to supply their end-products incorporating our products to their patients and other customers, which could materially and adversely affect our product revenue and results of operations.

While we are not currently subject to FDA or other regulatory approvals on our products, if we become subject to regulatory requirements, the manufacture and sale of our products may be delayed or prevented, or we may become subject to increased expenses.

None of our products are subject to FDA. In particular, we are not required to sponsor formal prospective, controlled clinical-trials to establish safety and efficacy. A group of isothermal, standard, and carousel LN2 freezers in our freezers and thaw systems product line is currently regulated as Class 2 medical devices in the EU. Additionally, we comply with cGMP requirements. This is done solely to support our current and prospective clinical customers. However, there can be no assurance that we will not be required to obtain approval from the FDA, or foreign regulatory authorities, as applicable, prior to marketing any of our products in the future. Any such requirements could delay or prevent the sale of our products or may subject us to additional expenses.

Our business may be subject to product liability claims or product recalls, which could be expensive and could result in a diversion of management's attention.

Our business exposes us to potential product liability risks that are inherent in the design, manufacture and marketing of our products. In particular, we are a supplier of bioproduction tools to the cell and gene therapy industry. Our products are used in basic and applied research, and commercial manufacturing of biologic-based therapies. Customers use our products to maintain the health and function of biologic material during sourcing, manufacturing, storage, and distribution of cells and tissues, and component failures, manufacturing flaws, design defects or inadequate disclosure of product-related risks with respect to these or other products we manufacture or sell could result in an unsafe condition or injury. As a result, we face an inherent risk of damage to our reputation if one or more of our products are, or are alleged to be, defective. Although we carry product liability insurance, we may be exposed to product liability and warranty claims in the event that our products actually or allegedly fail to perform as expected or the use of our products results, or is alleged to result, in bodily injury and/or property damage. The outcome of litigation, particularly any class-action lawsuits, is difficult to quantify. Plaintiffs often seek recovery of very large or indeterminate amounts, including punitive damages. The magnitude of the potential losses relating to these lawsuits may remain unknown for substantial periods of time and the cost to defend against any such litigation may be significant. Accordingly, we could experience product liability losses in the future and incur significant costs to defend these claims.

In addition, if any of our products are, or are alleged to be, defective, we may voluntarily participate, or be required by applicable regulators, to participate in a recall of that product if the defect or the alleged defect relates to safety. In the event of a recall, we may experience lost sales and be exposed to individual or class-action litigation claims and reputational risk. Product liability, warranty and recall costs may have a material adverse effect on our business, financial condition and results of operations.

Insurance coverage is increasingly difficult to obtain or maintain.

While we currently maintain product liability insurance, directors' and officers' liability insurance, general liability insurance, and other types of insurance, first- and third-party insurance is increasingly more costly and narrower in scope, and we may be required to assume more risk in the future. If we are subject to third-party claims or suffer a loss or damage in excess of our insurance coverage, we may be required to share that risk in excess of our insurance limits. Furthermore, any first- or third-party claims made on our insurance policies may impact our future ability to obtain or maintain product liability insurance coverage at reasonable costs, if at all.

We are and may become the subject of various claims, litigation or investigations which could have a material adverse effect on our business, financial condition, results of operations or price of our common stock.

We are and may become subject to various claims (including "whistleblower" complaints), litigation or investigations, including commercial disputes and employee claims, and from time to time may be involved in governmental or regulatory investigations or similar matters. Any claims asserted against us or our management, regardless of merit or eventual outcome, could harm our reputation and have an adverse impact on our relationship with our clients, distribution partners and other third parties and could lead to additional related claims. Furthermore, there is no guarantee that we will be successful in defending ourselves in pending or future litigation or similar matters under various laws. Any judgments or settlements in any pending litigation or future claims, litigation or investigation could have a material adverse effect on our business, financial condition, results of operations and price of our common stock.

Risks related to our intellectual property and cyber security

Expiration of our patents may subject us to increased competition and reduce our opportunity to generate product revenue.

The patents for our products have varying expiration dates and, when these patents expire, we may be subject to increased competition and we may not be able to recover our development costs. In some of the larger economic territories, such as the United States and Europe, patent term extension/restoration may be available. We cannot, however, be certain that an extension will be granted or, if granted, what the applicable time or the scope of patent protection afforded during any extended period will be. If we are unable to obtain patent term extension/restoration or some other exclusivity, we could be subject to increased competition and our opportunity to establish or maintain product revenue could be substantially reduced or eliminated. Furthermore, we may not have sufficient time to recover our development costs prior to the expiration of our U.S. and non-U.S. patents.

Our proprietary rights may not adequately protect our technologies and products.

Our commercial success will depend on our ability to obtain patents and/or regulatory exclusivity and maintain adequate protection for our technologies and products in the United States and other countries. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies and products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

We intend to apply for additional patents covering both our technologies and products, as we deem appropriate. We may, however, fail to apply for patents on important technologies or products in a timely fashion, if at all. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products and technologies. In addition, the patent positions of life science industry companies are highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. As a result, the validity and enforceability of our patents cannot be predicted with certainty. In addition, we cannot guarantee that:

- we were the first to make the inventions covered by each of our issued patents and pending patent applications;
- we were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our pending patent applications will result in issued patents;
- any of our patents will be valid or enforceable;
- any patents issued to us will provide us with any competitive advantages, or will not be challenged by third parties; and
- we will develop additional proprietary technologies that are patentable, or the patents of others will not have an adverse effect on our business.

The actual protection afforded by a patent varies on a product-by-product basis, from country to country and depends on many factors, including the type of patent, the scope of its coverage, the availability of regulatory related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patents. Our ability to maintain and solidify our proprietary position for our products will depend on our success in obtaining effective claims and enforcing those claims once granted. Our issued patents and those that may be issued in the future, or those licensed to us, may be challenged, invalidated, unenforceable or circumvented, and the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar products. We also rely on trade secrets to protect some of our technology, especially where it is believed that patent protection is inappropriate or unobtainable. However, trade secrets are difficult to maintain. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our proprietary information to competitors. Enforcement of claims that a third party has illegally obtained and is using trade secrets is expensive, time consuming and uncertain. In addition, non-U.S. courts are sometimes less willing than U.S. courts to protect trade secrets. If our competitors independently develop equivalent knowledge, methods and know-how, we would not be able to assert our trade secrets against them and our business could be harmed.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on all our products in every jurisdiction would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products. These products may compete with our products and may not be covered by any patent claims or other intellectual property rights.

The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

If we fail to protect our intellectual property rights, our competitors may take advantage of our ideas and compete directly against us.

Our success will depend to a significant degree on our ability to secure and protect intellectual property rights and enforce patent and trademark protections relating to our technology. While we believe that the protection of patents and trademarks is important to our business, we also rely on a combination of copyright, trade secret, nondisclosure and confidentiality agreements, know-how and continuing technological innovation to maintain our competitive position. From time to time, litigation may be advisable to protect our intellectual property position. However, these legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. Any litigation in this regard could be costly, and it is possible that we will not have sufficient resources to fully pursue litigation or to protect our intellectual property rights. This could result in the rejection or invalidation of our existing and future patents. Any adverse outcome in litigation relating to the validity of our patents, or any failure to pursue litigation or otherwise to protect our patent position, could materially harm our business and financial condition. In addition, confidentiality agreements with our employees, consultants, customers, and key vendors may not prevent the unauthorized disclosure or use of our technology. It is possible that these agreements will be breached or that they will not be enforceable in every instance, and that we will not have adequate remedies for any such breach. Enforcement of these agreements may be costly and time consuming. Furthermore, the laws of foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights and we may be unable to protect our rights to, or use of, our technology.

If we choose to go to court to stop someone else from using the inventions claimed in our patents or our licensed patents, that individual or company has the right to ask the court to rule that these patents are invalid and/or should not be enforced against that third party. These lawsuits are expensive and would consume time and other resources even if we were successful in stopping the infringement of these patents. In addition, there is a risk that the court will decide that these patents are invalid or unenforceable and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity or enforceability of these patents is upheld, the court will refuse to stop the other party on the grounds that such other party's activities do not infringe our rights.

If we wish to use the technology claimed in issued and unexpired patents owned by others, we will need to obtain a license from the owner, enter into litigation to challenge the validity or enforceability of the patents or incur the risk of litigation in the event that the owner asserts that we infringed its patents. The failure to obtain a license to technology or the failure to challenge an issued patent that we may require to discover, develop or commercialize our products may have a material adverse effect on us.

If a third party asserts that we infringed its patents or other proprietary rights, we could face a number of risks that could seriously harm our results of operations, financial condition and competitive position, including:

- patent infringement and other intellectual property claims, which would be costly and time consuming to defend, whether or not the claims have merit, and which could delay a product and divert management's attention from our business;
- substantial damages for past infringement, which we may have to pay if a court determines that our product or technologies infringe a competitor's patent or other proprietary rights;
- a court prohibiting us from selling or licensing our technologies unless the third party licenses its patents or other proprietary rights to us on commercially reasonable terms, which it is not required to do; and
- if a license is available from a third party, we may have to pay substantial royalties or lump-sum payments or grant cross licenses to our patents or other proprietary rights to obtain that license.

The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our products or methods of use either do not infringe the patent claims of the relevant patent, and/or that the patent claims are invalid, and/or that the patent is unenforceable, and we may not be able to do this. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents.

U.S. patent laws as well as the laws of some foreign jurisdictions provide for provisional rights in published patent applications beginning on the date of publication, including the right to obtain reasonable royalties, if a patent subsequently issues and certain other conditions are met.

Because some patent applications in the United States may be maintained in secrecy until the patents are issued, because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, and because publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our issued patents or our pending applications, or that we were the first to invent the technology.

Patent applications filed by third parties that cover technology similar to ours may have priority over our patent applications and could further require us to obtain rights to issued patents covering such technologies. If another party files a U.S. patent application on an invention similar to ours, we may elect to participate in or be drawn into an interference proceeding declared by the U.S. Patent and Trademark Office to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, resulting in a loss of our U.S. patent position with respect to such inventions. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations. We cannot predict whether third parties will assert these claims against us, or whether those claims will harm our business. If we are forced to defend against these claims, whether they are with or without any merit and whether they are resolved in favor of or against us, we may face costly litigation and diversion of management's attention and resources. As a result of these disputes, we may have to develop costly non-infringing technology, or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to us, if at all, which could seriously harm our business or financial condition.

Our inability to protect our systems and data from continually evolving cybersecurity risks or other technological risks, including as a result of breaches of our associated third parties, could affect our ability to conduct our business.

In conducting our business, we process, transmit and store sensitive business information and personal information about our customers, vendors, and other parties. This information may include account access credentials, credit and debit card numbers, bank account numbers, social security numbers, driver's license numbers, names and addresses and other types of sensitive business or personal information. Some of this information is also processed and stored by our third-party service providers to whom we outsource certain functions and other agents, including our customers, which we refer to collectively as our associated third parties.

We are a regular target of malicious third-party attempts to identify and exploit system vulnerabilities, and/or penetrate or bypass our security measures, in order to gain unauthorized access to our networks and systems or those of our associated third parties. Such access could lead to the compromise of sensitive, business, personal or confidential information. As a result, we proactively employ multiple methods at different layers of our systems to defend our systems against intrusion and attack and to protect the data we collect. However, we cannot be certain that these measures will be successful and will be sufficient to counter all current and emerging technology threats that are designed to breach our systems in order to gain access to confidential information.

Our computer systems and our associated third parties' computer systems could be in the future, subject to breach, and our data protection measures may not prevent unauthorized access. The techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and are often difficult to detect. Threats to our systems and our associated third parties' systems can derive from human error, fraud or malice on the part of employees or third parties, or may result from accidental technological failure. Computer viruses and other malware can be distributed and could infiltrate our systems or those of our associated third parties. In addition, denial of service or other attacks could be launched against us for a variety of purposes, including to interfere with our services or create a diversion for other malicious activities. Our defensive measures may not prevent downtime, unauthorized access or use of sensitive data. Further, while we select our third party service providers carefully, and we seek to ensure that our customers adequately protect their systems and data, we do not control their actions and are not able to oversee their processes. Any problems experienced by our associated third parties, including those resulting from breakdowns or other disruptions in the services provided by such parties or cyber-attacks and security breaches, could adversely affect our ability to conduct our business and our financial condition.

We could also be subject to liability for claims relating to misuse of personal information, such as violation of data privacy laws. We cannot provide assurance that the contractual requirements related to security and privacy that we impose on our service providers who have access to customer data will be followed or will be adequate to prevent the unauthorized use or disclosure of data. Any failure to adequately enforce or provide these protective measures could result in liability, protracted and costly litigation, governmental intervention and fines.

Risks related to our common stock

Our stock price may be volatile, and purchasers of our securities could incur substantial losses.

Our common stock, traded on the NASDAQ Capital Market, may be volatile and has experienced price and volume fluctuations. For example, in the year ended December 31, 2021, the highest intra-day sale price of our common stock on NASDAQ was $60.67 per share and the lowest intra-day sale price of our common stock on NASDAQ was $28.15 per share. We may continue to incur substantial increases or decreases in our stock price in the foreseeable future.

Our stock price and the market prices of many publicly traded companies, including emerging companies in the life sciences industry, have been, and can be expected to be, highly volatile. The future market price of our common stock could be significantly impacted by numerous factors, including, but not limited to:

- Future sales of our common stock or other fundraising events;
- Sales of our common stock by existing shareholders;
- Changes in our capital structure, including stock splits or reverse stock splits;
- Announcements of technological innovations for new commercial products by our present or potential competitors;
- Developments concerning proprietary rights;
- Adverse results in our field or with clinical tests of our products in customer applications;
- Adverse litigation;
- Unfavorable legislation or regulatory decisions;
- Public concerns regarding our products;
- Variations in quarterly operating results;
- General trends in the health care industry;
- Global viruses, epidemics and pandemics, including the current COVID-19 pandemic; and
- Other factors outside of our control, including significant market fluctuations.

A significant percentage of our outstanding common stock is held by one stockholder, and this stockholder therefore has significant influence on us and our corporate actions.

As of December 31, 2021, based on our review of public filings and the Company's records, one of our existing stockholders, Casdin Capital, LLC ("Casdin"), owned 7,566,292 shares of our common stock, representing 18% of the issued and outstanding shares of common stock. Accordingly, this stockholder has had, and will continue to have, significant influence in determining the outcome of any corporate transaction or other matter submitted to our stockholders for approval, including mergers, consolidations and the sale of all or substantially all our assets, election of directors and other significant corporate actions. In addition, without the consent of this stockholder, we could be prevented from entering into transactions that could be beneficial to us.

Any future sales of our securities in the public markets or any future securities issuances in connection with our acquisition strategy may cause the trading price of our common stock to decline and could impair our ability to raise capital through future equity offerings.

Sales of a substantial number of shares of our common stock or other securities in the public markets, or the perception that these sales may occur, could cause the market price of our common stock or other securities to decline and could materially impair our ability to raise capital through the sale of additional securities. If we issue additional securities in a public offering or a private placement, such sales or any resales of such securities could further adversely affect the market price of our common stock. The sale of a large number of shares of our common stock or other securities also might make it more difficult for us to sell equity or equity-related securities in the future at a time and at the prices that we deem appropriate.

We do not anticipate declaring any cash dividends on our common stock.

We have never declared or paid cash dividends on our common stock and do not plan to pay any cash dividends in the near future. Our current policy is to retain all funds and earnings for use in the operation and expansion of our business.

Risks related to accounting matters

Changes in accounting standards and subjective assumptions, estimates, and judgments by management related to complex accounting matters could significantly affect our financial results or financial condition.

Generally accepted accounting principles and related accounting pronouncements, implementation guidelines, and interpretations with regard to a wide range of matters that are relevant to our business, such as revenue recognition, asset impairment and fair value determinations, inventories, business combinations and intangible asset valuations, leases, and litigation, are highly complex and involve many subjective assumptions, estimates, and judgments. Changes in these rules or their interpretation or changes in underlying assumptions, estimates, or judgments could significantly change our reported or expected financial performance or financial condition and could require us to restate our prior financial statements and issue a non-reliance statement regarding our prior financial disclosures.

Our ability to use net operating loss and tax credit carryforwards and certain built-in losses to reduce future tax payments is limited by provisions of the Internal Revenue Code, and it is possible that certain transactions or a combination of certain transactions may result in material additional limitations on our ability to use our net operating loss and tax credit carryforwards.

Section 382 and 383 of the Internal Revenue Code of 1986, as amended, contain rules that limit the ability of a company that undergoes an ownership change, which is generally any change in ownership of more than 50% of its stock over a three-year period, to utilize its net operating loss and tax credit carryforwards and certain built-in losses recognized in years after the ownership change. These rules generally operate by focusing on ownership changes involving stockholders owning directly or indirectly 5% or more of the stock of a company and any change in ownership arising from a new issuance of stock by the company. Generally, if an ownership change occurs, the yearly taxable income limitation on the use of net operating loss and tax credit carryforwards and certain built-in losses is equal to the product of the applicable long-term, tax-exempt rate and the value of the company's stock immediately before the ownership change. We may be unable to offset our taxable income with losses, or our tax liability with credits, before such losses and credits expire and therefore would incur larger federal income tax liability.

If we are unable to develop an effective system of internal controls, we may not be able to accurately report financial results or prevent fraud. If we identify additional material weaknesses in our internal control over financial reporting or are unable to rectify the material weaknesses that we have identified, our ability to meet our reporting obligations and the trading price of our stock could be negatively affected.

As described in Item 9A — Controls and Procedures and elsewhere in this Form 10-K, Management identified material weaknesses in our internal control over financial reporting for the fiscal years ended December 31, 2021 and 2020.

In the course of making our assessment of the effectiveness of internal control over financial reporting as of December 31, 2019, we identified a material weakness in our internal control over financial reporting with regard to our controls over the accounting for financial instruments containing characteristics of both liabilities and equity due to insufficient technical resources.

In the course of making our assessment of the effectiveness of internal control over financial reporting as of December 31, 2021, we identified several material weaknesses. Material weaknesses were identified in relation to (i) inappropriately designed entity-level controls impacting the control environment, risk assessment, and monitoring activities to prevent or detect material misstatements to the consolidated financial statements attributed to an insufficient number of qualified resources and inadequate oversight and accountability over the performance of controls, ineffective identification and assessment or risks impacting internal control over financial reporting, and ineffective monitoring controls; (ii) information system logical access within certain key financial systems; (iii) accounting policies and procedures and related controls over complex financial statement areas; (iv) accounting policies, procedures, and related controls over assets held for lease; (v) accounting policies, procedures, and related controls over the preparation and review of projected financial information used in determining the valuation of acquired intangible assets and contingent consideration in business combinations as well as the quantitative impairment analysis of indefinite-lived intangible assets; and (vi) policies, procedures, and related controls over the presentation and disclosure of amounts presented in the consolidated financial statements in accordance with the applicable financial reporting requirements. Because material weaknesses in internal control exist, the Company’s internal controls may not prevent, or detect and correct a material misstatement in its financial statements or disclosures.

The aforementioned material weaknesses did not result in any identified material misstatements to our financial statements, and there were no changes to previously released financial results.

Effective internal controls are necessary to provide reliable financial reports and to assist in the effective prevention of fraud. Any inability to provide reliable financial reports or prevent fraud could harm our business. We regularly review and update our internal controls, disclosure controls and procedures, and corporate governance policies. In addition, we are required under the Sarbanes-Oxley Act of 2002 to report annually on our internal control over financial reporting. Any system of internal controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Accordingly, a material weakness increases the risk that the financial information we report contains material errors.

While we are in the process of addressing our material weaknesses as disclosed herein, elements of our remediation plan can only be accomplished over time and we can offer no assurance that these initiatives will ultimately have the intended effects. Any failure to maintain such internal controls could adversely impact our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations or may lose confidence in our reported financial information. Likewise, if our financial statements are not filed on a timely basis as required by the SEC and The NASDAQ Stock Market, we could face severe consequences from those authorities. In either case, it could result in a material adverse effect on our business or have a negative effect on the trading price of our common stock. Further, if we fail to remedy these deficiencies (or any other future deficiencies) or maintain the adequacy of our internal controls, we could be subject to regulatory scrutiny, civil or criminal penalties or shareholder litigation. We can give no assurance that the measures we have taken and plan to take in the future will remediate the material weaknesses identified or that any additional material weaknesses or restatements of our financial statements will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of those controls.

Further, in the future, if we cannot conclude that we have effective internal control over our financial reporting, or if our independent registered public accounting firm is unable to provide an unqualified opinion regarding the effectiveness of our internal control over financial reporting, investors could lose confidence in the reliability of our financial statements, which could lead to a decline in our stock price. Failure to comply with reporting requirements could also subject us to sanctions and/or investigations by the SEC, The NASDAQ Stock Market or other regulatory authorities.

Risks related to COVID-19 and other disruptive events

Our financial condition and results of operations may be adversely affected by the COVID-19 pandemic.

We continue to closely monitor the impact of the COVID-19 global pandemic on all aspects of our business and geographies, including how it has and will impact our customers, team members, suppliers, vendors, business partners and distribution channels. The COVID-19 global pandemic has created significant volatility, uncertainty and economic disruption, which may continue to affect our business operations and may materially and adversely affect our results of operations, cash flows and financial position.

We are currently following the recommendations of local health authorities to minimize exposure risk for our team members and visitors. While we have implemented specific business continuity plans to reduce the impact of COVID-19 and believe that we have sufficient inventory to meet forecasted demand for the next six to nine months, there is no guarantee that our continuity plan will be successful or that our inventory will meet forecasted or actual demand.

In the third and fourth quarters of 2021, we experienced difficulties in obtaining sheet metal and electrical components that incorporate semiconductor chips for our ULT freezer manufacturing operations. These difficulties led to increased supplier pricing for these materials and reduced production levels of ULT freezers in the third and fourth quarters of 2021. We believe some or all of these difficulties arose as a result of suppliers' production planning in response to COVID-19 and logistics challenges that have occurred as a result of the global pandemic. We believe the supply chain challenges related to sheet metal that we experienced in 2021 have been substantially mitigated through the diversification of suppliers. The availability of components that incorporate semiconductor chips, however, continues to be a challenge in comparison to pre-pandemic availability levels. Our strategic partnerships with key suppliers have secured sufficient supply of these electrical components for our operations for the foreseeable future.

Additional disruptions may occur for our customers or suppliers that may materially affect our ability to obtain supplies or other components for our products, produce our products or deliver inventory in a timely manner. This would result in lost product revenue, additional costs, or penalties, or damage our reputation. Similarly, COVID-19 could impact our customers and/or suppliers as a result of a health epidemic or other outbreak occurring in other locations which could reduce their demand for our products or their ability to deliver needed supplies for the production of our products.

We cannot predict at this time the full extent to which the COVID-19 pandemic will impact our business, results, and financial condition, which will depend on many factors that are not known at this time, as the situation is unprecedented and continues to evolve. These include, among others, the extent of harm to public health, including the duration of the pandemic, any potential subsequent waves of COVID-19 infection, the emergence of new variants of COVID-19, some of which may be more transmissible or virulent than the initial strain, and the availability and distribution of effective vaccines and medical treatments, further disruption to the manufacturing of and demand for our products, our ability to effectively manage inventory levels and adjust our production schedules to align with demand, impairments and other charges, the impact of the global business and economic environment on liquidity and the availability of capital, the costs incurred to keep our employees safe while maintaining continued operations, and our ability to effectively motivate and retain the necessary workforce. We are staying in close communication with our manufacturing facilities, employees, customers, and suppliers, and acting to mitigate the impact of this dynamic and evolving situation through a variety of measures, which may not be successful and are subject to the factors described above, many of which are uncertain or outside of our control. Even after the COVID-19 pandemic has subsided, we may continue to experience impacts to our business as a result of its global economic impact.

Natural disasters, geopolitical unrest, war, terrorism, public health issues or other catastrophic events could disrupt the supply, delivery or demand of products, which could negatively affect our operations and performance.

We are subject to the risk of disruption by earthquakes, floods and other natural disasters, fire, power shortages, geopolitical unrest, war, terrorist attacks and other hostile acts, public health issues, epidemics or pandemics and other events beyond our control and the control of the third parties on which we depend. Any of these catastrophic events, whether in the United States or abroad, may have a strong negative impact on the global economy, our employees, facilities, partners, suppliers, distributors or customers, and could decrease demand for our products, create delays and inefficiencies in our supply chain and make it difficult or impossible for us to deliver products to our customers. A catastrophic event that results in the destruction or disruption of our data centers or our critical business or information technology systems would severely affect our ability to conduct normal business operations and, as a result, our operating results would be adversely affected.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our material office and manufacturing leases are detailed below:

Location	Square Feet	Principal Use	Lease Expiration
Bothell, WA	36,766	Corporate headquarters, manufacturing, research and development, marketing and administrative offices	July 2031
Menlo Park, CA	3,460	Research and development, and administrative offices	Month to Month
Albuquerque, NM	9,932	Manufacturing, research and development, and administrative offices	December 2022
Bruce Township, MI	106,998	Manufacturing, research and development, and administrative offices	Month to Month
Athens, OH	50,000	Manufacturing, research and development, and administrative offices	March 2028
Nelsonville, OH	22,764	Warehouse	May 2022
Columbus, OH	1,807	Administrative offices	Month to Month
Indianapolis, IN	11,415	Manufacturing, research and development, and administrative offices	September 2024
United States	12,500	Biological and pharmaceutical specimen storage	January 2023
United States	20,000	Biological and pharmaceutical specimen storage	March 2024
United States	16,153	Biological and pharmaceutical specimen storage	June 2024
United States	16,800	Biological and pharmaceutical specimen storage	February 2026
United States	26,800	Biological and pharmaceutical specimen storage	November 2031
Netherlands	47,533	Biological and pharmaceutical specimen storage	March 2026

We consider the facilities to be in a condition suitable for their current uses. Because of anticipated growth in the business and due to the increasing requirements of customers or regulatory agencies, we may need to acquire additional space or upgrade and enhance existing space. We believe that adequate facilities will be available upon the conclusion of our leases.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be subject to legal proceedings and claims in the ordinary course of business. We are not currently aware of any such proceedings or claims that we believe will have, individually or in the aggregate, a material adverse effect on our business, financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Market information for common stock

Our common stock is traded on the NASDAQ Capital Market exchange under the ticker symbol "BLFS."

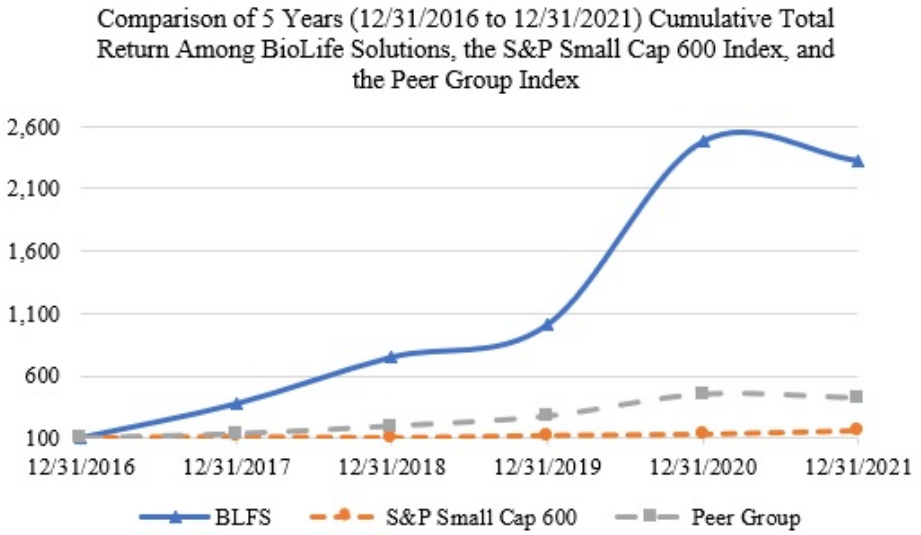
Stockholders and dividends

As of March 16, 2022, there were approximately 224 holders of record of our common stock. We have never paid cash dividends on our common stock and do not anticipate that any cash dividends will be paid in the foreseeable future. We anticipate that we will retain all earnings, if any, to support our operations. Any future determination as to the payment of dividends will be at the sole discretion of our Board of Directors and will depend on our financial condition, results of operations, capital requirements and other factors our Board of Directors deems relevant.

See Item 12 for information regarding securities authorized for issuance under our equity compensation plans.

Performance graph

The following graph shows the cumulative total stockholder return on our common stock with the cumulative total return of the S&P Small Cap 600 Index and our peer group, assuming an initial investment of $100 on December 31, 2016 and the reinvestment of all dividends.



Issuer repurchases of equity securities

Not applicable.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

Reserved.

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

This Form 10-K contains "forward-looking statements". These forward-looking statements involve a number of risks and uncertainties. We caution readers that any forward-looking statement is not a guarantee of future performance and that actual results could differ materially from those contained in the forward-looking statement. These statements are based on current expectations of future events. Such statements include, but are not limited to, statements about our products, including our newly acquired products, customers, regulatory approvals, the potential utility of and market for our products and services, our ability to implement our business strategy and anticipated business and operations, in particular following the 2021, 2020, and 2019 acquisitions, future financial and operational performance, our anticipated future growth strategy, including the acquisition of synergistic cell and gene therapy manufacturing tools and services or technologies, or other companies or technologies, capital requirements, intellectual property, suppliers, joint venture partners, future financial and operating results, the impact of the COVID-19 pandemic, plans, objectives, expectations and intentions, revenues, costs and expenses, interest rates, outcome of contingencies, business strategies, regulatory filings and requirements, the estimated potential size of markets, capital requirements, the terms of any capital financing agreements and other statements that are not historical facts. You can find many of these statements by looking for words like "believes", "expects", "anticipates", "estimates", "may", "should", "will", "could" "plan", "intend", or similar expressions in this Form 10-K. We intend that such forward-looking statements be subject to the safe harbors created thereby.

These forward-looking statements are based on the current beliefs and expectations of our management and are subject to significant risks and uncertainties. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results may differ materially from current expectations and projections. Factors that might cause such a difference include those discussed under "Risk Factors", as well as those discussed elsewhere in the Form 10-K.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this Form 10-K or, in the case of documents referred to or incorporated by reference, the date of those documents.

All subsequent written or oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date of this Form 10-K or to reflect the occurrence of unanticipated events, except as may be required under applicable U.S. securities law. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

We are a life sciences company that develops and commercializes innovative technologies used in the manufacture, storage and transportation of biological materials and provides storage solutions for biological and pharmaceutical materials.

We develop, manufacture, and market bioproduction tools and services to the cell and gene therapy ("CGT") industry and broader biopharma market, which are designed to improve quality and de-risk biologic manufacturing, storage, and distribution. Our products are used in basic and applied research and commercial manufacturing of biologic-based therapies. Customers use our products to maintain the health and function of biologic material during sourcing, manufacturing, storage, and distribution.

Our current portfolio of bioproduction tools and services are comprised of three revenue lines that contain seven main offerings: (i) cell processing (including biopreservation media for the preservation of cells and tissues, human platelet lysate media for the supplementation of cell expansion, cryogenic vials and automated fill machines that provide high-quality, efficient, and precise mixes of solutions), (ii) freezers and thaw systems (including a full line of mechanical ULT, isothermal, and liquid nitrogen freezers and accessories, automated thaw devices which provide controlled, consistent thawing of frozen biologics in vials and cryobags), and (iii) storage and cold chain services (including biological and pharmaceutical storage services, and "smart", cloud connected devices for transporting biologic payloads).

We currently operate as one bioproduction tools and services business which supports several steps in the biologic material manufacturing and delivery process. We have a diversified portfolio of tools and services that focus on biopreservation, cell processing, frozen biologic storage products and services, cold-chain transportation, and thawing of biologic materials. We have in-house expertise in cryobiology and continue to capitalize on opportunities to maximize the value of our product platform for our extensive customer base through both organic growth innovations and acquisitions.

Sexton Biotechnologies, Inc. acquisition

On August 9, 2021, BioLife entered into an Agreement and Plan of Merger (the "Sexton Merger Agreement") with BLFS Merger Sub, Inc., a Delaware corporation ("Sexton Merger Sub"), Fortis Advisors LLC, in its capacity as the representative of the stockholders of Sexton (the "Sexton Seller Representative") and Sexton Biotechnologies, Inc., a Delaware corporation.

On September 1, 2021, the Company completed the merger of Sexton Merger Sub with and into Sexton and Sexton became a wholly-owned subsidiary of the Company (the "Sexton Merger"). As consideration for the Sexton Merger (the "Sexton Merger Consideration"), holders of common stock, preferred stock and options of Sexton, other than the Company (collectively, the "Sexton Participating Holders"), are entitled to receive an aggregate of 530,502 newly issued shares of the Company's common stock, subject to certain post-closing adjustments, of which 477,452 shares of Common Stock were issued to the Sexton Participating Holders at the Closing, and 53,050 shares of Common Stock, or approximately 10% of the Merger consideration, were deposited into an escrow account for indemnification and post-closing purchase price adjustment purposes. Prior to the merger, the Company held preferred stock in Sexton, which was accounted for using a measurement alternative that measures the securities at cost minus impairment, if any. The Company accounted for the merger as a step acquisition, which required remeasurement of the Company's existing ownership in Sexton to fair value prior to completing the acquisition method of accounting. Using step acquisition accounting, the Company increased the value of its existing equity interest to its fair value, resulting in the recognition of a non-cash gain of $6.5 million, which was included in the gain on acquisition of Sexton Biotechnologies, Inc. in the Consolidated Statements of Operations in the year ended December 31, 2021. The Company utilized a market-based valuation approach to determine the fair value of the existing equity interest based on the total merger consideration offered and the Company's stock price at acquisition.

The Sexton Merger was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. The fair value of the net tangible assets acquired was approximately $4.1 million, the deferred tax liability acquired was approximately $1.5 million, the fair value of the intangible assets acquired was approximately $8.8 million, and the residual goodwill was approximately $28.5 million. The fair value calculations required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Global Cooling, Inc. acquisition

On March 19, 2021, the Company entered into an Agreement and Plan of Merger (the "GCI Merger Agreement") with BLFS Merger Subsidiary, Inc., a Delaware corporation ("GCI Merger Sub"), Global Cooling, a Delaware corporation and Albert Vierling and William Baumel, in their capacity as the representatives of the stockholders of GCI (collectively, the "GCI Seller Representative").

On May 3, 2021, pursuant to the GCI Merger Agreement, subject to the terms and conditions set forth therein, the transactions contemplated by the GCI Merger Agreement were consummated (the "GCI Closing"), GCI Merger Sub merged with and into GCI (the "GCI Merger" and, together with other transactions contemplated by the GCI Merger Agreement, the "GCI Transactions"), with GCI continuing as the surviving corporation in the GCI Merger and a wholly-owned subsidiary of the Company. In the GCI Merger, all of the issued and outstanding shares of capital stock of GCI immediately prior to the filing of the Certificate of Merger with the Secretary of State of the State of Delaware (other than those properly exercising any applicable dissenter's rights under Delaware law) were converted into the right to receive the GCI Merger Consideration (as defined below). The Company paid the GCI Merger Consideration to the holders of common stock and preferred stock of GCI (collectively, the "GCI Stockholders").

The aggregate merger consideration paid pursuant to the GCI Merger Agreement to the GCI Stockholders was 6,646,870 newly issued shares of common stock, provided, however, that the GCI Merger Consideration otherwise payable to GCI Stockholders is subject to the withholding of the GCI Escrow Shares (as defined below) and is subject to reduction for indemnification obligations. The GCI Merger Consideration allocable to one GCI stockholder was reduced by 10,400 shares to satisfy an outstanding note receivable of $374,000. In accordance with ASC 805, the Company recognized the settlement of pre-existing relationships in the forms of cash deposits, trade receivables, and trade payables, which are included in the consideration transferred. The GCI Merger Consideration is not subject to any purchase price adjustments.

At the GCI Closing, approximately nine percent (9%) of the GCI Merger Consideration (the “Escrow Shares”, along with any other dividends, distributions or other income on the GCI Escrow Shares, the “GCI Escrow Property”) otherwise issuable to the GCI Stockholders (allocated pro rata among the GCI Stockholders based on the GCI Merger Consideration otherwise issuable to them at the GCI Closing), was deposited into a segregated escrow account in accordance with an escrow agreement to be entered into in connection with the GCI Transactions (the “GCI Escrow Agreement”).

The GCI Escrow Property will be held for a period of up to twenty-four (24) months after the GCI Closing as the sole and exclusive source of payment for any post-GCI Closing indemnification claims (other than fraud claims), unless earlier released in accordance with the terms of the GCI Escrow Agreement.

The GCI Merger was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. The fair value of the net tangible assets acquired was $740,000, the deferred tax liability acquired was $24.1 million, the fair value of the intangible assets acquired was $120.5 million, and the residual goodwill was $137.8 million. The fair value calculations required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

SciSafe Holdings, Inc. acquisition

On September 18, 2020, BioLife entered into a Stock Purchase Agreement, by and among the Company, SciSafe Holdings, Inc., a Delaware corporation, and the stockholders of SciSafe (collectively, the “SciSafe Sellers”), pursuant to which the Company agreed to purchase from the SciSafe Sellers one hundred percent (100%) of the issued and outstanding capital shares or other equity interests of SciSafe (the “SciSafe Acquisition”). The SciSafe Acquisition closed October 1, 2020.

In connection with the SciSafe Acquisition, the Company issued to the SciSafe Sellers 611,683 shares of common stock valued at $29.29 per share and a cash payment of $15 million, with $1.5 million held in escrow to account for adjustments for net working capital and as a security for, and a source of payment of, the Company’s indemnity rights. Pending the occurrence of certain events, the Company will issue to the SciSafe Sellers an additional 626,000 shares of common stock, which are issuable to SciSafe Sellers upon SciSafe achieving certain specified revenue targets in each year from 2021 to 2024. The revenue target set for 2021 was met and, therefore, has resulted in 64,130 shares of common stock becoming issuable to the SciSafe Sellers.

The SciSafe Acquisition was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. The fair value of the contingent consideration was $3.7 million, the fair value of the net tangible assets acquired was $2.8 million, the deferred tax liability was $3.3 million, the fair value of the intangible assets acquired was $12.1 million, and the residual goodwill was $24.9 million. The fair value estimates required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Custom Biogenic Systems, Inc. Acquisition

On November 10, 2019, we entered into an Asset Purchase Agreement, by and among the Company, Arctic Solutions, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, and Custom Biogenic Systems, Inc., a Michigan corporation (“CBS Seller”), pursuant to which we agreed to purchase from the CBS Seller substantially all of CBS Seller’s assets, properties and rights (the “CBS Acquisition”). The CBS Seller, a privately held company with operations located near Detroit, Michigan, designs and manufactures liquid nitrogen laboratory freezers and cryogenic equipment and also offers a related cloud-based monitoring system that continuously assesses biologic sample storage conditions and alerts equipment owners if a fault condition occurs. The Acquisition closed on November 12, 2019.

In connection with the CBS Acquisition, we paid to CBS Seller a base payment in the amount of $15.0 million, consisting of a cash payment of $11.0 million paid at the closing of the CBS Acquisition, less a cash holdback escrow of $550,000 to satisfy certain indemnification claims, and an aggregate number of shares of our common stock, with an aggregate fair value equal to $4.0 million, less a holdback escrow of shares of Common Stock with an aggregate value equal to $3.0 million to satisfy potential payments related to any product liability claims outstanding as of March 13, 2019 and potential earnout payments in calendar years 2020, 2021, 2022, 2023 and 2024 of up to an aggregate of, but not exceeding, $15.0 million payable to CBS Seller upon achieving certain specified revenue targets in each year for certain product lines. The revenue targets set for 2020 and 2021 were not met and no amounts were paid or are considered payable for the earnouts related to those years.

The CBS acquisition was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. Under the acquisition method of accounting, the acquired assets and liabilities assumed from CBS were recorded as of the acquisition date, at their fair values, and consolidated with BioLife. The fair value of the net tangible assets acquired was $6.0 million, the fair value of the identifiable intangibles was $6.8 million, and the residual goodwill was $3.1 million. The fair value estimates required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

SAVSU Technologies, Inc. Acquisition

On August 7, 2019, the Company consummated the acquisition (the "SAVSU Acquisition") of the remaining shares of SAVSU Technologies, Inc., a Delaware corporation, pursuant to a Share Exchange Agreement (the "Exchange Agreement") by and among the Company, SAVSU and SAVSU Origin LLC, a Delaware limited liability company ("Origin"). Pursuant to the Exchange Agreement, Origin agreed to transfer to the Company and the Company agreed to acquire from Origin 8,616 shares of common stock of SAVSU, representing the remaining 56% of the outstanding shares of SAVSU that the Company did not own, in exchange for 1,100,000 shares of common stock of the Company. On August 8, 2019, the Company completed the SAVSU Acquisition, and SAVSU became a wholly owned subsidiary of the Company.

SAVSU is a leading developer and supplier of next generation cold chain management tools for CGT. The evo® cloud connect platform allows biologic products to be traced and tracked in real time. Our evo platform consists of rentable cloud connected shippers and evo technology tracking software provides real-time information on geolocation, payload temperature, ambient temperature, tilt of shipper, humidity, altitude, and real-time alerts when a shipper has been opened. Our internally developed evo software allows customers to customize alert notifications both in data measurements and user requirements. The evo Dry Vapor Shipper ("DVS") is specifically marketed to CGT companies. The evo DVS has improved form factor and ergonomics over the traditional dewar, including extended thermal performance, reduced liquid nitrogen recharge time, improved payload extractors and ability to maintain temperature for longer periods on its side. The evo DVS does not require to be shipped in a pallet format, enabling shipping on narrow-bodied aircraft which is not an option for competitors who use palletized shipments. Our integrated system of internal and external packing innovations reduces risk of payload breakage due to shock while in transportation.

The Company paid to Origin 1,100,000 shares of unregistered common stock totaling $19.9 million (based on a share price of $18.12 at the time of acquisition) for the 56% we did not previously own.

The SAVSU Acquisition was accounted for as a purchase of a business under ASC 805, *Business Combinations*. Under the acquisition method of accounting, the acquired assets and liabilities assumed from SAVSU were recorded as of the acquisition date, at their fair values, and consolidated with BioLife. The fair value of the net tangible assets acquired was $4.2 million, the fair value of the identifiable intangibles was $12.2 million, and the residual goodwill was $19.5 million. The fair value estimates required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Astero Bio Corporation Acquisition

On April 1, 2019, BioLife completed the acquisition of all the outstanding shares of Astero (the "Astero Acquisition"). Astero's ThawSTAR product line is comprised of a family of automated thawing devices for frozen cell and gene therapies packaged in cryovials and cryobags. The products improve the quality of administration of high-value, temperature-sensitive biologic therapies to patients by standardizing the thawing process and reducing the risks of contamination and overheating, which are inherent with the use of traditional water baths.

In connection with the Astero Acquisition, the Company paid a base payment in the amount of $12.5 million consisting of an initial cash payment of $8.0 million at the closing of the transactions contemplated by the Purchase Agreement, subject to adjustment for working capital, net debt and transaction expenses, and a deferred cash payment that was paid into escrow of $4.5 million payable upon the earlier of Astero meeting certain product development milestones or one year after the date of the Closing. In addition to the consideration paid, the sellers were eligible to receive earnout payments in calendar years 2021, 2020, and 2019 of up to an aggregate of $3.5 million, which would have been payable upon Astero achieving certain specified revenue targets in each year and a separate earnout payment of $5.0 million for calendar year 2021 which would have been payable upon Astero achieving a cumulative revenue target over the three-year period from 2019 to 2021. In the second quarter of 2020 we paid $483,000 for the earnout related to 2019 revenues. Revenue targets for 2020, 2021, and the cumulative period from 2019 to 2021 were not met and no amounts were paid or are considered payable for the earnouts related to those years.

The Astero acquisition was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. Under the acquisition method of accounting, the assets acquired and liabilities assumed from Astero were recorded as of the acquisition date, at their respective fair values, and consolidated with those of BioLife. The fair value of the contingent consideration of $1.5 million was determined using an option pricing model. The fair value of the net tangible assets acquired was $324,000, the fair value of the intangible assets acquired was $4.1 million, and the residual goodwill was $9.5 million. The fair value estimates required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Critical accounting policies and estimates

We have identified the policies and estimates below as being critical to our business operations and the understanding of our results of operations. These policies require management's most difficult, subjective or complex judgements, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. The impact of any associated risks related to these policies on our business operations are discussed throughout "Management's Discussion and Analysis of Financial Condition," including in the "Results of Operations" section, where such policies affect our reported and expected financial results. Although we believe that our estimates, assumptions, and judgements are reasonable, they are based upon information presently available. Actual results may differ significantly from these estimates under different assumptions, judgments, or conditions.

Revenue recognition

To determine revenue recognition for contractual arrangements that we determine are within the scope of Financial Accounting Standards Board ("FASB") Topic 606, *Revenue from Contracts with Customers*, we perform the following five steps: (i) identify each contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to our performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy the relevant performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. Contracts with customers may contain multiple performance obligations. For such arrangements, the transaction price is allocated to each performance obligation based on the estimated relative standalone selling prices of the promised products or services underlying each performance obligation. The Company determines standalone selling prices based on the price at which the performance obligation is sold separately. If the standalone selling price is not observable through past transactions, the Company estimates the standalone selling price, taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations. Payment terms and conditions vary, although terms generally include a requirement of payment within 30 to 90 days.

The Company primarily recognizes product revenues, service revenues, and rental revenues. Product revenues are generated from the sale of biopreservation media, ThawSTAR, and freezer products. We recognize product revenue, including shipping and handling charges billed to customers, when we transfer control of our products to our customers. Shipping and handling costs are classified as part of cost of product revenue in the Consolidated Statement of Operations. Service revenues are generated from the storage of biological and pharmaceutical materials. We recognize service revenues over time as services are performed or ratably over the contract term. To the extent the transaction price includes variable consideration, the Company estimates the amount of variable consideration that should be included in the transaction price utilizing the expected value method or the most likely amount method, depending on the facts and circumstances relative to the contract. When determining the transaction price of a contract, an adjustment is made if payment from a customer occurs either significantly before or significantly after performance, resulting in a significant financing component. Applying the practical expedient in paragraph 606-10-32-18, the Company does not assess whether a significant financing component exists if the period between when the Company performs its obligations under the contract and when the customer pays is one year or less. None of the Company's contracts contained a significant financing component or variable consideration as of and during the years ended December 31, 2021, 2020, and 2019.

The Company also generates revenue from the leasing of our property, plant, and equipment, operating right-of-use assets, and evo cold chain systems to customers pursuant to service contracts or rental arrangements entered into with the customer. Revenue from these arrangements is not within the scope of FASB ASC Topic 606 as it is within the scope of FASB ASC Topic 842, *Leases*. All customers leasing shippers currently do so under month-to-month rental arrangements. We account for these rental transactions as operating leases and record rental revenue on a straight-line basis over the rental term.

Business combinations

Amounts paid for acquisitions are allocated to the tangible and intangible assets acquired and liabilities assumed, if any, based on their fair values at the dates of acquisition. This purchase price allocation process requires management to make significant estimates and assumptions with respect to intangible assets and deferred revenue obligations. The fair value of identifiable intangible assets is based on detailed valuations that use information and assumptions determined by management. Any excess of purchase price over the fair value of the net tangible and intangible assets acquired is allocated to goodwill. While we use our best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date as well as any contingent consideration, where applicable, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to our Consolidated Statements of Operations. The fair value of contingent consideration includes estimates and judgments made by management regarding the probability that future contingent payments will be made, the extent of royalties to be earned in excess of the defined minimum royalties, etc. Management updates these estimates and the related fair value of contingent consideration at each reporting period based on the estimated probability of achieving the earnout targets and applying a discount rate that captures the risk associated with the expected contingent payments. To the extent our estimates change in the future regarding the likelihood of achieving these targets we may need to record material adjustments to our accrued contingent consideration. Changes in the fair value of contingent consideration are recorded in our Consolidated Statements of Operations. We use the income approach to determine the fair value of certain identifiable intangible assets including customer relationships and developed technology. This approach determines fair value by estimating after-tax cash flows attributable to these assets over their respective useful lives and then discounting these after-tax cash flows back to a present value. We base our assumptions on estimates of future cash flows, expected growth rates, expected trends in technology, etc. We base the discount rates used to arrive at a present value as of the date of acquisition on the time value of money and certain industry-specific risk factors. We believe the estimated purchased customer relationships, developed technologies, trademarks, tradenames, patents, and in process research and development amounts so determined represent the fair value at the date of acquisition and do not exceed the amount a third party would pay for the assets.

Intangible assets and goodwill

Intangible assets

Intangible assets with a definite life are amortized over their estimated useful lives using the straight-line method and the amortization expense is recorded within intangible asset amortization in the Consolidated Statements of Operations. If the estimate of a definite-lived intangible asset's remaining useful life is changed, the remaining carrying amount of the intangible asset is amortized prospectively over the revised remaining useful life. Definite-lived intangible assets and their related estimated useful lives are reviewed at least annually to determine if any adverse conditions exist that would indicate the carrying value of these assets may not be recoverable. The Company determined that no adverse conditions existed that would indicate that the carrying value of these assets may not be recoverable.

Indefinite-lived intangibles are carried at the initially recorded fair value less any recognized impairment. In-process research and development ("IPR&D") is initially capitalized at fair value as an intangible asset with an indefinite life. When the IPR&D project is complete, it is reclassified as a definite-lived intangible asset and is amortized over its estimated useful life. If an IPR&D project is abandoned, a charge would be recorded for the value of the related intangible asset to our Consolidated Statement of Operations in the period it is abandoned. Indefinite-lived intangibles are tested annually for impairment. Impairment assessments are conducted more frequently if certain conditions exist, including a change in the competitive landscape, any internal decisions to pursue new or different technology strategies, a loss of a significant customer, or a significant change in the marketplace, including changes in the prices paid for the Company's products or changes in the size of the market for the Company's products. If impairment indicators are present, the Company determines whether the underlying intangible asset is recoverable through estimated future undiscounted cash flows. If the asset is not found to be recoverable, it is written down to the estimated fair value of the asset based on the sum of the future discounted cash flows expected to result from the use and disposition of the asset. The Company performed a quantitative impairment test of one of the IPR&D assets acquired during 2021 during the fourth quarter of 2021 and determined that no impairment existed. The Company performed a qualitative test for the other IPR&D assets acquired during 2021 and determined that no impairment existed.

Goodwill

We test goodwill for impairment on an annual basis, and between annual tests if events and circumstances indicate it is more likely than not that the fair value of our goodwill is less than its carrying value. Events that would indicate impairment and trigger an interim impairment assessment include, but are not limited to, current economic and market conditions, including a decline in the Company's market capitalization, a significant adverse change in legal factors, business climate or operational performance of the business, and an adverse action or assessment by a regulator. Goodwill is tested for impairment in the fourth quarter of each year, or more frequently as warranted by events or changes in circumstances mentioned above. Accounting guidance also permits an optional qualitative assessment for goodwill to determine whether it is more likely than not that the carrying value of a reporting unit exceeds its fair value. If, after this qualitative assessment, we determine that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then no further quantitative testing would be necessary. A quantitative assessment is performed if the qualitative assessment results in a more likely than not determination or if a qualitative assessment is not performed. The quantitative assessment considers whether the carrying amount of a reporting unit exceeds its fair value, in which case an impairment charge is recorded to the extent the reporting unit's carrying value exceeds its fair value. The Company operates as one reporting unit as of the goodwill impairment measurement date in the fourth quarter of 2021. As of the testing date and the period after that date through the issuance date of our financial statements, the Company has observed no indicators of potential goodwill impairment at any point during the period based on its qualitative assessment.

Warranty guarantees

Our freezer and thaw and certain cell processing products are warranted to provide assurance that the product will function as expected and to ensure customer confidence in design and overall quality. Warranty coverage on our products is generally provided for specified periods of time and on select products' hours of usage, and generally covers parts, labor, and other expenses for non-maintenance repairs. Warranty coverage generally does not cover operator abuse or improper use.

At the time of sale, we recognize expense and record a warranty accrual by product line for estimated costs in connection with forecasted future warranty claims. Our estimate of the cost of future warranty claims is based primarily on the estimated number of products under warranty, historical average costs incurred to service warranty claims, the trend in the historical ratio of warranty claims for each part covered, and the historical length of time between the sale and resulting warranty claim. If applicable, historical claims experience may be adjusted for known product design improvements or for the impact of unusual product quality issues. We periodically assess the adequacy of our warranty accruals based on changes in our estimates and assumptions and record any necessary adjustments if the cost of actual claim experience differs from our estimate and indicates that adjustments to our warranty accrual are necessary. Factors that could have an impact on actual future claims and our warranty accrual include, but are not limited to, items such as performance of new products; product failure rates; factors impacting product usage, such as changes in sales volumes and shifts in product mix; manufacturing quality and product design issues, including significant manufacturing or design defects not discovered until after the product is delivered to customers; higher or lower than expected service and component part costs to satisfactorily address the repair, and, if applicable, changes to the warranty coverage periods. Additionally, from time to time, we also establish warranty accruals for our estimate of the costs necessary to settle major rework campaigns on a product-specific basis during the period in which the circumstances giving rise to the major rework campaign become known and when the costs to satisfactorily address the situation are both probable and estimable. The warranty accrual for the cost of a major rework campaign is primarily based on an estimate of the cost to repair each affected unit and the number of affected units expected to be repaired.

We believe that our analysis of historical warranty claim trends and knowledge of potential manufacturing and/or product design improvements or issues provide sufficient information to establish a reasonable estimate for the cost of future warranty claims at the time of sale and our warranty accruals as of the date of our Consolidated Balance Sheets. We believe that our $9.4 million warranty accrual as of December 31, 2021 is adequate and historically has been adequate; however, due to the inherent uncertainty in the accrual estimation process, including forecasting future warranty claims, costs associated with servicing future warranty claims, and unexpected major rework campaigns that may arise in the future, our actual warranty costs incurred may differ from our warranty accrual estimate. An unexpected increase in warranty claims and/or in the costs associated with servicing those claims would result in an increase in our warranty accruals and a decrease in our net earnings.

Contingent consideration

We estimate the acquisition date fair value of the acquisition-related contingent consideration using various valuation approaches, including option pricing models and Monte Carlo simulations, as well as significant unobservable inputs, reflecting the Company's assessment of the assumptions market participants would use to value these liabilities. The fair value of the contingent consideration is remeasured each reporting period, with any change in the value recorded in our Consolidated Statements of Operations as change in fair value of contingent consideration.

Stock-based compensation

We measure and record compensation expense using the applicable accounting guidance for share-based payments related to stock options, time-based restricted stock, market-based restricted stock awards and performance-based awards granted to our directors and employees. The fair value of stock options is determined by using the Black-Scholes option-pricing model. The fair value of market-based restricted stock awards is estimated, at the date of grant, using the Monte Carlo Simulation model. The Black-Scholes and Monte Carlo Simulation valuation models incorporate assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. In valuing our stock options and market-based stock awards, significant judgment is required in determining the expected volatility of our common stock. Expected volatility for stock options is based on the historical and implied volatility of our own common stock while the volatility for our market-based restricted stock awards is based on the historical volatility of our own stock and the stock of companies within our defined peer group. Further, our expected volatility may change in the future, which could substantially change the grant-date fair value of future awards and, ultimately, the expense we record. The fair value of restricted stock, including performance awards, without a market condition is estimated using the current market price of our common stock on the date of grant.

We expense stock-based compensation for stock options, restricted stock awards, and performance awards over the requisite service period. For awards with only a service condition, we expense stock-based compensation using the straight-line method over the requisite service period for the entire award. For awards with a market condition, we expense over the vesting period regardless of the value that the award recipients will ultimately receive.

Provision for income taxes

The assessment regarding whether a valuation allowance is required considers both positive and negative evidence when determining whether it is more likely than not that deferred tax assets are recoverable. In making this assessment, significant weight is given to evidence that can be objectively verified. In its evaluation, the Company considered its cumulative loss and its forecasted losses in the near-term as significant negative evidence. Based upon a review of the four sources of income identified within ASC 740, *Accounting for Income Taxes*, the Company determined that the Company's recorded deferred tax liabilities as of December 31, 2021 would be a sufficient source of taxable income to realize all of its deferred tax assets except for a portion of its net operating loss carryforwards. As a result, a partial valuation allowance on its deferred tax assets was recorded as of December 31, 2021. The Company will continue to assess the realizability of its assets going forward and will adjust the valuation allowance as needed.

The Company determines its uncertain tax positions based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be sustained upon examination by the relevant income tax authorities. The Company is generally subject to examination by U.S. federal and local income tax authorities for all tax years in which loss carryforward is available.

The Company applies judgment in the determination of the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. As of December 31, 2021, the Company has an unrecorded tax benefit of $255,000 related to tax attributes being carried forward. The Company is generally subject to examination by U.S. federal and local income tax authorities for all tax years in which loss carryforward is available.

As of December 31, 2021, the Company had U.S. federal net operating loss ("NOL") carryforwards of approximately $120.6 million, which is available to reduce future taxable income. Approximately $39.5 million of NOL will expire from 2022 through 2037, and approximately $81.1 million of NOL will be carried forward indefinitely. The NOL carryforwards are subject to an annual limitation in the event of certain cumulative changes in the ownership interest. This limits the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. Subsequent ownership changes may further affect the limitation in future years.

Recent accounting standards update

See Note 1: "*Organization and significant accounting policies – recent accounting pronouncements*," to our Consolidated Financial Statements included in this report for more information.

Results of operations

The following discussion of the financial condition and results of operations should be read in conjunction with the accompanying Consolidated Financial Statements and the related footnotes thereto.

Revenue

Revenues diversified significantly in the year ended December 31, 2021 as compared to the year ended December 31, 2020. This diversification was primarily driven by the acquisition of Global Cooling and Sexton in May and September of 2021, respectively. Most notably, the Company's freezer and thaw revenues increased by 318% as a result of the acquisition of Global Cooling and growth in LN2 freezer sales. Revenues also diversified significantly in the year ended December 31, 2020 as compared to the year ended December 31, 2019. This diversification was primarily driven by the acquisition of SciSafe in October of 2020 and the recognition of a full year of revenue from the acquisition of Custom Biogenic Systems in November of 2019. Given the Company's acquisition strategy, we expect product diversification to continue in future periods as the Company executes its strategy and makes additional acquisitions.

Revenue concentrations with one customer increased to 17% in the year ended December 31, 2021 from 13% from a different customer in the year ended December 31, 2020, primarily as a result of concentrations of sales to a prominent international distributor. Revenue concentrations with one customer decreased to 13% in the year ended December 31, 2020 from 15% from the same customer in the year ended December 31, 2019, primarily due to the expansion of the Company's customer base through the aforementioned acquisitions. We expect customer concentrations to diminish as revenues increase and we expand our presence in the global markets in which we participate.

Revenue for years ended December 31, 2021, 2020, and 2019 were comprised of the following:

	Year Ended December 31,			2021 vs. 2020		2020 vs. 2019	
(In thousands, except percentages)	**2021(1)**	**2020(2)**	**2019(3)**	**$ Change**	**% Change**	**$ Change**	**% Change**
Product revenue							
Freezer and thaw	$ 56,620	$ 13,548	$ 3,312	$ 43,072	318%	$ 10,236	309 %
Cell processing	44,965	30,946	23,367	14,019	45%	7,579	32 %
Storage and cold chain services	328	46	165	282	613%	(119)	(72)%
Service revenue							
Storage and cold chain services	9,817	1,752	-	8,065	460%	1,752	- %
Rental revenue							
Storage and cold chain services	7,426	1,795	527	5,631	314%	1,268	241 %
Total revenue	$ 119,156	$ 48,087	$ 27,371	$ 71,069	148%	$ 20,716	76 %

(1) 2021 revenue includes product revenue related to Global Cooling from May 3, 2021 through December 31, 2021 and product revenue related to Sexton from September 1, 2021 through December 31, 2021.
(2) 2020 revenue includes service revenue related to SciSafe from October 1, 2020 through December 31, 2020.
(3) 2019 revenue includes product revenue related to Astero from April 1, 2019 through December 31, 2019; rental revenue related to SAVSU from August 8, 2019 through December 31, 2019; and product revenue related to CBS from November 12, 2019 through December 31, 2019.

In the year ended December 31, 2021, revenue increased by $71.1 million, or 148%, from the year ended December 31, 2020. Of this increase, $40.9 million, or 85%, was driven by inorganic growth from the acquisitions of Global Cooling and Sexton. The remaining $30.2 million, or 63%, of the increase was driven primarily by organic growth in our biological and pharmaceutical storage and biopreservation media product lines of $13.0 million and $12.2 million, respectively.

In the year ended December 31, 2020, revenue increased by $20.7 million, or 76%, from the year ended December 31, 2019. Of this increase, $1.8 million, or 6%, was driven by inorganic growth from the acquisition of SciSafe. The remaining $18.9 million, or 70%, of the increase was driven primarily by organic growth in our biopreservation media product line of $7.6 million and the recognition of a full year of revenue from the acquisition of Custom Biogenic Systems in November of 2019, which contributed $9.7 million of incremental revenue in 2020.

Revenue is impacted by the relatively high degree of customer concentration, the timing of orders, the development efforts of our customers or end-users and regulatory approvals for biologics that incorporate our products, which may result in significant quarterly fluctuations. Such fluctuations are expected, but they may not be predictive of future revenue or otherwise indicative of a trend.

Costs and operating expenses

Total costs and operating expenses for years ended December 31, 2021, 2020, and 2019 were comprised of the following:

	Year Ended December 31,			2021 vs. 2020		2020 vs. 2019	
(In thousands, except percentages)	**2021**	**2020**	**2019**	**$ Change**	**%**	**$ Change**	**%**
Cost of product, rental, and service revenue	$ 82,108	$ 20,646	$ 8,760	$ 61,462	298%	$ 11,886	136 %
Research and development	11,821	6,720	3,168	5,101	76%	3,552	112 %
Sales and marketing	14,006	6,413	4,701	7,593	118%	1,712	36 %
General and administrative	32,448	14,607	8,893	17,841	122%	5,714	64 %
Intangible asset amortization	8,202	3,033	1,079	5,169	170%	1,954	181 %
Acquisition costs	1,636	668	940	968	145%	(272)	(29)%
Change in fair value of contingent consideration	2,875	1,575	50	1,300	83%	1,525	3,050 %
Total operating expenses	$ 153,096	$ 53,662	$ 27,591	$ 99,434	185%	$ 26,071	94 %

Cost of product, rental, and service revenue

In the year ended December 31, 2021, cost of product, rental, and service revenue increased $61.5 million or 298% from the year ended December 31, 2020. Of this increase, $44.2 million, or 214%, was driven by inorganic growth from the acquisitions of Global Cooling and Sexton. The remaining $17.3 million, or 84%, of the increase was driven primarily by organic growth in our biopreservation media and biological and pharmaceutical storage product lines.

In the year ended December 31, 2020, cost of product, rental, and service revenue increased $11.9 million or 136% from the year ended December 31, 2019. Of this increase, $1.2 million, or 14%, was driven by inorganic growth from the acquisition of SciSafe. The remaining $10.7 million, or 122%, of the increase driven primarily by organic growth in our biopreservation media product line and the recognition of a full year of costs from the acquisition of Custom Biogenic Systems in November of 2019.

We expect the cost of product, rental, and service revenue to fluctuate in future quarters based on production volumes, product mix, and the impact of any future acquisitions.

Cost of product, rental, and service revenue as a percentage of revenue was 69%, 43%, and 32% for the years ended December 31, 2021, 2020, and 2019, respectively. Cost of product, rental, and service revenue in the years ended December 31, 2021, 2020, and 2019 includes $1.1 million, $411,000, and $289,000, respectively, in inventory step-up expense recorded in the purchase accounting of our Global Cooling, Custom Biogenic Systems, and AsteroBio acquisitions.

The increase in cost of product, rental, and service revenue as a percentage of revenue to 69% in the year ended December 31, 2021 from 43% in the year ended December 31, 2020 is primarily a result of the acquisitions of Global Cooling and Sexton, which were acquired in May and September of 2021, respectively. Of the increase noted, $43.0 million was recognized by Global Cooling and $1.2 million was recognized by Sexton. $9.8 million of the costs recognized by Global Cooling were incurred in relation to warranty expenses. In the third and fourth quarters of 2021, Global Cooling experienced supply chain disruptions related to sheet metal and electronic components that incorporate semiconductor chips that led to increased supplier pricing and delays in production that led to a lower margin profile than we believe to otherwise be achievable. We believe that the supply chain risks that were present in these quarters have been significantly mitigated through the diversification of sheet metal suppliers and strategic agreements with electronic component suppliers.

The increase in cost of product, rental, and service revenue as a percentage of revenue to 43% in the year ended December 31, 2020 from 32% in the year ended December 31, 2019 is primarily a result of the acquisition of SciSafe, which was acquired in October of 2020 and the recognition of a full year of costs from the acquisition of Custom Biogenic Systems in November of 2019. Of the increase noted, SciSafe recognized $1.2 million, whereas the incremental costs recognized by Custom Biogenic Systems in the year ended December 31, 2021 amounted to $7.2 million.

Research and development expenses

During the years ended December 31, 2021, 2020, and 2019, research and development ("R&D") expense consisted primarily of personnel-related costs, consulting, and external product development services.

R&D expense increased $5.1 million in the year ended December 31, 2021, or 76%, compared with the year ended December 31, 2020. The increase is primarily due to in-process research and development costs associated with the freezer technology acquired in the acquisition of Global Cooling.

R&D expense increased $3.6 million in the year ended December 31, 2020, or 112%, compared with the year ended December 31, 2019. The increase is primarily due to recognition of a full year of research and development activity from the acquisitions of Custom Biogenic Systems, SAVSU, and AsteroBio in the year ended December 31, 2019. Additionally, the Company invested increased levels of capital into the refinement of its cold chain shipper products in the year ended December 31, 2020.

We expect our R&D expense to increase as we continue to expand, develop, and refine our product lines.

Sales and marketing expenses

Sales and marketing expense ("S&M") consisted primarily of personnel-related costs, stock compensation expense, trade shows, sales commissions and advertising.

S&M expense increased $7.6 million in the year ended December 31, 2021, or 118%, compared with the year ended December 31, 2020. Of this increase, $4.4 million, or 68%, was incurred by Global Cooling. The remaining costs primarily relate to additional headcount of $1.2 million, commission expense associated with organic revenue growth of $413,000, and stock-based compensation of $691,000.

S&M expense increased $1.7 million in the year ended December 31, 2020, or 36%, compared with the year ended December 31, 2019. Of this increase, $336,000 was composed of incremental costs associated with a full year's ownership of Custom Biogenic Systems, $306,000 was composed of incremental costs associated with a full year's ownership of SAVSU, and $139,000 was composed of incremental costs associated with a full year's ownership of AsteroBio. The remaining costs primarily relate to additional headcount of $506,000.

We expect S&M expense to increase, as we expand our product line offerings and our presence in the markets in which we participate.

General and administrative expenses

General and administrative ("G&A") expense consists primarily of personnel-related expenses, non-cash stock-based compensation for administrative personnel and members of the board of directors, professional fees, such as accounting and legal, and corporate insurance.

In the year ended December 31, 2021, G&A expenses increased by $17.8 million, or 122%, compared with the year ended December 31, 2020. Of this increase, $4.2 million, or 29%, was incurred by Global Cooling. The remaining costs primarily relate to stock-based compensation awarded to attract and retain talent of $4.4 million, accounting fees of $1.4 million, insurance expense of $524,000, and the continued buildout of our administrative infrastructure, predominantly through increased headcount of $4.6 million, to support expected future growth.

In the year ended December 31, 2020, G&A expenses increased by $5.7 million, or 64%, compared with the year ended December 31, 2019. Of this increase, $1.3 million, or 22%, was composed of incremental costs associated with a full year's ownership of Custom Biogenic Systems and $471,000, or 8%, associated with a full year's ownership of SAVSU. The remaining costs primarily relate to stock-based compensation awarded to attract and retain talent and the continued buildout of our administrative infrastructure, predominantly through increased headcount, to support expected future growth.

We expect G&A expense to increase as we continue to execute on our growth strategy.

Intangible asset amortization expense

Amortization expense consists of charges related to the amortization of intangible assets associated with the acquisitions of Global Cooling, Custom Biogenic Systems, SciSafe, SAVSU, and AsteroBio in which we acquired definite-lived intangible assets.

Acquisition costs

Acquisition costs consist of legal, accounting, third-party valuations, and other due diligence costs related to our Global Cooling, Custom Biogenic Systems, SciSafe, Sexton, SAVSU, and AsteroBio acquisitions.

Change in fair value of contingent consideration

Change in fair value of contingent consideration consists of changes in estimated fair value of our potential earnouts related to our SciSafe, CBS, and Astero acquisitions.

Other income and expenses

Total other income and expenses for the years ended December 31, 2021, 2020, and 2019 were comprised of the following:

	Year Ended December 31,			2021 vs. 2020		2020 vs. 2019	
(In thousands, except percentages)	**2021**	**2020**	**2019**	**$ Change**	**% Change**	**$ Change**	**% Change**
Change in fair value of warrant liability	$ (121)	$ 3,601	$ (12,835)	$ (3,722)	(103)%	$ 16,436	(128)%
Change in fair value of investments	-	1,319	-	(1,319)	(100)%	1,319	- %
Interest (expense) income, net	(432)	58	501	(490)	(845)%	(443)	(88)%
Other income (expense)	289	-	(13)	289	- %	13	(100)%
Loss from equity-method investment in SAVSU	-	-	(739)	-	- %	739	(100)%
Gain on acquisition of SAVSU	-	-	10,108	-	- %	(10,108)	(100)%
Gain on acquisition of Sexton Biotechnologies, Inc.	6,451	-	-	6,451	- %	-	- %
Total other income (expense), net	$ 6,187	$ 4,978	$ (2,978)	$ 1,209	24 %	$ 7,956	(267)%

Change in fair value of warrant liability. Reflects the changes in fair value associated with the periodic “mark-to-market” valuation of certain warrants that were issued in 2014. See Note 1: “*Organization and Significant Accounting Policies*” of our accompanying Consolidated Financial Statements “Certain Warrants which have Features that may Result in Cash Settlement” for more information.

Change in fair value of investments. Reflects the fair value adjustments to our investment in iVexSol convertible debt prior to its conversion to Series A-1 Preferred Stock. The fair value was determined by expected term of the instrument, the underlying credit worthiness of iVexSol and the valuation of various embedded features in the note, which were based on future financings of iVexSol. The expected term range of our estimate was 1 to 5 years, with projected weighting over this term.

Interest (expense) income, net. Interest expense incurred in the year ended December 31, 2021 related primarily to three term loans that were assumed in the acquisition of Global Cooling. These term loans were refinanced in the fourth quarter of 2021 to obtain more favorable interest rates to the Company. We also earn interest on cash held in our money market account. Despite having a higher average cash balance in the year ended December 31, 2020 as compared to the year ended December 31, 2019, yields in our money market account dropped steeply between February and March of 2020 due to reduced interest rates set by the United States Federal Reserve, causing interest income to be significantly lower for the remainder of 2020 and the year ended December 31, 2021.

Loss on equity method investment. Reflects the non-cash loss associated with our proportionate share of the net loss in our investment in SAVSU prior to our acquisition of the remaining shares of SAVSU and subsequent consolidation of SAVSU in our financial statements.

Gain on acquisition of SAVSU. Reflects the non-cash gain associated with our equity investment in SAVSU due to the step-acquisition of the remaining shares of SAVSU and subsequent consolidation of SAVSU in our financial statements.

Gain on acquisition of Sexton Biotechnologies, Inc. Reflects the non-cash gain associated with our investment in Sexton due to the step-acquisition of the remaining shares of Sexton and subsequent consolidation of Sexton in our financial statements.

Income Tax Benefit

Income tax benefit for the years ended December 31, 2021, 2020 and 2019 was as follows:

	Year Ended December 31,			2021 vs. 2020		2020 vs. 2019	
(In thousands, except percentages)	**2021**	**2020**	**2019**	**$ Change**	**% Change**	**$ Change**	**% Change**
Income tax benefit	$ 20,118	$ 3,264	$ 1,541	$ 16,854	516%	$ 1,723	112%
Effective tax rate	72%	547%	47%				

The income tax benefit recognized in the year ended December 31, 2021 primarily related to losses generated in 2021 and the recognition of the release of our valuation allowance related to the acquisition of Global Cooling. Our effective tax rate for 2021 was higher than the U.S. statutory rate of 21% primarily due to windfall benefits on stock compensation, 162(m) limitations on executive compensation, and the change in our valuation allowance.

The income tax benefit recognized in the year ended December 31, 2020 primarily related to the partial release of our valuation allowance related to the acquisition of SciSafe. Our effective tax rate in 2020 was significantly higher than the U.S. statutory rate of 21% primarily due to windfall benefits on stock compensation, changes in the fair value of our warrant liability, changes in the fair value of contingent consideration, and the expiration of net operating losses.

The income tax benefit recognized in the year ended December 31, 2019 primarily related to the recognition of partial release of our valuation allowance related to the acquisitions of SAVSU and Astero. Our effective tax rate was higher than the U.S. statutory rate of 21% due primarily to changes in the fair value of our warrant liability, windfall benefits on stock compensation, and gain recognized on our acquisition of SAVSU.

Liquidity and capital resources

We believe our cash and cash equivalents, cash generated from operations, and credit lines will satisfy, for at least the next twelve months, our liquidity requirements, both globally and domestically, including the following: working capital needs, capital expenditures, business acquisitions, contractual obligations, commitments, principal and interest payments on debt, and other liquidity requirements associated with our operations. We have not identified any material liquidity concerns as a result of the COVID-19 pandemic.

On December 31, 2021, we had $69.9 million in cash and cash equivalents, compared to $90.4 million as of December 31, 2020. The decrease in cash is primarily due to the payoff of debt and liabilities acquired in the Global Cooling transaction, the use of capital for funding operations, and the expansion of our storage services footprint both domestically and in the Netherlands.

On May 22, 2020, the Company closed on a share purchase agreement with Casdin Capital LLC, a current stockholder of the Company, pursuant to which Casdin invested $20.0 million in the Company at $10.50 per share.

On July 7, 2020, the Company closed its public offering of 5,951,250 shares of common stock at the public offering price of $14.50 per share, which includes the shares purchased pursuant to the exercise in full of the underwriters' option to purchase up to an additional 776,250 shares of its common stock. The net proceeds from the public offering to BioLife, after deducting underwriting discounts and commissions and estimated underwriter offering expenses of $6.1 million, were approximately $80.2 million.

On October 1, 2020, we acquired SciSafe for $15.0 million in cash, 611,683 shares of common stock, and up to 626,000 additional shares of common stock as contingent consideration. 64,130 of the additional shares were earned as of December 31, 2021 and will be issued in the year ended December 31, 2022.

Cash flows

	Year Ended December 31,			2021 vs. 2020		2020 vs. 2019	
(In thousands)	**2021**	**2020**	**2019**	**$ Change**	**% Change**	**$ Change**	**% Change**
Operating activities	$ (4,593)	$ 6,645	$ 1,213	$ (11,238)	(169)%	$ 5,432	448 %
Investing activities	(13,192)	(24,715)	(27,018)	11,523	(47)%	2,303	(9)%
Financing activities	(2,778)	102,078	1,596	(104,856)	(103)%	100,482	6,296 %
Net (decrease) increase in cash and cash equivalents	$ (20,563)	$ 84,008	$ (24,209)	$ (104,571)	(124)%	$ 108,217	(447)%

Operating activities

In the year ended December 31, 2021, our operating activities used cash of $4.6 million reflecting net loss of $7.6 million and non-cash charges totaling $6.6 million primarily related to depreciation, amortization, changes in the fair value of investments, changes in fair value of contingent consideration, deferred income tax benefit, stock-based compensation, and non-cash lease charges. An increase in accounts receivable of $10.1 million was primarily driven by the 148% year-to-date increase in revenues. The remaining cash provided by operating activities resulted from favorable changes in various other working capital accounts.

In the year ended December 31, 2020, our operating activities provided cash of $6.6 million reflecting net income of $2.7 million and non-cash charges totaling $5.8 million primarily related to depreciation, amortization, changes in the fair value of investments, changes in fair value of contingent consideration, income tax benefit related to the acquisition of SciSafe, change in the fair value of the warrant liability, and stock-based compensation charges. An increase in accounts receivable of $1.8 million was primarily driven by the 76% year-to-date increase in revenues and an increase in inventory used $629,000 to support future revenue. These cash items used for operating activities were offset by cash items provided by operating activities that included an increase in accrued liabilities of $780,000. The remaining cash used in operating activities resulted from unfavorable changes in various other working capital accounts.

In the year ended December 31, 2019, our operating activities provided cash of $1.2 million, reflecting a net loss of $1.7 million and non-cash charges totaling $7.3 million primarily related to depreciation, amortization, gain on acquisition of SAVSU, changes in fair value contingent consideration, income tax benefit related to the acquisition of SAVSU, fair value change in warrant liability and stock-based compensation charges. An increase in accounts receivable used $290,000 of cash and was primarily driven by the 39% year-to-date increase in revenues and an increase in inventory used $3.8 million to support future revenue. These cash items used for operating activities were offset by cash items provided by operating activities that included an increase in accounts payable of $768,000. The remaining cash used in operating activities resulted from unfavorable changes in various other working capital accounts.

Investing activities

Our investing activities used $13.2 million of cash in the year ended December 31, 2021. We acquired $1.6 million in cash in the acquisitions of Global Cooling and Sexton. Capital expenditures and purchases of assets held for rent used $14.8 million as we continue to invest in our manufacturing and storage facilities.

Our investing activities used $24.7 million of cash in the year ended December 31, 2020. We used $15.0 million in cash for the SciSafe acquisition. We also invested $1.0 million and $995,000 in our strategic investments in iVexSol and PanTHERA, respectively. Capital expenditures, deposits on future capital expenditures, purchases of assets held for rent, and deposits made on assets held for rent used $7.8 million.

Our investing activities used $27.0 million of cash in the year ended December 31, 2019. We used $12.4 million, acquired $1.3 million, and used $11.0 million in cash for the Astero, SAVSU, and CBS acquisitions, respectively. We also invested $1.0 million and $1.5 million in our strategic investments in iVexSol and Sexton, respectively. Capital expenditures used $2.3 million in our manufacturing facilities and to increase SAVSU’s assets held for rent.

Financing activities

In the year ended December 31, 2021, cash used by financing activities was $2.8 million. We used $4.2 million to pay off the line of credit assumed in the acquisition of Global Cooling. Other significant cash flows include $1.6 million provided by lenders to finance equipment for our continued expansion, $1.4 million provided by the exercise of stock options, and $1.0 million used to pay financed insurance premiums.

In the year ended December 31, 2020, cash provided by financing activities was $102.1 million. We received $100.1 million from the sale of common shares and $1.5 million from the proceeds of warrant and stock option exercises. We used $483,000 for contingent consideration related to the Astero acquisition.

In the year ended December 31, 2019, cash provided by financing activities of $1.6 million included $1.8 million from the proceeds of warrant and stock option exercises.

Impacts of COVID-19

Our domestic and international operations have been and continue to be affected by the ongoing global pandemic of COVID-19 and the resulting volatility and uncertainty it has caused in the U.S. and international markets. During the year ended December 31, 2021, many businesses and countries, including the U.S., continued applying preventative and precautionary measures to mitigate the spread of the virus including government orders and other restrictions on the conduct of business operations.

In the year ended December 31, 2021, we experienced supply chain disruptions due to the effects of COVID-19 on our suppliers of sheet metal and electronic components that incorporate semiconductor chips. These supply chain disruptions decreased the Company's profitability as a result of increased supplier pricing and production stoppages. We believe that the supply chain risks that were present have been significantly mitigated through the diversification of sheet metal suppliers and strategic agreements with electronic component suppliers. However, we cannot be assured that a continued or prolonged global pandemic will not have other negative impacts on our manufacturing and shipping processes or our product costs. The extent to which the COVID-19 pandemic affects our future financial results and operations will depend on future developments which are highly uncertain and cannot be predicted, including the recurrence, severity and/or duration of the ongoing pandemic, and current or future domestic and international actions to contain and treat COVID-19.

We are following public and private sector policies and initiatives to reduce the transmission of COVID-19, such as the imposition of travel restrictions and the promotion of social distancing and work-from-home arrangements. We are taking a variety of measures to ensure the availability and functioning of our critical infrastructure, to promote the safety and security of our employees and to support the communities in which we operate. These measures include increasing our raw materials, manufacturing safe stock inventory for our biopreservation media and expanding availability of our biological and pharmaceutical storage, requiring remote working arrangements for employees who are not integral to physically making and shipping our products or who do not need specialized equipment to perform their work, restricting on-site visits by non-employees and implementing social distancing protocols and investing in personal protective equipment. Beginning April 2, 2020, BioLife became actively engaged in managing the company COVID-19 response and protocols in accordance with federal, state and local regulations. BioLife has mandated mask wearing for all team members on-site throughout the pandemic per the guidelines and regulations in place. COVID-19 response is actively managed through daily reporting, contact tracing and quarantine guidelines as published by the CDC and state health departments in order to maintain safe working conditions. As a part of our COVID-19 response, on-site visitors have been limited to essential visitors only in order to reduce risk of transmission. Additionally, throughout the pandemic, BioLife has encouraged positions not essential to being on-site to work remotely in order to further reduce transmission rates and potential contact.

Contractual obligations

Our cash flows from operations are dependent on a number of factors, including fluctuations in our operating results, accounts receivable collections, inventory management, and the timing of tax and other payments. As a result, the impact of contractual obligations on our liquidity and capital resources in future periods should be analyzed in conjunction with such factors.

The following summarizes certain of our contractual obligations as of December 31, 2021 and the effect such obligations are expected to have on our cash flows in future periods:

(In thousands)	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years	Total
Long-term debt, including interest[1]	$ 1,175	$ 3,618	$ 1,009	$ 2,623	$ 8,425
Operating leases[2]	3,443	6,034	4,503	8,364	22,344
Financing leases[2]	171	272	39	-	482
Purchase obligations[3]	254	507	-	-	761
Total	$ 5,043	$ 10,431	$ 5,551	$ 10,987	$ 32,012

(1) These amounts represent expected cash payments, including principal and interest. Debt obligations are described in Note 7 of the Consolidated Financial Statements.
(2) Lease obligations are described in Note 5 of the Consolidated Financial Statements.
(3) Purchase obligations are defined as agreements to purchase goods or services that are enforceable and legally binding and that specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable pricing provisions and the approximate timing of the transactions.

Purchase orders or contracts for the purchase of supplies and other goods and services are not included in the table above. We are not able to determine the aggregate amount of such purchase orders that represent contractual obligations, as purchase orders may represent authorizations to purchase rather than binding agreements. Our purchase orders are based on our current procurement or developmental needs and fulfilled by our vendors within short time horizons.

Capital requirements

Our future capital requirements will depend on many factors, including the following:

- the expansion of our cell and gene therapy tools and services business;
- the ability to sustain product revenue and profits of our cell and gene therapy products and services;
- The degree to which we implement additional automated production equipment throughout our facilities;
- our ability to acquire additional cell and gene therapy products and services;
- the scope of and progress made in our research and development activities; and
- the success of any proposed financing efforts.

Absent acquisitions of additional products, product candidates, or intellectual property, we believe our current cash balances are adequate to meet our cash needs for at least the next 12 months. We expect operating expenses in the year ending December 31, 2022 to increase as we continue to expand our CGT tools business. We expect to incur continued spending related to the development and expansion of our product lines and expansion of our commercial capabilities for the foreseeable future. Our future capital requirements may include, but are not limited to, purchases of property, plant and equipment, the acquisition of additional cell and gene therapy products and technologies to complement our existing manufacturing capabilities, and continued investment in our intellectual property portfolio.

We actively evaluate various strategic transactions on an ongoing basis, including acquiring complementary products, technologies or businesses that would complement our existing portfolio. We continue to seek to acquire such potential assets that may offer us the best opportunity to create value for our shareholders. In order to acquire such assets, we may need to seek additional financing to fund these investments. If our available cash balances and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements, including because of any such acquisition-related financing needs or lower demand for our products, we may seek to sell common or preferred equity or convertible debt securities, enter into a credit facility or another form of third-party funding, or seek other debt funding. The sale of equity and convertible debt securities may result in dilution to our stockholders, and those securities may have rights senior to those of our common shares. If we raise additional funds through the issuance of preferred stock, convertible debt securities or other debt financing, these securities or other debt could contain covenants that would restrict our operations. Any other third-party funding arrangement could require us to relinquish valuable rights. We may require additional capital beyond our currently anticipated amounts. Additional capital may not be available on reasonable terms, if at all.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

The Company operates internationally, and thus is subject to potentially adverse movements in foreign currency exchange rates. Approximately 1% of the Company's consolidated net sales in the year ended December 31, 2021 were made in euros. The Company is exposed to market risk primarily from foreign exchange rate fluctuations of the euro as compared to the U.S. dollar as the financial position and operating results of the Company's foreign operations are translated into U.S. dollars for consolidation.

Month-end exchange rates between the euro and the U.S. dollar, which have not been weighted for actual sales volume in the applicable months in the periods, were as follows:

	Year Ended December 31,		
	2021	2020	2019
High	$ 1.24	$ 1.23	$ 1.16
Low	$ 1.12	$ 1.06	$ 1.09
Average	$ 1.18	$ 1.14	$ 1.12

The Company's exposure to foreign exchange rate fluctuations also arises from trade receivables and intercompany payables denominated in one currency in the financial statements, but receivable or payable in another currency.

The Company does not enter into foreign currency forward contracts to reduce its exposure to foreign currency rate changes on forecasted intercompany sales transactions or on intercompany foreign currency denominated balance sheet positions. Foreign currency transaction gains and losses are included in "Other income (expense)" in the Consolidated Statements of Operations. The effect of translating net assets of foreign subsidiaries into U.S. dollars are recorded on the Consolidated Balance Sheet as part of "Accumulated other comprehensive loss, net of taxes".

The effects of a hypothetical 10% appreciation in the U.S. dollar from December 31, 2021 levels against the euro are as follows (in thousands):

Decrease in translation of 2021 earnings into U.S. dollars	$ 46
Decrease in translation of net assets of foreign subsidiaries	$ 1,132

ITEM 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page No.
Report of Independent Registered Public Accounting Firm (BDO USA, LLP, Seattle, Washington, PCAOB ID#243)	39
Consolidated Balance Sheets	41
Consolidated Statements of Operations	42
Consolidated Statements of Comprehensive (Loss) Income	43
Consolidated Statements of Shareholders' Equity	44
Consolidated Statements of Cash Flows	45
Notes to Consolidated Financial Statements	46

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Directors
BioLife Solutions, Inc.
Bothell, Washington

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of BioLife Solutions, Inc. (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive (loss) income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021**,** in conformity with accounting principles generally accepted in the United States of America. 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, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") and our report dated March 31, 2022 expressed an adverse opinion thereon.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated 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 consolidated 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 consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

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

Contingent Consideration – SciSafe Holdings ("SciSafe")

As described in Note 2 to the consolidated financial statements, contingent consideration liabilities are recorded at fair value on the acquisition date and are revalued each reporting period, with changes in the fair value recognized within the consolidated statement of operations. As of and for the year ended December 31, 2021, the Company recorded a contingent consideration liability associated with the October 1, 2020 acquisition of SciSafe of $9.9 million and a change in fair value of $3.0 million. Management estimated the fair value of contingent consideration through valuation models that incorporate unobservable inputs including projected revenue, revenue and asset volatility, and discount rates. Changes in the fair value of contingent consideration can result from changes to one or multiple assumptions.

We identified the estimation of the fair value of the SciSafe contingent consideration liability as a critical audit matter. The determination of the SciSafe contingent consideration liability's fair value requires management to make significant judgments including the appropriateness of the valuation model and the reasonableness of estimates and assumptions. Changes in these estimates and assumptions could have a significant impact on the fair value of the SciSafe contingent consideration liability. Auditing these elements involved especially challenging auditor judgment due to the subjectivity and the nature and extent of audit effort required to address the matter, including the extent of specialized skill or knowledge needed.

The primary procedures we performed to address this critical audit matter included:

- Assessing the reasonableness of certain significant assumptions used in the valuation model, through: (i) comparing historical forecasts to SciSafe's actual performance, (ii) evaluating the reasonableness of significant assumptions (including revenue projections) against current budgets and the expected performance of SciSafe, and (iii) evaluating the impact of alternative assumptions on the measurements and comparing to management's estimate.

- Utilizing professionals with specialized skills and knowledge to assist in evaluating the appropriateness of the valuation model utilized by management and to assess the reasonableness of assumptions and accuracy of the underlying calculations used by management to develop the discount rate, revenue volatility, and asset volatility applied to the revenue forecast.

Business Combinations – Valuation of Acquired Intangible Assets

As described in Note 12 to the consolidated financial statements, on May 3, 2021, the Company acquired Global Cooling, Inc. ("GCI") for purchase consideration of approximately $234.9 million and on September 1, 2021, the Company acquired Sexton Biotechnologies ("Sexton") for purchase consideration of approximately $39.9 million. Management applied significant judgment in estimating the fair value of the identifiable intangible assets including in-process research and development assets, developed technology, customer relationships, and tradenames.

We identified the determination of the fair values of the identifiable intangible assets as a critical audit matter. The Company's estimation of the acquisition date fair values of certain identifiable intangible assets is complex, requires management's judgment and involves the use of significant estimates and assumptions, including selection of the appropriate valuation methodology, revenue growth rates, forecasted expenses, royalty rates, and discount rates. Auditing these elements involved especially challenging and subjective auditor judgment due to the nature and extent of audit effort required to address these matters, including the extent of specialized skill or knowledge needed.

The primary procedures we performed to address this critical audit matter included:

- Assessing the reasonableness of projected revenue growth rates and forecasted expenses through: (i) evaluating historical performance of the target entities, and (ii) assessing financial projections against market trends, industry metrics and peer-group/guideline companies.

- Utilizing personnel with specialized knowledge and skill with valuation to assist in: (i) assessing the reasonableness of royalty rates and discount rates incorporated into the various valuation models, and (ii) assessing the appropriateness of various valuation models utilized by management to determine the fair values of the intangible assets.

/s/ BDO USA, LLP

We have served as the Company's auditor since 2019.

Seattle, Washington

March 31, 2022

BioLife Solutions, Inc.
Consolidated Balance Sheets

(In thousands, except per share and share data)	December 31, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 69,860	$ 90,403
Restricted cash	10	53
Accounts receivable, trade, net of allowance for doubtful accounts of $275 and $85 as of December 31, 2021 and December 31, 2020, respectively	23,217	8,006
Inventories	28,345	11,602
Prepaid expenses and other current assets	4,427	4,648
Total current assets	125,859	114,712
Assets held for rent, net	9,809	4,705
Property and equipment, net	17,657	10,120
Operating lease right-of-use assets, net	18,705	9,675
Financing lease right-of-use assets, net	440	17
Long-term deposits and other assets	325	230
Investments	4,372	5,872
Intangible assets, net	152,149	31,049
Goodwill	224,741	58,449
Total assets	$ 554,057	$ 234,829
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ 14,945	$ 3,672
Accrued expenses and other current liabilities	7,142	4,543
Warranty liability	9,398	212
Lease liabilities, operating, current portion	2,758	1,107
Lease liabilities, financing, current portion	149	8
Debt, current portion	862	614
Warrant liability	-	2,780
Contingent consideration, current portion	5,127	2,637
Total current liabilities	40,381	15,573
Contingent consideration, long-term	4,900	4,515
Lease liabilities, operating, long-term	16,466	8,757
Lease liabilities, financing, long-term	291	12
Debt, long-term	6,353	655
Deferred tax liabilities	5,487	-
Other long-term liabilities	42	71
Total liabilities	73,920	29,583
Commitments and Contingencies (Note 11)		
Shareholders' equity:		
Preferred stock, $0.001 par value; 1,000,000 shares authorized, Series A, 4,250 shares designated, and 0 shares issued and outstanding as of December 31, 2021 and December 31, 2020	-	-
Common stock, $0.001 par value; 150,000,000 shares authorized, 41,817,503 and 33,039,146 shares issued and outstanding as of December 31, 2021 and December 31, 2020, respectively	42	33
Additional paid-in capital	585,397	302,598
Accumulated other comprehensive loss, net of taxes	(282)	-
Accumulated deficit	(105,020)	(97,385)
Total shareholders' equity	480,137	205,246
Total liabilities and shareholders' equity	$ 554,057	$ 234,829

The accompanying Notes to consolidated Financial Statements are an integral part of these consolidated financial statements

BioLife Solutions, Inc.
Consolidated Statements of Operations

(In thousands, except per share and share data)	Years Ended December 31		
	2021	2020	2019
Product revenue	$ 101,913	$ 44,540	$ 26,844
Service revenue	9,817	1,752	-
Rental revenue	7,426	1,795	527
Total product, service, and rental revenue	119,156	48,087	27,371
Costs and operating expenses:			
Cost of product revenue (exclusive of intangible assets amortization)	69,676	18,058	8,355
Cost of service revenue (exclusive of intangible assets amortization)	5,381	1,367	405
Cost of rental revenue (exclusive of intangible assets amortization)	7,051	1,221	-
Research and development	11,821	6,720	3,168
Sales and marketing	14,006	6,413	4,701
General and administrative	32,448	14,607	8,893
Intangible asset amortization	8,202	3,033	1,079
Acquisition costs	1,636	668	940
Change in fair value of contingent consideration	2,875	1,575	50
Total operating expenses	153,096	53,662	27,591
Operating loss	(33,940)	(5,575)	(220)
Other income (expense):			
Change in fair value of warrant liability	(121)	3,601	(12,835)
Change in fair value of investments	-	1,319	-
Interest (expense) income, net	(432)	58	501
Other income (expense)	289	-	(13)
Loss from equity-method investment in SAVSU	-	-	(739)
Gain on acquisition of SAVSU	-	-	10,108
Gain on acquisition of Sexton Biotechnologies, Inc.	6,451	-	-
Total other income (expense), net	6,187	4,978	(2,978)
Loss before income tax benefit	(27,753)	(597)	(3,198)
Income tax benefit	20,118	3,264	1,541
Net (loss) income	$ (7,635)	$ 2,667	$ (1,657)
Net (loss) income attributable to common shareholders:			
Basic	$ (7,635)	$ 2,450	$ (1,657)
Diluted	(7,635)	(954)	(1,657)
(Loss) earnings attributable to common shareholders:			
Basic	$ (0.20)	$ 0.09	$ (0.09)
Diluted	$ (0.20)	$ (0.03)	$ (0.09)
Weighted average shares used to compute (loss) earnings per share attributable to common shareholders:			
Basic and Diluted	38,503,944	27,306,258	19,460,299

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements

BioLife Solutions, Inc.
Consolidated Statements of Comprehensive (Loss) Income

(In thousands)	Years Ended December 31		
	2021	2020	2019
Net (loss) income	$ (7,635)	$ 2,667	$ (1,657)
Other comprehensive loss - foreign currency translation adjustment, net of tax	(282)	-	-
Comprehensive (loss) income	$ (7,917)	$ 2,667	$ (1,657)

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements

BioLife Solutions, Inc.
Consolidated Statements of Shareholders' Equity

(In thousands, except share data)	Series A Preferred Stock Shares	Series A Preferred Stock Amount	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Shareholders' Equity
Balance, December 31, 2018	-	$ -	18,547,406	$ 19	$ 113,008	$ -	$ (98,395)	$ 14,632
Stock based compensation	-	-	-	-	3,043	-	-	3,043
Shares issued in acquisitions	-	-	1,334,219	1	23,931	-	-	23,932
Stock option exercises	-	-	697,010	1	1,180	-	-	1,181
Stock issued – on vested RSAs	-	-	125,817	-	-	-	-	-
Warrant exercises	-	-	121,000	-	2,323	-	-	2,323
Net loss	-	-	-	-	-	-	(1,657)	(1,657)
Balance, December 31, 2019	-	-	20,825,452	21	143,485	-	(100,052)	43,454
Stock issued as 2019 bonus payout	-	-	-	-	314	-	-	314
Stock based compensation	-	-	-	-	5,981	-	-	5,981
Sale of common stock, net of costs	-	-	7,856,012	8	100,113	-	-	100,121
Common stock issued for services	-	-	3,175	-	60	-	-	60
Shares issued in acquisitions	-	-	611,683	-	17,916	-	-	17,916
Stock option exercises	-	-	777,496	1	1,471	-	-	1,472
Stock issued – on vested RSAs	-	-	208,858	-	-	-	-	-
Cashless exercises of 3,871,405 warrants	-	-	2,747,970	3	33,108	-	-	33,111
Warrant exercises	-	-	8,500	-	150	-	-	150
Net income	-	-	-	-	-	-	2,667	2,667
Balance, December 31, 2020	-	-	33,039,146	33	302,598	-	(97,385)	205,246
Stock issued as consideration in GCI acquisition	-	-	6,636,470	7	232,734	-	-	232,741
Stock issued as consideration in Sexton acquisition	-	-	530,502	-	31,977	-	-	31,977
Fees incurred for registration filings	-	-	-	-	(186)	-	-	(186)
Stock based compensation	-	-	-	-	13,956	-	-	13,956
Stock option exercises	-	-	869,065	1	1,417	-	-	1,418
Cashless exercise of 79,100 warrants	-	-	70,030	-	2,901	-	-	2,901
Stock issued – on vested RSAs	-	-	672,290	1	-	-	-	1
Foreign currency translation	-	-	-	-	-	(282)	-	(282)
Net loss	-	-	-	-	-	-	(7,635)	(7,635)
Balance, December 31, 2021	-	$ -	41,817,503	$ 42	$ 585,397	$ (282)	$ (105,020)	$ 480,137

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements

BioLife Solutions, Inc.
Consolidated Statements of Cash Flows

(In thousands)	Year Ended December 31, 2021	2020	2019
Cash flows from operating activities			
Net (loss) income	$ (7,635)	$ 2,667	$ (1,657)
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities			
Depreciation	4,663	2,035	718
Amortization of intangible assets	8,202	3,033	1,079
Amortization of loan costs	121	-	-
Stock-based compensation	13,956	5,981	3,043
Non-cash lease expense	2,053	737	512
Loss from equity method investment in SAVSU	-	-	739
Gain on acquisition of SAVSU	-	-	(10,108)
Deferred income tax benefit	(20,127)	(3,297)	(1,541)
Change in fair value of contingent consideration	2,875	1,575	50
Change in fair value of warrant liability	121	(3,601)	12,835
Change in fair value of investments	-	(1,319)	-
Gain on acquisition of Sexton Biotechnologies, Inc.	(6,451)	-	-
Stock issued for services	-	60	-
Loss on disposal of assets held for rent, net	609	365	-
Loss on disposal of property and equipment, net	482	-	-
Forgiveness of loans payable	(284)	-	-
Other	353	190	15
Change in operating assets and liabilities, net of effects of acquisitions			
Accounts receivable, trade, net	(10,132)	(1,786)	(290)
Inventories	114	(629)	(3,777)
Prepaid expenses and other current assets	2,802	25	(704)
Accounts payable	2,018	(171)	768
Accrued expenses and other current liabilities	(3,936)	780	(327)
Warranty liability	5,833	-	-
Other	(230)	-	(142)
Net cash (used in) provided by operating activities	(4,593)	6,645	1,213
Cash flows from investing activities			
Cash acquired in acquisition of SAVSU	-	-	1,251
Acquisition of Astero Bio, net of cash acquired	-	-	(12,439)
Payments related to the acquisition of CBS	-	-	(11,000)
Payments related to the acquisition of SciSafe, net of cash acquired	-	(14,947)	-
Cash acquired in acquisition of Global Cooling, Inc. and Sexton Biotechnologies, Inc.	1,559	-	-
Investment in Sexton	-	-	(1,500)
Investment in iVexSol convertible debt	-	-	(1,000)
Investment in iVexSol preferred stock	-	(1,000)	-
Investment in PanTHERA Cryosolutions	-	(995)	-
Purchases of property and equipment	(8,385)	(1,961)	(675)
Deposits on property and equipment	-	(2,672)	-
Purchases of assets held for rent	(6,371)	(2,813)	(1,655)
Deposits on assets held for rent	-	(362)	-
Proceeds from sale of equipment	5	35	-
Net cash used in investing activities	(13,192)	(24,715)	(27,018)
Cash flows from financing activities			
Proceeds from Paycheck Protection Program ("PPP") Loan	-	2,175	-
Payoff of PPP Loan	-	(2,175)	-
Proceeds from equipment loans	1,550	984	-
Payments on equipment loans	(214)	-	-
Payments of contingent consideration	-	(483)	-
Proceeds from sale of common stock, net of $6.2 million of costs in 2020	-	100,121	-
Fees paid related to issuance of common stock	(145)	-	-
Proceeds from line of credit	27,306	-	-
Payments on line of credit	(31,536)	-	-
Proceeds from exercise of common stock options	1,418	1,472	1,181
Proceeds from exercise of warrants	-	40	574
Payments on financed insurance premium	(1,033)	-	-
Other	(124)	(56)	(159)
Net cash (used in) provided by financing activities	(2,778)	102,078	1,596
Net (decrease) increase in cash, cash equivalents, and restricted cash	(20,563)	84,008	(24,209)

Cash, cash equivalents, and restricted cash – beginning of period	90,456	6,448	30,657
Effects of currency translation on cash, cash equivalents, and restricted cash	(23)	-	-
Cash, cash equivalents, and restricted cash – end of period	$ 69,870	$ 90,456	$ 6,448
Non-cash investing and financing activities			
Cashless exercise of warrants reclassified from warrant liability to common stock	$ 2,901	$ 33,111	$ -
Stock issued as consideration to acquire Global Cooling, Inc. and Sexton Biotechnologies, Inc.	$ 264,718	$ -	$ -
Equipment acquired under operating leases	$ 6,875	$ 8,096	$ -
Equipment acquired under finance leases	$ 440	$ -	$ -
Purchase of property and equipment not yet paid	$ 197	$ -	$ 29
Reclassification of warrant liabilities to equity upon exercise	$ -	$ 110	$ 1,749
Stock issued as consideration to acquire SAVSU	$ -	$ -	$ 19,932
Stock issued as consideration to acquire assets of CBS	$ -	$ -	$ 4,000
Stock issued as consideration to acquire SciSafe	$ -	$ 17,916	$ -
Stock issued as bonus consideration	$ -	$ 314	$ -
Cash interest paid	$ 452	$ -	$ -

The accompanying Notes to Consolidated Financial Statements are an integral part of these consolidated financial statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and significant accounting policies

Business

BioLife Solutions, Inc. (“BioLife”, “us”, “we”, “our”, or the “Company”) is a developer, manufacturer, and supplier of a portfolio of bioproduction tools and services including proprietary biopreservation media, automated thawing devices, cloud-connected shipping containers, ultra-low temperature mechanical freezers, cryogenic and controlled rate freezers and biological and pharmaceutical materials storage. Our CryoStor® freeze media and HypoThermosol® hypothermic storage media are optimized to preserve cells in the regenerative medicine market. These novel biopreservation media products are serum-free and protein-free, fully defined, and are formulated to reduce preservation-induced cell damage and death. Our Sexton cell processing product line includes human platelet lysates (“hPL”) for cell expansion reducing risk and improving downstream performance over fetal bovine serum, human serum, and other chemically defined media, CellSeal® cryogenic vials that are purpose-built rigid containers used in cell and gene therapy (“CGT”) that can be filled manually or with high throughput systems, and automated cell processing machines that bring multiple processes traditionally performed by manual techniques under a higher level of control to protect therapies from loss or contamination. Our ThawSTAR® product line is comprised of a family of automated thawing devices for frozen cell and gene therapies packaged in cryovials and cryobags. These products help administer temperature-sensitive biologic therapies to patients by standardizing the thawing process and reducing the risks of contamination and overheating, which are inherent with the use of traditional water baths. Our cryogenic freezer technology provides for controlled rate freezing and cryogenic storage of biologic materials. Our ultra-low temperature mechanical freezers allow biological materials and vaccines to be stored at temperatures which range from negative 20℃ to negative 86℃. Our evo® shipping containers provide cloud-connected passive storage and transport containers for temperature-sensitive biologics and pharmaceuticals. Our biological and pharmaceutical materials storage services provide facilities that allow for real-time tracking of biologic materials and vaccines that can be stored at a wide range of temperatures.

Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements and reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Significant estimates and assumptions by management affect the Company’s allowance for doubtful accounts, the net realizable value of inventory, fair value of warrant liability, valuation of market based awards, valuations and purchase price allocations related to investments and business combinations, expected future cash flows including growth rates, discount rates, terminal values and other assumptions and estimates used to evaluate the recoverability of long-lived assets, estimated fair values of intangible assets and goodwill, amortization methods and periods, warranty reserves, certain accrued expenses, share-based compensation, contingent consideration from business combinations, and the recoverability of the Company’s deferred tax assets and the related valuation allowance.

The Company regularly assesses these estimates; however, actual results could differ materially from these estimates. Changes in estimates are recorded in the period in which they become known. The Company bases its estimates on historical experience and various other assumptions that it believes to be reasonable under the circumstances.

Basis of presentation

The Consolidated Financial Statements include the accounts of the Company and its wholly-owned subsidiaries, SAVSU Technologies, Inc. (“SAVSU” acquired on August 8, 2019), Arctic Solutions, Inc. doing business as Custom Biogenic Systems (“CBS” acquired on November 12, 2019), SciSafe Holdings, Inc. (“SciSafe” acquired on October 1, 2020), Global Cooling, Inc. doing business as Stirling Ultracold (“Global Cooling” or “GCI” acquired on May 3, 2021), and Sexton Biotechnologies, Inc. (“Sexton” acquired on September 1, 2021). All intercompany accounts and transactions have been eliminated in consolidation.

All long-lived assets are maintained in the United States of America and the Netherlands.

Financial statement reclassification

Certain classifications on the Consolidated Balance Sheets related to accrued expenses and other current liabilities, debt, current portion, and debt, long-term as of December 31, 2020 were reclassified to conform to current period presentation. These reclassifications have no impact on previously reported total revenue, net (loss) income, net assets, or total operating cash flows.

Foreign currency translation

The Company translates balance sheet and income statement items into U.S. dollars. For the Company's subsidiaries that operate in a local currency functional environment, all assets and liabilities are translated into U.S. dollars using current exchange rates at the balance sheet date; revenue and expenses are translated using quarterly exchange rates which approximate to average exchange rates in effect during each period. Resulting translation adjustments are reported as a separate component of accumulated other comprehensive (loss) income in shareholders' equity.

Segment reporting

The Company views its operations and makes decisions regarding how to allocate resources and manages its business as one reportable segment and one reporting unit. The Company's Chief Executive Officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for purposes of allocating and evaluating financial performance.

Revenue recognition

To determine revenue recognition for contractual arrangements that we determine are within the scope of Financial Accounting Standards Board ("FASB") Topic 606, *Revenue from Contracts with Customers*, we perform the following five steps: (i) identify each contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to our performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy the relevant performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. Contracts with customers may contain multiple performance obligations. For such arrangements, the transaction price is allocated to each performance obligation based on the estimated relative standalone selling prices of the promised products or services underlying each performance obligation. The Company determines standalone selling prices based on the price at which the performance obligation is sold separately. If the standalone selling price is not observable through past transactions, the Company estimates the standalone selling price, taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations. Payment terms and conditions vary, although terms generally include a requirement of payment within 30 to 90 days. During the year ended December 31, 2021, the Company recognized approximately $671,000 of revenue that was included in the deferred revenue balance at the beginning of the year.

The Company primarily recognizes product revenues, service revenues, and rental revenues. Product revenues are generated from the sale of biopreservation media, ThawSTAR, and freezer products. We recognize product revenue, including shipping and handling charges billed to customers, at a point in time when we transfer control of our products to our customers, which is upon shipment for substantially all transactions. Shipping and handling costs are classified as part of cost of product revenue in the Consolidated Statement of Operations. Service revenues are generated from the storage of biological and pharmaceutical materials. We recognize service revenues over time as services are performed or ratably over the contract term. To the extent the transaction price includes variable consideration, the Company estimates the amount of variable consideration that should be included in the transaction price utilizing the expected value method or the most likely amount method, depending on the facts and circumstances relative to the contract. When determining the transaction price of a contract, an adjustment is made if payment from a customer occurs either significantly before or significantly after performance, resulting in a significant financing component. Applying the practical expedient in paragraph 606-10-32-18, the Company does not assess whether a significant financing component exists if the period between when the Company performs its obligations under the contract and when the customer pays is one year or less. None of the Company's contracts contained a significant financing component as of and during the year ended December 31, 2021.

The Company also generates revenue from the leasing of our property, plant, and equipment, operating right-of-use assets, and evo cold chain systems to customers pursuant to service contracts or rental arrangements entered into with the customer. Revenue from these arrangements is not within the scope of FASB ASC Topic 606 as it is within the scope of FASB ASC Topic 842, *Lease*s. All customers leasing shippers currently do so under month-to-month rental arrangements. We account for these rental transactions as operating leases and record rental revenue on a straight-line basis over the rental term.

The Company enters into various customer service agreements (collectively, "Service Contracts") with customers to provide biological and pharmaceutical storage services. In certain of these Service Contracts, the property, plant, and equipment or operating right-of-use assets used to store the customer product are used only for the benefit of one customer. This is primarily driven by the customer's desire to ensure that sufficient storage capacity is available in a specific geographic location for a set period of time. These agreements may include extension and termination clauses. These Service Contracts do not allow for customers to purchase the underlying assets.

The Company has assessed its Service Contracts and concluded that certain of the contracts for the storage of customer products met the criteria to be considered a leasing arrangement ("Embedded Leases"), with the Company as the lessor. The specific Service Contracts that met the criteria were those that provided a single customer with the ability to substantially direct the use of the Company's property, plant, and equipment or operating right-of-use assets.

Under ASC 842, consistent with the previous guidance, the Company will continue to recognize operating right-of-use asset embedded lessor arrangements on its Consolidated Balance Sheets in operating right-of-use assets.

None of the Embedded Leases identified by the Company qualify as a sales-type or direct finance lease. None of the operating leases for which the Company is the lessor include options for the lessee to purchase the underlying asset at the end of the lease term or residual value guarantees, nor are any such operating leases with related parties.

Embedded Leases may contain both lease and non-lease components. We have elected to utilize the practical expedient to account for lease and non-lease components together as a single combined lease component as the timing and pattern of transfer are the same for the non-lease components and associated lease component and, the lease component, if accounted for separately, would be classified as an operating lease. Non-lease components of the Company's rental arrangements include reimbursements of lessor costs.

Total bioproduction tools and services revenue for the years ended December 31, 2021, 2020, and 2019 were comprised of the following:

(In thousands, except percentages)	Year Ended December 31, 2021[1]	2020[2]	2019[3]
Product revenue			
Freezer and thaw	$ 56,620	$ 13,548	$ 3,312
Cell processing	44,965	30,946	23,367
Storage and cold chain services	328	46	165
Service revenue			
Storage and cold chain services	9,817	1,752	-
Rental revenue			
Storage and cold chain services	7,426	1,795	527
Total revenue	$ 119,156	$ 48,087	$ 27,371

(1) 2021 revenue includes product revenue related to Global Cooling from May 3, 2021 through December 31, 2021 and product revenue related to Sexton from September 1, 2021 through December 31, 2021.
(2) 2020 revenue includes service revenue related to SciSafe from October 1, 2020 through December 31, 2020.
(3) 2019 revenue includes product revenue related to Astero Bio Corporation ("Astero") from April 1, 2019 through December 31, 2019; rental revenue related to SAVSU from August 8, 2019 through December 31, 2019; and product revenue related to CBS from November 12, 2019 through December 31, 2019.

The following table includes estimated rental revenue expected to be recognized in the future related to embedded leases as well as estimated service revenue expected to be recognized in the future related to performance obligations that are unsatisfied or partially unsatisfied as of the end of the reporting periods. The Company is electing not to disclose the value of the remaining unsatisfied performance obligation with a duration of one year or less as permitted by the practical expedient in ASU 2014-09, *Revenue from Contracts with Customers*. The estimated revenue in the following table does not include contracts with the original durations of one year or less, amounts of variable consideration attributable to royalties, or contract renewals that are unexercised as of December 31, 2021.

The balances in the table below are partially based on judgments involved in estimating future orders from customers subject to the exercise of material rights pursuant to respective contracts:

(In thousands)	Year Ending December 31, 2022	2023	2024	Total
Rental revenue	$ 10,151	$ 3,748	$ 900	$ 14,799
Service revenue	$ 67	$ 31	$ 10	$ 108

Risks and uncertainties

COVID-19 pandemic

Our domestic and international operations have been and continue to be affected by the ongoing global pandemic of a novel strain of coronavirus (“COVID-19”) and the resulting volatility and uncertainty it has caused in the U.S. and international markets. During the year ended December 31, 2021, many businesses and countries, including the U.S., continued applying preventative and precautionary measures to mitigate the spread of the virus including government orders and other restrictions on the conduct of business operations.

In the year ended December 31, 2021, we experienced supply chain disruptions due to the effects of COVID-19 on our suppliers of sheet metal and electronic components that incorporate semiconductor chips. These supply chain disruptions decreased our profitability as a result of increased supplier pricing and production stoppages. We cannot be assured that a continued or prolonged global pandemic will not have other negative impacts on our manufacturing and shipping processes or our product costs. The extent to which the COVID-19 pandemic affects our future financial results and operations will depend on future developments which are highly uncertain and cannot be predicted, including the recurrence, severity and/or duration of the ongoing pandemic, and current or future domestic and international actions to contain and treat COVID-19.

The Company reviews capital and amortizing intangible assets (long-lived assets) for impairment on an annual basis or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Company determined that the economic uncertainty caused by the COVID-19 pandemic was a trigger for an impairment review in the quarter ended June 30, 2020 of certain long-lived assets based on the expected near-term weakness in ThawSTAR and freezer revenue resulting from the impact of COVID-19.

As a result of the Company’s outlook for revenue from the ThawSTAR and freezer product lines, estimated undiscounted cash flow projections were developed to determine if any impairment of the related intangible assets was warranted. After conducting such review, the Company determined that there was no impairment of the remaining long-lived assets as of June 30, 2020. Given the inherent uncertainties of the COVID-19 pandemic and the estimates used in these cash flow projections, changes based on facts and circumstances in future quarters could give rise to impairment.

The Company revised the revenue projections for the ThawSTAR and freezer product lines in the second quarter ended June 30, 2020 to determine the impact on the fair value of the contingent consideration related to the existing earnout provisions. Based on results of the year ended December 31, 2020 related to these two product lines, we made further adjustments to our revenue projections. After reviewing the impact of the updated revenue projections on estimated undiscounted cash flow projections, the Company determined that there was no impairment of the remaining long-lived assets as of December 31, 2020. The Company reduced the fair value of the combined contingent consideration liability from $388,000 at June 30, 2020, to $221,000 as of December 31, 2020 due to updated revenue projections, the time value of money, and actual results for the year ended December 31, 2020.

The Company may also experience other negative impacts of the COVID-19 outbreak such as the lack of availability of the Company's key personnel, additional temporary closures of the Company's office or the facilities of the Company's business partners, customers, third party service providers or other vendors, the inability to travel to market and sell our products, and the interruption of the Company's supply chain, distribution channels, liquidity and capital or financial markets.

Any disruption and volatility in the global capital markets as a result of the pandemic may increase the Company's cost of capital and adversely affect the Company's ability to access financing when and on terms that the Company desires. In addition, a potential recession resulting from the spread of COVID-19 could materially affect the Company's business, especially if a recession results in higher unemployment causing potential patients to not have access to health insurance.

The ultimate extent to which the COVID-19 pandemic and its repercussions impact the Company's business will depend on future developments, which are highly uncertain. However, the foregoing and other continued disruptions to the Company's business as a result of COVID-19 could result in a material adverse effect on the Company's business, results of operations, financial condition and cash flows.

On March 27, 2020, the President of the United States signed into law the "Coronavirus Aid, Relief, and Economic Security (CARES) Act." The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer side social security tax payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations, increased limitations on qualified charitable contributions, and technical corrections to tax depreciation methods for qualified improvement property.

On March 11, 2021, the President of the United States signed into law the "American Rescue Plan Act of 2021" (the American Rescue Plan), which included additional economic stimulus and tax credits, including the expansion of the Employee Retention Credit. BioLife continues to examine the impact that the American Rescue Plan will have on its financial condition, results of operations, and liquidity.

We determined that we met the original eligibility requirements per the guidelines original established by the U.S. federal government as part of the CARES Act for the Pursuant to the Paycheck Protection Program (the "PPP"). As such, on April 20, 2020, the Company received $2,175,320 in support from the PPP. Because the U.S. government subsequently changed its position and guidelines related to the PPP and publicly traded companies, the Company repaid the loan on April 29, 2020. As of March 30, 2020, the company started deferring the employer side of social security tax payments. As of December 31, 2021, the amount of deferred social security tax payments was $297,000. In the year ended December 31, 2021, we paid $135,000 of the deferred payments. The remainder of the outstanding balance is anticipated to be paid by December 31, 2022.

In the SciSafe acquisition, the Company acquired a $295,300 loan from the PPP. The loan incurred interest at 1% and was unsecured. Of the principal borrowed, $284,000 was forgiven in December 2021. The remaining principal that was not forgiven was repaid in December 2021.

Earnings per share

The Company considers its unexercised warrants and unvested restricted shares, which contain non-forfeitable rights to dividends, participating securities, and includes such participating securities in its computation of earnings per share pursuant to the two-class method. Basic earnings per share for the two classes of stock (common stock and warrants) is calculated by dividing net income by the weighted average number of shares of common stock and warrants outstanding during the reporting period. Diluted earnings per share is calculated using the weighted average number of shares of common stock plus the potentially dilutive effect of common equivalent shares outstanding determined under both the two-class method and the treasury stock method, whichever is more dilutive. In periods when we have a net loss, common stock equivalents are excluded from our calculation of earnings per share as their inclusion would have an antidilutive effect.

The following table presents computations of basic and diluted earnings per share under the two-class method:

	Year Ended December 31,		
(In thousands, except share and earnings per share data)	**2021**	**2020**	**2019**
Basic earnings (loss) per common share Numerator:			
Net (loss) income	$ (7,635)	$ 2,667	$ (1,657)
Amount attributable to unvested restricted shares	-	(135)	-
Amount attributable to warrants outstanding	-	(82)	-
Net (loss) income allocated to common shareholders	(7,635)	2,450	(1,657)
Denominator:			
Weighted-average common shares issued and outstanding	38,503,944	27,306,258	19,460,299
Basic (loss) earnings per common share	$ (0.20)	$ 0.09	$ (0.09)
Diluted earnings (loss) per common share Numerator:			
Net (loss) income	$ (7,635)	$ 2,667	$ (1,657)
Amount attributable to warrants	-	(20)	-
Less: gain related to change in fair value of warrants	-	(3,601)	-
Diluted (loss) earnings per common share	(7,635)	(954)	(1,657)
Denominator:			
Weighted-average common shares issued and outstanding	38,503,944	27,306,258	19,460,299
Diluted (loss) earnings per common share	$ (0.20)	$ (0.03)	$ (0.09)

The following table sets forth the number of shares excluded from the computation of diluted loss per share, as their inclusion would have been anti-dilutive:

	Year Ended December 31,		
	2021	**2020**	**2019**
Stock options and restricted stock awards	1,637,745	2,131,794	2,564,456
Warrants	18,204	1,499,953	2,956,039
Total	1,655,949	3,631,747	5,520,495

Cash, cash equivalents, and restricted cash

Cash equivalents consist primarily of interest-bearing money market accounts. We consider all highly liquid debt instruments purchased with an initial maturity of three months or less to be cash equivalents. We maintain cash balances that may exceed federally insured limits. We do not believe that this results in any significant credit risk.

Restricted cash consists entirely of amounts that will be recovered from escrow in relation to the acquisition of SciSafe. The restricted cash is short term in nature, as the Company anticipates to receive the funds within one year of the balance sheet date.

The following is a summary of the Company's cash, cash equivalents, and restricted cash total as presented in the Company's consolidated statements of cash flows for the years ended December 31, 2021, 2020, and 2019.

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Cash and cash equivalents	$ 69,860	$ 90,403	$ 6,448
Restricted cash	10	53	-
Total cash, cash equivalents, and restricted cash	$ 69,870	$ 90,456	$ 6,448

Inventories

Inventories relate to the Company's cell and gene therapy products. The Company values biopreservation media inventory at cost or, if lower, net realizable value, using the specific identification method. All other inventory is valued at cost or, if lower, net realizable value, using the first-in, first-out method. The Company reviews its inventories at least quarterly and records a provision for inventory that has become obsolete, inventory that has a cost basis in excess of its expected net realizable value, and inventory in excess of expected revenue volume to cost of product revenue. The Company bases its estimates on expected product revenue volume, production capacity and expiration dates of raw materials, work in process, and finished products. A change in the estimated timing or amount of demand for the Company's products could result in additional provisions for excess inventory quantities on hand. Any significant unanticipated changes in demand or unexpected quality failures could have a significant impact on the value of inventory and reported operating results. During all periods presented in the accompanying consolidated financial statements, there have been no material adjustments related to a revised estimate of inventory valuations. Work-in-process and finished products inventories consist of material, labor, outside testing costs and manufacturing overhead.

Accounts receivable

Accounts receivable consist of short-term amounts due from our customers (generally 30 to 90 days) and are stated at the amount we expect to collect. We establish an allowance for doubtful accounts based on our assessment of the collectability of specific customer accounts.

Accounts receivable are stated at principal amount, do not bear interest, and are generally unsecured. We provide an allowance for doubtful accounts based on an evaluation of the collectability of customer account balances. Accounts considered uncollectible are charged against the established allowance.

Investments

We periodically invest in securities of private companies to promote business and strategic objectives. These investments are measured and recorded as follows:

Non-marketable equity securities are equity securities without a readily determinable fair value. As of December 31, 2021, these investments are comprised of $3.4 million in Series A-1 and A-2 Preferred Stock in iVexSol, Inc. (“iVexSol”) and $995,000 in Series E Preferred Stock in PanTHERA CryoSolutions, Inc. (“PanTHERA”). As of December 31, 2020, these investments were comprised of $1.5 million in Series A Preferred Stock in Sexton, $3.4 million in Series A-1 and A-2 Preferred Stock in iVexSol, Inc. (“iVexSol”), and $995,000 in Series E Preferred Stock in PanTHERA CryoSolutions, Inc. (“PanTHERA”).

As of December 31, 2021, Sexton is consolidated in the Consolidated Financial Statements as a result of the step-acquisition completed September 1, 2021. As of December 31, 2020, the Sexton investment was measured and recorded using a measurement alternative for equity investments that do not have a readily determinable fair value that measures the securities at cost minus impairment, if any, plus or minus changes resulting from observable process changes in orderly transactions for identical or similar investments of the same issuer. In September of 2019, the Company invested $1.0 million in a convertible note receivable of iVexSol, Inc. The Company made an irrevocable election to record this convertible note in its entirety at fair value utilizing the fair value option available under U.S. GAAP. The Company believed that carrying this investment at fair value better portrayed the economic substance of the investment. Under the fair value option, gains and losses on the convertible note were included in unrealized gains/(losses) on investments within net earnings each applicable reporting period. Gains related to the increase in fair value of this convertible note were zero, $1.3 million and zero for the years ended December 31, 2021, 2020, and 2019, respectively. The fair value of the note on the date of investment was determined to be equal to its principal amount. Interest income related to this note was recorded separately from other changes in its fair value within interest income each period. In November of 2020, the Company elected to convert the note into Series A-1 Preferred Stock and invest an additional $1.0 million in Series A-2 Preferred Stock in iVexSol. The Preferred Stock investments in iVexSol are carried at cost minus impairment, if any, plus or minus changes resulting from observable process changes in orderly transactions for identical or similar investments of the same issuer.

In November of 2020, the Company invested $995,000 in Class E Preferred Shares in PanTHERA CryoSolutions, Inc. In conjunction with this investment, the Company executed a development and license agreement with PanTHERA under which the Company will make milestone development payments up to $2 million in the event that certain milestones are met in exchange for exclusive, perpetual, worldwide marketing and distribution rights to the technology for use in cell and gene therapy applications. In June of 2021, PanTHERA satisfied the first milestone and the Company paid $200,000 in accordance with the agreement. The Preferred Stock investments in PanTHERA are carried at cost minus impairment, if any, plus or minus changes resulting from observable process changes in orderly transactions for identical or similar investments of the same issuer.

As of December 31, 2021, management believes there are no indications of impairment or changes in fair value for the investments in iVexSol or PanTHERA.

Property and equipment

Property and equipment are stated at cost and are depreciated using the straight-line method over estimated useful lives of three to ten years. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful lives of the assets or the remaining lease term of the respective assets. Gains or losses on disposals of property and equipment are recorded within income from operations. Costs of repairs and maintenance are included as part of operating expenses unless they are incurred in relation to major improvements to existing property and equipment, at which time they are capitalized.

Property and equipment are reviewed for impairment whenever events or changes in circumstances indicate that their net book value may not be recoverable. Carrying values are reviewed for recoverability at the asset grouping level to determine if the facts and circumstances suggest that a potential impairment may have occurred. If the sum of the expected future cash flows (undiscounted and before interest) from the use of the assets is less than the net book value of the asset an impairment could exist and the amount of the impairment loss, if any, will generally be measured as the difference between the net book value of the assets and their estimated fair values. There were no impairment losses recognized during the years ended December 31, 2021, 2020, and 2019.

Assets held for rent

Assets held for rent are carried at cost less accumulated depreciation. These assets consist of dedicated storage space, evo shippers and related components in production shippers complete and ready to be deployed and placed in service upon a customer order, shippers in the process of being assembled, and components available to build shippers. Assets utilized to provide dedicated storage space are depreciated over their applicable useful lives once placed in service. Shippers are depreciated over a useful life of three years when in use by customers.

Our customers rent assets per a rental agreement. Each agreement provides for fixed monthly rent. Rental revenue and fees are recognized over the rental term on a straight-line basis. We retain the ownership of the assets rented. At the end of the rental agreement, the customer returns the asset to the Company.

Assets held for rent are reviewed for impairment whenever events or changes in circumstances indicate that their net book value may not be recoverable. Carrying values are reviewed for recoverability at the asset grouping level to determine if the facts and circumstances suggest that a potential impairment may have occurred. If the sum of the expected future cash flows (undiscounted and before interest) from the use of the assets is less than the net book value of the asset an impairment could exist and the amount of the impairment loss, if any, will generally be measured as the difference between the net book value of the assets and their estimated fair values. There were no impairment losses recognized during the years ended December 31, 2021, 2020, and 2019.

Lease accounting

We determine if an arrangement is a lease at inception. Where an arrangement is a lease, we determine if it is an operating lease or a finance lease. At lease commencement, we record a lease liability and corresponding right-of-use (“ROU”) asset. Lease liabilities represent the present value of our future lease payments over the expected lease term which includes options to extend or terminate the lease when it is reasonably certain those options will be exercised. The present value of our lease liability is determined using our incremental collateralized borrowing rate at lease inception. ROU assets represent our right to control the use of the leased asset during the lease and are recognized in an amount equal to the lease liability for leases with an initial term greater than 12 months. Over the lease term we use the effective interest rate method to account for the lease liability as lease payments are made and the ROU asset is amortized in a manner that results in straight-line expense recognition.

We elected to apply the practical expedient for short-term leases and accordingly do not apply lease recognition requirements for short-term leases with a duration less than twelve months. Instead, we recognize payments related to these arrangements in the consolidated statement of operations as lease costs on a straight-line basis over the lease term.

Warranty

Our standard warranty terms typically extend between one year and seven years from the date of delivery. We accrue for standard warranty costs based on historical trends in warranty charges. The accrual is reviewed regularly and periodically adjusted to reflect changes in warranty cost over the period.

Income taxes

We account for income taxes using an asset and liability method which generally requires recognition of deferred tax assets and liabilities for the expected future tax effects of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are recognized for the future tax effects of differences between tax bases of assets and liabilities, and financial reporting amounts, based upon enacted tax laws and statutory rates applicable to the periods in which the differences are expected to affect taxable income. We evaluate the likelihood of realization of deferred tax assets and provide an allowance where, in management’s opinion, it is more likely than not that the asset will not be realized. Our policy for interest and penalties is to recognize interest and penalties as a component of the provision for income taxes in the Consolidated Statement of Operations.

We determine any uncertain tax positions based on a determination of whether and how much of a tax benefit taken in the Company’s tax filings or positions is more likely than not to be sustained upon examination by the relevant income tax authorities.

Judgment is applied in the determination of the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. As of December 31, 2021, the Company has an unrecorded tax benefit of $255,000 related to tax attributes being carried forward. The Company is generally subject to examination by U.S. federal and local income tax authorities for all tax years in which loss carryforward is available.

Advertising

Advertising costs are expensed as incurred and totaled $552,000, $167,000, and $43,000 for the years ended December 31, 2021, 2020, and 2019, respectively.

Concentrations of risk

In the years ended December 31, 2021, 2020, and 2019, we derived approximately 17%, 13%, and 15% of our revenue from one customer, one customer, and one customer, respectively. No other customers accounted for more than 10% of revenues. Revenue from foreign customers is denominated in United States dollars or euros.

In the year ended December 31, 2019, we made approximately 12% of purchases from one supplier. No other suppliers accounted for more than 10% of purchases in the years ended December 31, 2021, 2020, and 2019.

The following table represents the Company's total revenue by geographic area (based on the location of the customer):

	Year Ended December 31,		
Revenue by customers' geographic locations	**2021**	**2020**	**2019**
United States	78%	73%	69%
Canada	7%	13%	16%
Germany	4%	4%	3%
Europe, Middle East, Africa (excluding Germany)	10%	8%	11%
Other	1%	2%	1%
Total revenue	100%	100%	100%

The following table represents the Company's long-lived assets by geographic area as of December 31:

(In thousands)	**2021**	**2020**
United States	$ 40,708	$ 30,389
Netherlands	5,903	-
Total	$ 46,611	$ 30,389

As of December 31, 2021 and 2020, two customers and one customer accounted for 32% and 17% of gross accounts receivable, respectively. No other customers accounted for more than 10% of our gross accounts receivable.

As of December 31, 2021 and 2020, one supplier and one supplier accounted for 10% and 21% of accounts payable, respectively. No other suppliers accounted for more than 10% of our accounts payable.

Research and development

Research and development costs are expensed as incurred.

Stock-based compensation

We measure and record compensation expense using the applicable accounting guidance for share-based payments related to stock options, time-based restricted stock, market-based restricted stock awards and performance-based restricted stock awards granted to our directors and employees. The fair value of stock options, including performance awards, without a market-based condition is determined by using the Black-Scholes option-pricing model. The fair value of restricted stock awards with a market condition is estimated at the date of grant using the Monte Carlo Simulation model. The Black-Scholes and Monte Carlo Simulation valuation models incorporate assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. The fair value of restricted stock, including performance awards, without a market condition is estimated using the current market price of our common stock on the date of grant.

We expense stock-based compensation for stock options, restricted stock awards, and performance awards over the requisite service period. For awards with only a service condition, we expense stock-based compensation using the straight-line method over the requisite service period for the entire award. For awards with a market condition, we expense the grant date fair value over the vesting period regardless of the value that the award recipients ultimately receive.

We have, from time to time, modified the terms of restricted stock awards awarded to employees. We account for the incremental increase in the fair value over the original award on the date of the modification as an expense for vested awards or over the remaining service (vesting) period for unvested awards. The incremental compensation cost is the excess of the fair value of the modified award on the date of modification over the fair value of the original award immediately before the modification.

Business combinations, goodwill and intangible assets

Business combinations

The Company accounts for business acquisitions using the acquisition method as required by FASB ASC Topic 805, *Business Combinations*.

The Company's identifiable assets acquired and liabilities, including identified intangible assets, assumed in a business combination are recorded at their acquisition date fair values. The valuation requires management to make significant estimates and assumptions, especially with respect to long-lived and intangible assets. Critical estimates in valuing intangible assets include, but are not limited to:

- future expected cash flows, including revenue and expense projections;
- discount rates to determine the present value of recognized assets and liabilities and;
- revenue volatility to determine contingent consideration using option pricing models

Goodwill is calculated as the excess of the acquisition price over the fair value of net assets acquired, including the amount assigned to identifiable intangible assets. Acquisition-related costs, including advisory, legal, accounting, valuation, and other costs, are expensed in the periods in which these costs are incurred. The results of operations of an acquired business are included in the consolidated financial statements beginning at the acquisition date.

The Company estimates the acquisition date fair value of the acquisition-related contingent consideration using various valuation approaches, including option pricing models, as well as significant unobservable inputs, reflecting the Company's assessment of the assumptions market participants would use to value these liabilities. The fair value of the contingent consideration is remeasured each reporting period.

During the measurement period, which may be up to one year from the acquisition date, any refinements made to the fair value of the assets acquired, liabilities assumed, or contingent consideration are recorded in the period in which the adjustments are recognized. Upon the conclusion of the measurement period or final determination of the fair value of the assets acquired, liabilities assumed, or contingent consideration, whichever comes first, any subsequent adjustments are recognized in the consolidated statements of operations.

Goodwill

Goodwill represents the excess of the purchase price over the net amount of identifiable assets acquired and liabilities assumed in a business combination measured at fair value. Goodwill is not amortized but is tested for impairment at least annually. The Company reviews goodwill for impairment annually in the fourth quarter and whenever events or changes in circumstances indicate that the fair value of a reporting unit may be less than its carrying amount (a triggering event). The Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of its reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the quantitative goodwill impairment test described in FASB ASC Topic 350, *Intangibles – Goodwill and Other*. The more likely than not threshold is defined as having a likelihood of more than 50 percent. If, after assessing the totality of events or circumstances, the Company determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the quantitative goodwill impairment test is unnecessary and goodwill is considered to be unimpaired. However, if based on the qualitative assessment the Company concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, the Company will proceed with performing the quantitative goodwill impairment test. In performing the quantitative goodwill impairment test, the Company determines the fair value of its reporting unit and compares it to its carrying value. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not impaired. If the carrying value of the reporting unit exceeds its fair value, the Company records an impairment loss equal to the difference. The Company operates as one reporting unit as of the goodwill impairment measurement date in the fourth quarter of 2021. As of the testing date and the period after that date through the issuance date of our financial statements, the Company has observed no indicators of potential goodwill impairment at any point during the period based on its qualitative assessment.

Intangible assets

Intangible assets with a definite life are amortized over their estimated useful lives using the straight-line method and the amortization expense is recorded within intangible asset amortization in the Consolidated Statements of Operations. If the estimate of a definite-lived intangible asset's remaining useful life is changed, the remaining carrying amount of the intangible asset is amortized prospectively over the revised remaining useful life. Definite-lived intangible assets and their related estimated useful lives are reviewed at least annually to determine if any adverse conditions exist that would indicate the carrying value of these assets may not be recoverable. The Company determined that no adverse conditions existed that would indicate that the carrying value of these assets may not be recoverable.

Indefinite-lived intangibles are carried at the initially recorded fair value less any recognized impairment. In-process research and development ("IPR&D") is initially capitalized at fair value as an intangible asset with an indefinite life. When the IPR&D project is complete, it is reclassified as a definite-lived intangible asset and is amortized over its estimated useful life. If an IPR&D project is abandoned, a charge would be recorded for the value of the related intangible asset to our Consolidated Statement of Operations in the period it is abandoned. Indefinite-lived intangibles are tested annually for impairment. Impairment assessments are conducted more frequently if certain conditions exist, including a change in the competitive landscape, any internal decisions to pursue new or different technology strategies, a loss of a significant customer, or a significant change in the marketplace, including changes in the prices paid for the Company's products or changes in the size of the market for the Company's products. If impairment indicators are present, the Company determines whether the underlying intangible asset is recoverable through estimated future undiscounted cash flows. If the asset is not found to be recoverable, it is written down to the estimated fair value of the asset based on the sum of the future discounted cash flows expected to result from the use and disposition of the asset. The Company performed a quantitative impairment test of one of the IPR&D assets acquired during 2021 during the fourth quarter of 2021 and determined that no impairment existed. The Company performed a qualitative test for the other IPR&D assets acquired during 2021 and determined that no impairment existed.

Certain warrants which have features that may result in cash settlement

Warrants that include cash settlement features are recorded as liabilities at their estimated fair value at the date of issuance and are remeasured at fair value each reporting period with the increase or decrease in fair value recorded in the Consolidated Statements of Operations. The warrants are measured at estimated fair value using the Black Scholes valuation model, which is based, in part, upon inputs for which there is little or no observable market data, requiring the Company to develop its own assumptions. Inherent in this model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. We estimate the volatility of our common stock at the date of issuance, and at each subsequent reporting period, based on historical volatility that matches the contractual remaining life of the warrants. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the warrants. The expected life of the warrants is assumed to be equivalent to their remaining contractual term. The dividend rate is based on our historical rate, which we anticipate to remain at zero. The assumptions used in calculating the estimated fair value of the warrants represent our best estimates. However, these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and different assumptions are used, the warrant liability and the change in estimated fair value could be materially different. As of December 31, 2021, no warrants were outstanding. The following is our weighted average assumptions used in the Black Scholes calculations of the warrants as of December 31:

	2020	2019
Risk free interest rate	0.1%	1.9%
Expected dividend yield	0.0%	0.0%
Contractual remaining lives	0.2	1.7
Expected volatility	56.8%	70.3%

Recent accounting pronouncements

In November 2021, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2021-10, *Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance*, to increase the transparency of government assistance including the disclosure of the types of assistance an entity receives, an entity’s method of accounting for government assistance, and the effect of the assistance on an entity’s financial statements. The guidance in this update will be effective for fiscal years beginning after December 15, 2023, with early application of the amendments allowed. The amendments are to be applied prospectively to all transactions within the scope of the amendments that are reflected in financial statements at the date of initial application and new transactions that are entered into after the date of initial application or, retrospectively to those transactions. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In October 2021, the FASB issued ASU No. 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. This update amends guidance to require that an entity (acquirer) recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with *Revenue from Contracts with Customers (Topic 606)*. At the acquisition date, an acquirer should account for the related revenue contracts in accordance with Topic 606 as if it had originated the contracts. ASU 2021-08 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption of the amendments is permitted including adoption in an interim period. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In July 2021, the FASB issued ASU No. 2021-05, *Leases (Topic 842): Lessors - Certain Leases with Variable Lease Payments*. The guidance in ASU 2021-05 amends the lease classification requirements for the lessors under certain leases containing variable payments to align with practice under Accounting Standards Codification (“ASC”) 840. The lessor should classify and account for a lease with variable lease payments that do not depend on a reference index or a rate as an operating lease if both of the following criteria are met: 1) the lease would have been classified as a sales-type lease or a direct financing lease in accordance with the classification criteria in ASC 842-10-25-2 through 25-3; and 2) the lessor would have otherwise recognized a day-one loss. The amendments in ASU 2021-05 are effective for fiscal years beginning after December 15, 2021, with early adoption permitted. The Company adopted this guidance and it did not have a material impact on the company’s financial position, results of operation or cash flows.

In May 2021, the FASB issued ASU No. 2021-04, *Issuer’s Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options*, which clarifies the accounting for modifications or exchanges of freestanding equity-classified written call options that remain equity classified after modification or exchange. Specifically, ASU 2021-04 requires the issuer to treat a modification of an equity-classified warrant as an exchange of the original warrant. The difference between the fair value of the modified warrant and the fair value of the warrant immediately before modification is then recognized as an issuance cost or discount of the related transaction. ASU 2021-04 is effective for fiscal years beginning after December 15, 2021, and interim periods within those fiscal years, with early adoption permitted. ASU 2021-04 should be applied prospectively to modifications or exchanges occurring after the effective date. Either the full or modified retrospective adoption method is allowed. The Company adopted this guidance and it did not have a material impact on the company’s financial position, results of operation or cash flows.

In August 2020, the FASB issued ASU 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 simplifies the accounting for convertible debt instruments and convertible preferred stock by reducing the number of accounting models and the number of embedded conversion features that could be recognized separately from the primary contract. ASU 2020-06 also enhances transparency and improves disclosures for convertible instruments and earnings per share guidance. ASU 2020-06 is effective for annual reporting periods beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020. This update permits the use of either the modified retrospective or fully retrospective method of transition. The Company adopted this guidance and it did not have a material impact on the company's financial position, results of operation or cash flows.

In March 2020, the FASB issued ASU No. 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. ASU 2020-04 provides optional expedient and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. In response to the concerns about structural risks of interbank offered rates and, particularly, the risk of cessation of the London Interbank Offered Rate ("LIBOR"), regulators in several jurisdictions around the world have undertaken reference rate reform initiatives to identify alternative reference rates that are more observable or transaction-based and less susceptible to manipulation. The ASU provides companies with optional guidance to ease the potential accounting burden associated with transitioning away from reference rates that are expected to be discontinued. In January 2021, the FASB issued ASU 2021-01, Reference Rate Reform—Scope, which clarified the scope and application of the original guidance. The Company will adopt these standards when LIBOR is discontinued. The ASU can be adopted no later than December 1, 2022, with early adoption permitted. The Company has not yet adopted this ASU and is evaluating the effect of adopting this new accounting guidance.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 requires companies to measure credit losses utilizing a methodology that reflects expected credit losses and requires a consideration of a broader range of reasonable and supportable information to inform credit loss estimates. For companies that qualified as Smaller Reporting Companies as defined by the SEC as of November 19, 2019, ASU 2016-13 is effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. The Company is evaluating the impact of the guidance on its financial statements.

2. Fair value measurement

In accordance with FASB ASC Topic 820, *Fair Value Measurements and Disclosures*, ("ASC Topic 820"), the Company measures its financial instruments at fair value on a recurring basis. The carrying values of certain of our financial instruments including cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities approximate fair value because of their short maturities. The carrying values of our long-term debt, which is classified within Level 2 in the fair value hierarchy, approximates fair value as our borrowings with lenders are at interest rates that approximate market rates for comparable loans. The Company also measures certain assets and liabilities at fair value on a non-recurring basis when applying acquisition accounting. ASC Topic 820 clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, ASC Topic 820 establishes a three-tier value fair hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 – Observable inputs that reflect quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 – Observable inputs other than quoted prices included in Level 1 for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities.

Level 3 – Unobservable data points for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability.

For the investment in iVexSol convertible debt that was converted to Series A-1 preferred stock in November 2020, the significant Level 3 inputs were the expected term of the instrument, the underlying credit worthiness of iVexSol and the valuation of various embedded features in the note, which were based on future financings of iVexSol. We considered a range of probability-weighted financing or payoff settlements between 5% and 50% with outcomes occurring over a range of 1 to 2 years. The estimated market interest rate of approximately 8.0% was based on an average of indexes of below investment grade debt. The market rate was calibrated to the rate implied in the original issuance in September 2019 and adjusted for changes in market rates quarterly.

The fair value of the Astero contingent consideration liability was initially valued based on unobservable inputs using a Black-Scholes valuation model. These inputs included the estimated amount and timing of projected future revenue, a discount rate of 17.5%, risk-free rates between 2.29% and 2.41% and revenue volatility of 56%. Significant increases (decreases) in any of those inputs in isolation would result in a significantly higher (lower) fair value measurement. Generally, changes used in the assumptions for projected future revenue and revenue volatility would be accompanied by a directionally similar change in the fair value measurement. Conversely, changes in the discount rate would be accompanied by a directionally opposite change in the related fair value measurement. However, due to the contingent consideration having a maximum payout amount, changes in these assumptions would not affect the fair value of the contingent consideration if they increase (decrease) beyond certain amounts. Subsequent to the acquisition date, at each reporting period, the contingent consideration liability is re-measured to fair value with changes recorded in the change in fair value of contingent consideration in the Consolidated Statements of Operations. During the most recent re-measurement of the contingent consideration liability as of December 31, 2021, the Company assessed the probability of meeting previously determined metrics as unlikely. The Company recognized a reduction of $81,000 in the Change in Fair Value of Contingent Consideration in the Consolidated Statements of Operations for the year ended December 31, 2021. This Contingent Consideration liability is included in the Consolidated Balance Sheets as of December 31, 2020 in the amount of $81,000.

The fair value of the CBS contingent consideration liability was initially valued based on unobservable inputs using a Monte Carlo simulation. These inputs included the estimated amount and timing of projected future revenue, a discount rate of 26.0%, a risk-free rate of approximately 1.74% and revenue volatility of 70%. Significant increases (decreases) in any of those inputs in isolation would result in a significantly higher (lower) fair value measurement. Generally, changes used in the assumptions for projected future revenue and revenue volatility would be accompanied by a directionally similar change in the fair value measurement. Conversely, changes in the discount rate would be accompanied by a directionally opposite change in the related fair value measurement. However, due to the contingent consideration having a maximum payout amount, changes in these assumptions would not affect the fair value of the contingent consideration if they increase (decrease) beyond certain amounts. Subsequent to the acquisition date, at each reporting period, the contingent consideration liability is re-measured to fair value with changes recorded in the change in fair value of contingent consideration in the consolidated statements of operations. During the most recent re-measurement of the Contingent Consideration liability as of December 31, 2021, the Company used a discount rate of 21.0%, a risk-free rate of 0.23% and revenue volatility of 63%. This Contingent Consideration Liability is included in the Consolidated Balance Sheet as of December 31, 2021 and 2020 in the amount of $140,000.

The fair value of the SciSafe contingent consideration liability was initially valued based on unobservable inputs using a Monte Carlo simulation. These inputs included the estimated amount and timing of projected future revenue, a discount rate of 4.5%, a risk-free rate of approximately 0.20%, asset volatility of 60%, and revenue volatility of 15%. Significant increases (decreases) in any of those inputs in isolation would result in a significantly higher (lower) fair value measurement. Generally, changes used in the assumptions for projected future revenue and revenue volatility would be accompanied by a directionally similar change in the fair value measurement. Conversely, changes in the discount rate would be accompanied by a directionally opposite change in the related fair value measurement. However, due to the contingent consideration having a maximum payout amount, changes in these assumptions would not affect the fair value of the contingent consideration if they increase (decrease) beyond certain amounts. At the acquisition date, the contingent consideration was determined to have a fair value of $3.7 million. Subsequent to the acquisition date, the contingent consideration liability was re-measured to fair value with changes recorded in the change in fair value of contingent consideration in the consolidated statements of operations. During the most recent re-measurement of the contingent consideration liability as of December 31, 2021, the Company used a discount rate of 7.1%, a risk-free rate of approximately 0.85%, asset volatility of 72%, and revenue volatility of 27%. This contingent consideration liability is included in the Consolidated Balance Sheets as of December 31, 2021 and 2020 in the amounts of $9.9 million and $6.9 million, respectively. The changes in fair value of contingent consideration of $3.0 million and $3.3 million associated with this liability are included within the Change in Fair Value of Contingent Consideration in the Consolidated Statements of Operations for the years ended December 31, 2021 and 2020, respectively.

For the warrant liability, the significant Level 3 inputs included the contractual remaining term of the warrants and the volatility of the Company’s common stock. For the estimated term of the warrants, we used the actual terms of the warrants, which expired March 25, 2021. For the volatility of the Company’s stock as of December 31, 2020, we used historical volatility for the remaining term of each warrant. These amounts ranged from 56.8% to 84.6%. We did not make any adjustments to the historical volatility. Certain assumptions used in estimating the fair value of the warrants are uncertain by nature. On March 25, 2021, the expiration date of all remaining warrants, all remaining warrants were exercised via a “cashless” exercise and the warrant liability was revalued to its intrinsic value, as the Company’s stock price was observable as of that date.

There were no remeasurements to fair value during the year ended December 31, 2021 of financial assets and liabilities that are not measured at fair value on a recurring basis.

The following tables set forth the Company's financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2021 and 2020, based on the three-tier fair value hierarchy:

(In thousands)

As of December 31, 2021	Level 1	Level 2	Level 3	Total
Assets:				
Money market accounts	$ 63,873	$ -	$ -	$ 63,873
Total	63,873	-	-	63,873
Liabilities:				
Contingent consideration - business combinations	-	-	10,027	10,027
Total	$ -	$ -	$ 10,027	$ 10,027

As of December 31, 2020	Level 1	Level 2	Level 3	Total
Assets:				
Money market accounts	$ 90,403	$ -	$ -	$ 90,403
Total	90,403	-	-	90,403
Liabilities:				
Contingent consideration - business combinations	-	-	7,152	7,152
Warrant liability	-	-	2,780	2,780
Total	$ -	$ -	$ 9,932	$ 9,932

The fair values of money market funds classified as Level 1 were derived from quoted market prices as active markets for these instruments exist. The fair values of investments and contingent consideration classified as Level 3 were derived from management assumptions (see Note 1 – "*Organization and Significant Accounting Policies.*") There have been no transfers of assets or liabilities between the fair value measurement levels.

The following table presents the changes in fair value of contingent consideration liabilities which are measured using Level 3 inputs for the years ended December 31, 2021, 2020, and 2019:

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Beginning balance	$ 7,152	$ 1,914	-
Additions	-	3,663	2,347
Change in fair value recognized in net (loss) income	2,875	1,575	50
Payments earned, reclassified to accrued liabilities	-	-	(483)
Ending balance	$ 10,027	$ 7,152	$ 1,914

The following table presents the changes in fair value of warrant liabilities which are measured using Level 3 inputs for the years ended December 31, 2021, 2020, and 2019:

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Beginning balance	$ 2,780	$ 39,602	28,516
Exercised warrants	(2,901)	(33,221)	(1,749)
Change in fair value recognized in net (loss) income	121	(3,601)	12,835
Ending balance	$ -	$ 2,780	$ 39,602

3. Inventories

Inventories consist of the following as of December 31, 2021 and 2020:

(In thousands)	**2021**	**2020**
Raw materials	$ 17,252	$ 2,855
Work in progress	5,015	2,006
Finished goods	6,078	6,741
Total	$ 28,345	$ 11,602

4. Assets held for rent

Assets held for rent consist of the following as of December 31, 2021 and 2020:

(In thousands)	2021	2020
Shippers placed in service	$ 5,645	$ 3,171
Fixed assets held for rent	4,040	-
Accumulated depreciation	(2,272)	(411)
Net	7,413	2,760
Shippers and related components in production	2,396	1,945
Total	$ 9,809	$ 4,705

Shippers and related components in production include shippers complete and ready to be deployed and placed in service upon a customer order, shippers in the process of being assembled, and components available to build shippers. We recognized $1.9 million, $671,000, and $174,000 in depreciation expense related to assets held for rent during the years ended December 31, 2021, 2020, and 2019, respectively.

5. Leases

We have various operating lease agreements for office space, warehouses, manufacturing, and production locations as well as vehicles and other equipment. Our real estate leases have remaining lease terms of one to ten years. We exclude options that are not reasonably certain to be exercised from our lease terms, ranging from one to five years. Our lease payments consist primarily of fixed rental payments for the right to use the underlying leased assets over the lease terms. For certain leases, we receive incentives from our landlords, such as rent abatements, which effectively reduce the total lease payments owed for these leases. Vehicle and other equipment operating leases have terms between one and five years.

Our financing leases relate to research equipment, machinery, and other equipment.

The table below presents certain information related to the weighted average discount rate and weighted average remaining lease term for the Company's leases as of December 31, 2021 and 2020:

	2021	2020
Weighted average discount rate - operating leases	3.8%	3.3%
Weighted average discount rate - finance leases	6.1%	5.7%
Weighted average remaining lease term in years - operating leases	7.8	9.4
Weighted average remaining lease term in years - finance leases	3.0	2.6

The components of lease expense for the years ended December 31, 2021, 2020, and 2019 were as follows:

	Year Ended December 31,		
(In thousands)	2021	2020	2019
Operating lease costs	$ 2,817	$ 839	$ 612
Short-term lease costs	1,727	277	51
Total operating lease costs	4,544	1,116	663
Variable lease costs	749	357	299
Total lease expense	$ 5,293	$ 1,473	$ 962

Maturities of our lease liabilities as of December 31, 2021 are as follows:

(In thousands)	Operating Leases	Financing Leases
2022	$ 3,443	$ 171
2023	3,151	171
2024	2,883	101
2025	2,497	37
2026	2,006	2
Thereafter	8,364	-
Total lease payments	22,344	482
Less: interest	(3,120)	(42)
Total present value of lease liabilities	$ 19,224	$ 440

6. Goodwill and intangible assets

Goodwill

The following table represents the changes in the carrying value of goodwill for the years ended December 31, 2021 and 2020:

(In thousands)	Goodwill
Balance as of December 31, 2019	$ 33,637
Correction of an error related to CBS goodwill	(131)
Goodwill related to SciSafe acquisition	24,943
Balance as of December 31, 2020	58,449
Goodwill related to Global Cooling acquisition	137,822
Goodwill related to Sexton acquisition	28,470
Balance as of December 31, 2021	$ 224,741

We adjusted goodwill from the CBS Acquisition related to an immaterial error of $131,000 in payables that were paid during closing and incorrectly recorded as liabilities in our purchase price accounting as of December 31, 2019. We reduced our goodwill and accounts payable by $131,000 in the year ended December 31, 2020.

Intangible assets

Intangible assets, net consisted of the following as of December 31, 2021 and 2020:

(In thousands, except weighted average useful life)	December 31, 2021			
Intangible assets:	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Weighted Average Useful Life (in years)
Customer Relationships	$ 17,516	$ (1,776)	$ 15,740	10.3
Tradenames	35,574	(2,306)	33,268	13.8
Technology - acquired	41,942	(7,789)	34,153	5.9
Non-compete agreements	1,990	(442)	1,548	3.0
In-process research and development[(1)]	67,440	-	67,440	N/A
Total intangible assets	$ 164,462	$ (12,313)	$ 152,149	9.8

	December 31, 2020			
Intangible assets:	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Weighted Average Useful Life (in years)
Customer Relationships	$ 8,220	$ (330)	$ 7,890	12.8
Tradenames	6,610	(508)	6,102	14.0
Technology - acquired	19,670	(3,232)	16,438	7.1
Non-compete agreements	660	(41)	619	3.8
Total intangible assets	$ 35,160	$ (4,111)	$ 31,049	9.7

(1) In-process R&D represents the fair value of incomplete research and development that has not yet reached technological feasibility. We will amortize the asset upon technological feasibility.

Amortization expense for finite-lived intangible assets was $8.2 million, $3.0 million, and $1.1 million for the years ended December 31, 2021, 2020, and 2019, respectively. As of December 31, 2021, the Company expects to record the following amortization expense:

(In thousands)

For the Years Ending December 31,	Estimated Amortization Expense
2022	$ 11,421
2023	10,951
2024	10,126
2025	9,748
2026	9,346
Thereafter	33,117
Total	$ 84,709

7. Line of credit and long-term debt

Line of credit

In May 2021, the Company acquired Global Cooling and assumed a line of credit which bore interest at a floating rate equal to the 3-month LIBOR rate plus 5.50%. The maximum allowed on the line of credit was $5.0 million. The line was secured by substantially all assets of Global Cooling. In October 2021, the Company paid off the entirety of the outstanding balance on the line of credit and all related interest.

Long-term debt

In May 2021, the Company assumed three term notes in the acquisition of Global Cooling. At the time of acquisition, these notes carried aggregate outstanding principal balances of $4.4 million. These term notes bore interest at a floating rate equal to the 3-month LIBOR rate plus 6.50%. The term notes included financial covenants tied to the performance of Global Cooling.

In October 2021, the Company entered into amended and restated term notes for all three term notes assumed in the acquisition of Global Cooling. Pursuant to the loan agreements, one lender provided two term notes in the amounts of $1.4 million and $1.4 million. A separate lender provided one term note in the amount of $1.8 million. All three term notes bear interest at a fixed rate of 4%, are interest-only with one balloon principal payment at maturity, and can be pre-paid without penalty at any time. All financial covenants included in the original agreements previously in effect were removed by the amended loan agreements.

Long-term debt consisted of the following as of December 31, 2021 and 2020:

(In thousands)	Maturity Date	Interest Rate	December 31, 2021	December 31, 2020
2022 term loan 1	Sep-24	4.0%	$ 1,750	$ -
2022 term loan 2	Various	4.0%	2,813	-
Insurance premium financing	Apr-22	4.0%	373	-
Paycheck Protection Program loan	May-22	1.0%	-	295
Freezer equipment loan	Dec-25	5.7%	612	365
Manufacturing equipment loans	Oct-25	5.7%	355	439
Freezer installation loan	Various	6.3%	1,334	156
Other loans	Various	Various	9	14
Total debt, excluding unamortized debt issuance costs			7,246	1,269
Less: unamortized debt issuance costs			(31)	-
Total debt			7,215	1,269
Less: current portion of debt			(862)	(614)
Total long-term debt			$ 6,353	$ 655

The 2022 term loans are secured by substantially all assets of Global Cooling. Equipment loans are secured by the financed equipment.

As of December 31, 2021, the scheduled maturities of loans payable for each of the next five years and thereafter were as follows:

(In thousands)	Amount
2022	$ 862
2023	813
2024	2,294
2025	543
2026	221
Thereafter	2,513
Total debt, excluding unamortized debt issuance costs	7,246
Less: unamortized debt issuance costs	(31)
Total debt	$ 7,215

8. Income taxes

The following are the domestic and foreign components of the Company's loss before income taxes:

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Domestic	$ (27,317)	$ (597)	$ (3,198)
Foreign	(436)	-	-
Total	$ (27,753)	$ (597)	$ (3,198)

Income tax benefit consists of the following:

	Year Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Current:			
Federal	$ -	$ -	$ -
State	-	33	-
Foreign	9	-	-
Total current tax provision	9	33	-
Deferred:			
Federal	(17,703)	(3,297)	(1,541)
State	(2,424)	-	-
Foreign	-	-	-
Total deferred tax benefit	(20,127)	(3,297)	(1,541)
Income tax benefit	$ (20,118)	$ (3,264)	$ (1,541)

In the years ended December 31, 2021, 2020, and 2019, income tax benefit included excess tax benefits from stock-based compensation of $10.5 million, $3.2 million, and $2.3 million, respectively.

In connection with the 2021 Global Cooling acquisition, the Company recognized a deferred tax liability estimated to be $24.1 million. As a result, the Company recorded an income tax benefit of $8.0 million for the release of valuation allowance on our existing U.S. deferred tax assets as a result of the offset of the deferred tax liabilities established for intangible assets from the acquisition. In connection with the 2021 Sexton acquisition, the Company recorded a deferred tax liability estimated to be $1.5 million with an offset to goodwill.

In connection with the 2020 SciSafe acquisition, the Company recognized a deferred tax liability of $3.3 million on acquired intangible assets. As a result, the Company recorded an income tax benefit of $3.3 million for the release of valuation allowance on our existing U.S. deferred tax assets as a result of the offset of deferred tax liabilities established for intangible assets from the acquisition.

In connection with the 2019 SAVSU acquisition, the Company recognized a deferred tax liability of $1.5 million on acquired intangible assets. As a result, the Company recorded an income tax benefit of $1.5 million for the release of valuation allowance on our existing U.S. deferred tax assets as a result of the offset of deferred tax liabilities established for intangible assets from the acquisition.

A reconciliation of income taxes computed using the U.S. federal statutory rate to that reflected in operations follows:

	Year Ended December 31,		
	2021	**2020**	**2019**
Federal statutory tax	21%	21%	21%
State tax, net of federal benefit	7%	39%	-
Stock compensation	38%	538%	74%
Sec. 162(m) limitation on executive compensation	(12%)	(35%)	(17%)
Fair value change in contingent consideration	(2%)	(81%)	-
Fair value change in warrant liability	-	127%	(82%)
Transaction costs	(1%)	(6%)	(4%)
Gain on stock acquisition	5%	-	64%
Tax credits	-	12%	5%
Change in valuation allowance	21%	35%	(5%)
Book loss on equity method investment	-	-	(5%)
Expired net operating losses	(5%)	(100%)	(5%)
Other	-	(3%)	1%
Total	72%	547%	47%

The principal components of the Company's net deferred tax assets are as follows as of December 31, 2021 and 2020:

(In thousands)	2021	2020
Deferred tax assets related to:		
Net operating loss carryforwards	$ 27,500	$ 12,314
Stock-based compensation	2,066	1,678
Accruals and reserves	2,902	427
Inventory	236	142
Lease liabilities	4,198	2,247
Tax credit carryforward	594	225
Other	318	48
Total deferred tax assets	37,814	17,081
Deferred tax liabilities related to:		
Intangibles	(35,241)	(5,025)
Right-of-use assets	(4,070)	(2,261)
Fair value change in investments	(294)	(287)
Fixed assets	(1,203)	(959)
Other	-	(51)
Total deferred tax liabilities	(40,808)	(8,583)
Net deferred tax (liabilities) assets before valuation allowance	(2,994)	8,498
Less: valuation allowance	(2,493)	(8,498)
Net deferred tax liabilities	$ (5,487)	$ -

Realization of deferred tax assets is dependent upon the generation of future taxable income, if any, the timing and amount of which are uncertain. The assessment regarding whether a valuation allowance is required on deferred tax assets considers the evaluation of both positive and negative evidence when concluding whether it is more likely than not that deferred tax assets are realizable. The valuation allowance recorded as of December 31, 2021 and 2020 primarily relates to deferred tax assets for net operating loss carryforwards.

The changes in the valuation allowance for deferred tax assets were as follows:

(In thousands)	2021	2020	2019
Balance at January 1	$ 8,498	$ 8,706	$ 8,345
Deferred tax liabilities assumed through acquisitions	(8,498)	(3,297)	(1,541)
Charged to income tax expense	2,493	3,089	1,902
Balance at December 31	$ 2,493	$ 8,498	$ 8,706

As of December 31, 2021, the Company had U.S. federal net operating loss ("NOL") carryforwards of approximately $120.6 million. Approximately $39.5 million of NOL will expire from 2023 through 2037, and approximately $81.1 million of NOL will be carried forward indefinitely. The NOL carryforwards are subject to an annual limitation in the event of certain cumulative changes in the ownership interest. This limited the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. Subsequent ownership changes may further affect the limitation in future years.

The Company determines its uncertain tax positions based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be sustained upon examination by the relevant income tax authorities.

A reconciliation of the beginning and ending balances of uncertain tax positions in the years ended December 31, 2021 and 2020 is as follows:

(In thousands)	2021	2020
Balance as of January 1	$ 96	$ -
Increase related to prior year tax positions	-	36
Increase related to current year tax positions	159	60
Balance as of December 31	$ 255	$ 96

The Company did not have any uncertain tax positions or changes in uncertain tax positions as of or in the year ended December 31, 2019. The Company is generally subject to examination by U.S. federal and local income tax authorities for all tax years in which loss carryforward is available, which includes 2003 through 2021.

9. Warrants

In March 2014, pursuant to a to a registered public offering and note conversion agreement with certain note holders, the Company issued warrants to purchase 6,910,283 shares of common stock at $4.75 per share. The warrants had an original expiration date of March 2021.

In May 2016, in connection with a credit facility, the Company issued a warrant to purchase 550,000 shares of common stock at $1.75 per share. The warrant was immediately exercisable and had an original expiration date of May 2021.

In May 2020, the Company entered into separate warrant exercise agreements with WAVI Holding AG and Taurus4757 GmbH pursuant to which the warrant holders immediately exercised their respective warrants via a "cashless" exercise as agreed to by the Company. As a result of the cashless exercise, the Company issued an aggregate of 2,747,970 shares of Company common stock upon cashless exercise of an aggregate of 3,871,405 warrants.

In March 2021, all remaining outstanding warrants were exercised via a "cashless" exercise. As a result of the cashless exercise, the Company issued an aggregate of 70,030 shares of Company common stock upon cashless exercise of an aggregate of 79,100 warrants.

The following table summarizes warrant activity for the years ended December 31, 2021, 2020, and 2019:

	2021		2020		2019	
	Shares	Wtd. Avg. Exercise Price	Shares	Wtd. Avg. Exercise Price	Shares	Wtd. Avg. Exercise Price
Outstanding at beginning of year	79,100	$ 4.75	3,959,005	$ 4.33	4,080,005	$ 4.35
Exercised	(79,100)	4.75	(3,879,905)	4.33	(121,000)	4.75
Outstanding and exercisable at end of year	-	$ -	79,100	$ 4.75	3,959,005	$ 4.33

10. Stock-based compensation

Stock compensation plans

Our stock-based compensation programs are long-term retention programs that are intended to attract, retain and provide incentives for talented employees, officers and directors, and to align stockholder and employee interests. We have the following stock-based compensation plans and programs:

During 2013, we adopted the 2013 Performance Incentive Plan (the "2013 Plan"), which allows us to grant options or restricted stock awards to all employees, including executive officers, outside consultants and non-employee directors. An aggregate of 3.1 million shares of common stock were initially reserved for issuance under the 2013 Plan. In May 2017, July 2020, and June 2021, the shareholders approved an increase in the number of shares available for issuance to 4.1 million shares, 5.0 million shares, and 6.5 million shares, respectively. As of December 31, 2021, there were outstanding options to purchase 589,000 shares of Company common stock and 1.4 million unvested restricted stock awards outstanding under the 2013 Plan.

The Company also issued, outside any approved compensation plans, non-incentive stock options. As of December 31, 2021, there were 36,000 such options outstanding which were fully vested prior to 2019.

Issuance of shares

When options and warrants are exercised, it is the Company's policy to issue new shares.

Stock option activity

Service vesting-based stock options

The following is a summary of service vesting-based stock option activity for the year ended December 31, 2021 and 2020, and the status of service vesting-based stock options outstanding as of December 31, 2021 and 2020:

	2021		2020	
	Shares	Wtd. Avg. Exercise Price	Shares	Wtd. Avg. Exercise Price
Outstanding as of beginning of year	844,455	$ 2.00	1,570,455	$ 1.96
Exercised	(183,064)	1.61	-	-
Forfeited	(1,146)	5.69	(726,000)	1.91
Expired	(35,714)	1.73	-	-
Outstanding as of end of year	624,531	$ 2.13	844,455	$ 2.00
Stock options exercisable at year end	624,531	$ 2.13	832,478	$ 1.98

We recognized stock compensation expense related to service-based options of $25,000, $119,000, and $370,000 during the years ended December 31, 2021, 2020, and 2019. As of December 31, 2021, there was $21.9 million of aggregate intrinsic value of outstanding service vesting-based stock options, including $21.9 million of aggregate intrinsic value of exercisable service vesting-based stock options. Intrinsic value is the total pretax intrinsic value for all "in-the-money" options (i.e., the difference between the Company's closing stock price on the last trading day of the year and the exercise price, multiplied by the number of shares) that would have been received by the option holders had all option holders exercised their options on December 31, 2021. This amount will change based on the fair market value of the Company's stock. Intrinsic value of service vesting-based awards exercised during the years ended December 31, 2021, 2020, and 2019 was $6.9 million, $13.1 million, and $7.1 million, respectively. There were no service based-vesting options granted during the years ended December 31, 2021, 2020, and 2019. The weighted average remaining contractual life of service vesting-based options outstanding and exercisable as of December 31, 2021 is 3.2 years. There were no unrecognized compensation costs for service vesting-based stock options as of December 31, 2021.

The following table summarizes information about service vesting-based stock options outstanding as of December 31, 2021:

Range of Exercise Prices	Number Outstanding as of December 31, 2021	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price
$1.00 - 1.50	26,428	1.05	$ 1.38
$1.51 - 2.00	290,760	3.27	1.87
$2.01 - 2.50	265,775	3.35	2.06
$2.51 - 8.60	41,568	3.75	4.86
	624,531	3.24	$ 2.13

Performance-based stock options

The Company's Board of Directors implemented a Management Performance Bonus Plan for 2017. Based on achieving varying levels of specified revenue for the year ending December 31, 2017, up to 1,000,000 options to purchase shares of the Company's common stock were available for vesting. The options had an exercise price of $1.64 and vested if revenue levels for 2017 were met. If the minimum performance targets were not achieved, no options would have vested. On February 27, 2018, the Company's Board of Directors determined that the specified revenue target had been achieved. Accordingly, 999,997 options to purchase shares of the Company's common stock vested in 2017 and 2018.

The following is a summary of performance-based stock option activity under our stock option plans for the years ended December 31, 2021 and 2020, and the status of performance-based stock options outstanding as of December 31, 2021 and 2020:

	2021		2020	
	Shares	Wtd. Avg. Exercise Price	Shares	Wtd. Avg. Exercise Price
Outstanding as of beginning of year	686,001	$ 1.64	737,497	$ 1.64
Exercised	(686,001)	1.64	(51,496)	1.64
Outstanding as of end of year	-	$ -	686,001	$ 1.64
Stock options exercisable as of year end	-	$ -	686,001	$ 1.64

No stock compensation expense was recognized during the years ended December 31, 2021, 2020, and 2019 related to performance-based options. The intrinsic value of performance-based awards exercised during the years ending December 31, 2021, 2020, and 2019 was $27.4 million, $1.3 million, and $3.7 million, respectively. There were no stock options granted to employees and non-employee directors in the years ending December 31, 2021, 2020, and 2019.

Restricted stock

Service vesting-based restricted stock

The following is a summary of service vesting-based restricted stock activity for the years ended December 31, 2021 and 2020, and the status of unvested service vesting-based restricted stock outstanding as of December 31, 2021 and 2020:

	2021		2020	
	Shares	Wtd. Avg. Grant Date Fair Value	Shares	Wtd. Avg. Grant Date Fair Value
Outstanding as of beginning of year	930,854	$ 19.31	429,399	$ 13.25
Granted	801,484	47.20	717,267	20.88
Granted in lieu of cash	-	-	34,154	9.18
Vested	(378,502)	19.31	(208,858)	11.32
Forfeited	(141,053)	36.95	(41,108)	15.47
Non-vested as of year end	1,212,783	$ 37.48	930,854	$ 19.31

On November 4, 2021, the Board of Directors approved to modify certain restricted stock awards that were awarded to one executive that otherwise would have expired upon the executive's intended retirement in early 2023. The modification accelerated the vesting of the awards to vest equally over four quarters in the year ended December 31, 2022. We recorded incremental stock-based compensation expense of $666,000 in the year ended December 31, 2021 for this stock option modification.

The aggregate fair value of the service vesting-based awards granted during the years ended December 31, 2021, 2020, and 2019 was $37.8 million, $15.3 million, and $5.3 million, respectively. The aggregate fair value of the service vesting-based awards that vested during the years ended December 31, 2021, 2020, and 2019 was $15.9 million, $4.5 million, and $1.9 million, respectively.

On March 25, 2020, our board of directors granted 34,154 restricted stock awards, based on a fair value on the grant date of $9.18 per share, in lieu of the 2019 cash performance bonus for our executive compensation plan. The award vested in full on September 25, 2020 regardless of employment status on that date. All expenses related to these awards were incurred in the year ended December 31, 2019.

We recognized stock compensation expense of $12.7 million, $3.0 million, and $1.2 million related to service vesting-based awards during the years ended December 31, 2021, 2020, and 2019, respectively. As of December 31, 2021, there was $38.9 million in unrecognized compensation costs related to service vesting-based awards. We expect to recognize those costs over 3.0 years.

Performance-based restricted stock

On March 25, 2020, the Company granted 82,805 shares of performance-based stock to its executives in the form of restricted stock. The shares granted contain a performance condition based on several Company metrics related to 2020 performance. The grant date fair value of this award was $9.18 per share. The fair value of this award was expensed on a straight-line basis over the requisite service period ending on December 31, 2020.

The following is a summary of performance-based restricted stock activity for the years ended December 31, 2021 and 2020:

	2021		2020	
	Shares	Wtd. Avg. Grant Date Fair Value	Shares	Wtd. Avg. Grant Date Fair Value
Outstanding as of beginning of year	-	$ -	-	$ -
Granted	-	-	82,805	9.18
Vested	-	-	(82,805)	9.18
Non-vested as of year end	-	$ -	-	$ -

We recognized stock compensation expense of zero, $760,000, and zero related to performance-based restricted stock awards for the years ended December 31, 2021, 2020, and 2019, respectively. As of December 31, 2021, there were no unrecognized non-cash compensation costs related to performance-based restricted stock awards. Non-cash compensation costs were expensed over the period for which performance was measured.

The aggregate fair value of the performance-based awards granted during the years ended December 31, 2021, 2020, and 2019 was zero, $760,000, and zero, respectively. The aggregate fair value of the performance-based awards that vested during the years ended December 31, 2021, 2020, and 2019 was zero, $2.3 million, and zero, respectively.

Market-based restricted stock

The following is a summary of market-based restricted stock activity under our stock option plan for the years ended December 31, 2021 and 2020 and the status of market-based restricted stock outstanding as of December 31, 2021 and 2020:

	2021		2020	
	Shares	Wtd. Avg. Grant Date Fair Value	Shares	Wtd. Avg. Grant Date Fair Value
Outstanding as of beginning of year	224,774	$ 19.20	123,851	$ 26.99
Granted	152,665	32.50	109,140	10.95
Vested	(231,268)	26.98	-	-
Forfeited	(6,415)	40.65	(8,217)	27.02
Non-vested as of year end	139,756	$ 19.86	224,774	$ 19.20

On February 25, 2019 the Company granted 94,247 shares and on April 1, 2019 granted 29,604 shares of market-based stock to its executives in the form of restricted stock. The shares granted contain a market condition based on Total Shareholder Return ("TSR"). The TSR market condition measures the Company's performance against a peer group. On February 8, 2021, the Company determined the TSR attainment was 200% of the targeted shares, resulting in 115,634 shares being granted and 231,268 shares vesting to current employees of the Company based on our total shareholder return during the period beginning on January 1, 2019 through December 31, 2020 as compared to the total shareholder return of 20 of our peers. The fair value of this award was determined at the grant date using a Monte Carlo simulation with the following assumptions: a historical volatility of 69%, 0% dividend yield and a risk-free interest rate of 2.5%. The historical volatility was based on the most recent 2-year period for the Company and correlated with the components of the peer group. The stock price projection for the Company and the components of the peer group assumes a 0% dividend yield. This is mathematically equivalent to reinvesting dividends in the issuing entity over the performance period. The risk-free interest is based on the yield on the U.S. Treasury Strips as of the Measurement Date with a maturity consistent with the 2-year term associated with the market condition of the award. The fair value of this award of $3.1 million was expensed on a straight-line basis over the grant date to the vesting date of December 31, 2020.

On March 25, 2020, the Company granted 109,140 shares of market-based stock to its executives in the form of restricted stock. The shares granted contain a market condition based on TSR. The TSR market condition measures the Company's performance against a peer group. The market-based restricted stock awards will vest as to between 0% and 200% of the number of restricted shares granted to each recipient based on our total shareholder return during the period beginning on January 1, 2020 through December 31, 2021 as compared to the total shareholder return of 20 of our peers. The fair value of this award was determined at the grant date using a Monte Carlo simulation with the following assumptions: a historical volatility of 78%, 0% dividend yield and a risk-free interest rate of 0.3%. The historical volatility was based on the most recent 2-year period for the Company and correlated with the components of the peer group. The stock price projection for the Company and the components of the peer group assumes a 0% dividend yield. This is mathematically equivalent to reinvesting dividends in the issuing entity over the performance period. The risk-free interest is based on the yield on the U.S. Treasury Strips as of the Measurement Date with a maturity consistent with the 2-year term associated with the market condition of the award. The fair value of this award of $1.2 million was expensed on a straight-line basis over the grant date to the vesting date of December 31, 2021.

On February 8, 2021, the Company granted 30,616 shares of market-based stock to its executives in the form of restricted stock. The shares granted contain a market condition based on TSR. The TSR market condition measures the Company's performance against a peer group. The market-based restricted stock awards will vest as to between 0% and 200% of the number of restricted shares granted to each recipient based on our total shareholder return during the period beginning on January 1, 2021 through December 31, 2022 as compared to the total shareholder return of 20 of our peers. The fair value of this award was determined using a Monte Carlo simulation with the following assumptions: a historical volatility of 68%, 0% dividend yield and a risk-free interest rate of 0.1%. The historical volatility was based on the most recent 2-year period for the Company and correlated with the components of the peer group. The stock price projection for the Company and the components of the peer group assumes a 0% dividend yield. This is mathematically equivalent to reinvesting dividends in the issuing entity over the performance period. The risk-free interest rate is based on the yield on the U.S. Treasury Strips as of the Measurement Date with a maturity consistent with the 2-year term associated with the market condition of the award. The fair value of this award of $1.3 million is being expensed on a straight-line basis over the grant date to the vesting date of December 31, 2022.

On May 3, 2021, the Company granted 6,415 shares of market-based stock to one executive in the form of restricted stock. The shares granted contain a market condition based on TSR. The TSR market condition measures the Company's performance against a peer group. The market-based restricted stock awards will vest as to between 0% and 200% of the number of restricted shares granted to the recipient based on our total shareholder return during the period beginning on January 1, 2021 through December 31, 2022 as compared to the total shareholder return of 20 of our peers. The fair value of this award was determined using a Monte Carlo simulation with the following assumptions: a historical volatility of 68%, 0% dividend yield and a risk-free interest rate of 0.2%. The historical volatility was based on the most recent 2-year period for the Company and correlated with the components of the peer group. The stock price projection for the Company and the components of the peer group assumes a 0% dividend yield. This is mathematically equivalent to reinvesting dividends in the issuing entity over the performance period. The risk-free interest rate is based on the yield on the U.S. Treasury Strips as of the Measurement Date with a maturity consistent with the 2-year term associated with the market condition of the award. In November 2021, the executive departed the company and, as a result, forfeited these shares, resulting in no expense being recognized in the year ended December 31, 2021 for this award.

We recognized stock compensation expense of $1.4 million, $2.1 million, and $1.5 million related to market-based restricted stock awards for the years ended December 31, 2021, 2020, and 2019. As of December 31, 2021, there was $834,000 in unrecognized non-cash compensation costs related to market-based restricted stock awards expected to vest. We expect to recognize those costs over 1.0 year.

The aggregate fair value of the market-based awards granted during the years ended December 31, 2021, 2020, and 2019 was $1.8 million, $1.2 million, and $3.3 million, respectively. The aggregate fair value of the market-based awards that vested during the years ended December 31, 2021, 2020, and 2019 was $10.2 million, zero, and zero, respectively.

Total stock compensation expense

We recorded total stock compensation expense for the years ended December 31, 2021, 2020, and 2019, as follows:

	2021	2020	2019
Research and development costs	$ 1,906	$ 1,012	$ 571
Sales and marketing costs	1,788	852	711
General and administrative costs	8,061	3,518	1,584
Cost of revenue	2,201	599	177
Total	$ 13,956	$ 5,981	$ 3,043

11. Commitments and contingencies

Employment agreements

We have employment agreements with certain key employees. None of these employment agreements is for a definitive period, but rather each will continue indefinitely until terminated in accordance with its terms. The agreements provide for a base annual salary, payable in monthly (or shorter) installments. Under certain conditions and for certain of these officers, we may be required to pay additional amounts upon terminating the officer or upon the officer resigning for good reason.

Litigation

From time to time, the Company is subject to various legal proceedings that arise in the ordinary course of business, none of which are currently material to the Company's business. The Company's industry is characterized by frequent claims and litigation, including claims regarding intellectual property. As a result, the Company may be subject to various legal proceedings from time to time. The results of any future litigation cannot be predicted with certainty, and regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors. Management is not aware of any pending or threatened litigation.

Indemnification

As permitted under Delaware law and in accordance with the Company's bylaws, the Company is required to indemnify its officers and directors for certain errors and occurrences while the officer or director is or was serving in such capacity. The Company is also party to indemnification agreements with its directors. The Company believes the fair value of the indemnification rights and agreements is minimal. Accordingly, the Company has not recorded any liabilities for these indemnification rights and agreements as of December 31, 2021.

12. Acquisitions

Sexton acquisition

General terms and effects

On August 9, 2021, BioLife entered into an Agreement and Plan of Merger (the "Sexton Merger Agreement") with BLFS Merger Sub, Inc., a Delaware corporation ("Sexton Merger Sub"), Fortis Advisors LLC, in its capacity as the representative of the stockholders of Sexton (the "Sexton Seller Representative") and Sexton, a Delaware corporation. The acquisition strengthens BioLife's offerings in the cell and gene therapy and broader biopharma markets.

On September 1, 2021, the Company completed the merger of Sexton Merger Sub with and into Sexton and Sexton became a wholly-owned subsidiary of the Company (the "Sexton Merger"). As consideration for the Sexton Merger (the "Sexton Merger Consideration"), holders of common stock, preferred stock and options of Sexton, other than the Company (collectively, the "Sexton Participating Holders"), are entitled to receive an aggregate of 530,502 newly issued shares of the Company's common stock, subject to certain post-closing adjustments, of which 477,452 shares of Common Stock were issued to the Sexton Participating Holders at the Closing, and 53,050 shares of Common Stock, or approximately 10% of the Merger consideration, were deposited into an escrow account for indemnification and post-closing purchase price adjustment purposes. Prior to the merger, the Company held preferred stock in Sexton, which was accounted for using a measurement alternative that measures the securities at cost minus impairment, if any, plus or minus changes resulting from observable process changes in orderly transactions for identical or similar investments of the same issuer. The Company accounted for the merger as a step acquisition, which required remeasurement of the Company's existing ownership in Sexton to fair value prior to completing the acquisition method of accounting. Using step acquisition accounting, the Company increased the value of its existing equity interest to its fair value, resulting in the recognition of a non-cash gain of $6.5 million, which was included in the gain on acquisition of Sexton Biotechnologies, Inc. in the Consolidated Statements of Operations for the year ended December 31, 2021. The Company utilized a market-based valuation approach to determine the fair value of the existing equity interest based on the total merger consideration offered and the Company's stock price at acquisition.

Total consideration transferred (in thousands, except number of shares and stock price):

Merger consideration shares		530,502
BioLife stock price (as of September 1, 2021)	$	60.50
Value of issued shares	$	32,095
plus: Fair value of BioLife's existing investment in Sexton	$	7,951
less: Net working capital adjustment	$	(118)
Merger Consideration	$	39,928

Transaction costs related to the acquisition are expensed as incurred and are not included in the calculation of consideration transferred.

Fair value of net assets acquired

Under the acquisition method of accounting, the assets acquired and liabilities assumed from Sexton were calculated as of the merger date, at their respective fair values, and consolidated with those of BioLife. The gross contractual accounts receivable acquired in the acquisition was $509,000. Of the acquired accounts receivable, $17,000 is estimated to be uncollectable. The fair value calculations required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

The table below represents the fair value of the net assets acquired and liabilities assumed, which were recorded as of the merger date (amounts in thousands).

Cash	$	1,516
Accounts receivable, net		492
Inventory		1,310
Prepaid expenses and other current assets		670
Property, plant and equipment, net		737
Operating lease right-of-use assets, net		470
Developed technology		4,132
Customer relationships		2,276
Tradenames		2,324
Non-compete agreements		90
Goodwill		28,470
Accounts payable		(291)
Lease liabilities, operating		(470)
Deferred tax liability		(1,482)
Other liabilities		(316)
Fair value of net assets acquired	**$**	**39,928**

We recorded a measurement period adjustment in the fourth quarter of the year ended December 31, 2021 of $198,000 to the fair value of goodwill and the deferred tax liability. This adjustment related to the tax attributes of the business combination.

The fair value of Sexton's identifiable intangible assets and useful lives are as follows (amounts in thousands, except years):

		Fair Value	Useful Life (Years)
Developed technology	$	4,132	5 - 9
Customer relationships		2,276	2
Tradenames		2,324	11
Non-compete agreements		90	1
Total identifiable intangible assets	**$**	**8,822**	

Fair value measurement methodologies used to calculate the value of any asset can be broadly classified into one of three approaches, referred to as the cost, market and income approaches. In any fair value measurement analysis, all three approaches must be considered, and the approach or approaches deemed most relevant will then be selected for use in the fair value measurement of that asset. The estimated fair values of developed technology were estimated using a multi-period excess earnings approach. The estimated fair values of customer relationships and non-compete agreements were estimated using a "with and without" approach, comparing projected cash flows under scenarios assuming the customer relationships and non-compete agreements were and were not in place. The estimated fair value of the tradenames is based on the relief from royalty method, which estimates the value of the trade names based on the hypothetical royalty payments that are saved by owning the asset.

Some of the more significant assumptions inherent in the development of intangible asset fair values, from the perspective of a market participant, include, but are not limited to (i) the amount and timing of projected future cash flows (including revenue and expenses), (ii) the discount rate selected to measure the risks inherent in the future cash flows, (iii) the assessment of the asset's life cycle, and (iv) the competitive trends impacting the asset.

Acquired goodwill

The goodwill of $28.5 million represents future economic benefits expected to arise from synergies from combining operations and commercial organizations to increase market presence and the extension of existing customer relationships. The goodwill recorded is not deductible for income tax purposes.

Global Cooling acquisition

General terms and effects

On March 19, 2021, the Company entered into an Agreement and Plan of Merger (the "GCI Merger Agreement") with BLFS Merger Subsidiary, Inc., a Delaware corporation ("GCI Merger Sub"), Global Cooling, a Delaware corporation and Albert Vierling and William Baumel, in their capacity as the representatives of the stockholders of GCI (collectively, the "GCI Seller Representative"). The acquisition strengthens BioLife's offerings in the cell and gene therapy and broader biopharma markets.

On May 3, 2021, pursuant to the GCI Merger Agreement, subject to the terms and conditions set forth therein, the transactions contemplated by the GCI Merger Agreement were consummated (the "GCI Closing"), GCI Merger Sub merged with and into GCI (the "GCI Merger" and, together with other transactions contemplated by the GCI Merger Agreement, the "GCI Transactions"), with GCI continuing as the surviving corporation in the GCI Merger and a wholly-owned subsidiary of the Company. In the GCI Merger, all of the issued and outstanding shares of capital stock of GCI immediately prior to the filing of the Certificate of Merger with the Secretary of State of the State of Delaware (other than those properly exercising any applicable dissenter's rights under Delaware law) were converted into the right to receive the GCI Merger Consideration (as defined below). The Company paid the GCI Merger Consideration to the holders of common stock and preferred stock of GCI (collectively, the "GCI Stockholders").

Merger consideration

The aggregate merger consideration paid pursuant to the GCI Merger Agreement to the GCI Stockholders was 6,646,870 newly issued shares of common stock, provided, however, that the GCI Merger Consideration otherwise payable to GCI Stockholders is subject to the withholding of the GCI Escrow Shares (as defined below) and is subject to reduction for indemnification obligations. The GCI Merger Consideration allocable to one GCI stockholder was reduced by 10,400 shares to satisfy an outstanding note receivable of $374,000. In accordance with ASC 805, the Company recognized the settlement of pre-existing relationships in the forms of cash deposits, trade receivables, and trade payables, which are included in the consideration transferred. The GCI Merger Consideration is not subject to any purchase price adjustments.

Total consideration transferred (in thousands, except number of shares, stock price, and consideration percentage):

BioLife shares outstanding (as of March 19, 2021)		33,401,359
Merger consideration percentage		19.9%
Merger consideration shares		6,646,870
less: Merger consideration shares withheld to satisfy outstanding GCI stockholder obligations to GCI		10,400
Subtotal		6,636,470
BioLife stock price (as of May 3, 2021)	$	35.07
Value of issued shares	$	232,741
plus: Settlement of BioLife prepaid deposits	$	2,152
plus: Net settlement of BioLife accounts receivable	$	16
Merger Consideration	$	234,909

Transaction costs related to the acquisition are expensed as incurred and are not included in the calculation of consideration transferred.

Escrow shares

At the GCI Closing, approximately nine percent (9%) of the GCI Merger Consideration (the "Escrow Shares", along with any other dividends, distributions or other income on the GCI Escrow Shares, the "GCI Escrow Property") otherwise issuable to the GCI Stockholders (allocated pro rata among the GCI Stockholders based on the GCI Merger Consideration otherwise issuable to them at the GCI Closing), was deposited into a segregated escrow account in accordance with an escrow agreement to be entered into in connection with the GCI Transactions (the "GCI Escrow Agreement").

The GCI Escrow Property will be held for a period of up to twenty-four (24) months after the GCI Closing as the sole and exclusive source of payment for any post-GCI Closing indemnification claims (other than fraud claims), unless earlier released in accordance with the terms of the GCI Escrow Agreement.

Fair value of net assets acquired

Under the acquisition method of accounting, the assets acquired and liabilities assumed from Global Cooling were calculated as of the merger date, at their respective fair values, and consolidated with those of BioLife. The gross contractual accounts receivable acquired in the acquisition was $7.1 million. Of the acquired accounts receivable, $53,000 was estimated to be uncollectable. The fair value calculations required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

The table below represents the fair value of the net assets acquired and liabilities assumed, which were recorded as of the merger date (amounts in thousands).

Cash	$	43
Accounts receivable, net		7,076
Inventory		15,547
Prepaid expenses and other current assets		639
Property, plant and equipment, net		3,512
Operating lease right-of-use assets, net		1,741
Financing lease right-of-use assets, net		114
Long-term deposits and other assets		4
Developed technology		18,140
Customer relationships		7,020
Tradenames		26,640
Non-compete agreements		1,240
In-process research and development		67,440
Goodwill		137,822
Accounts payable		(9,837)
Line of credit		(4,231)
Lease liabilities, operating		(1,880)
Lease liabilities, financing		(114)
Long-term debt		(4,410)
Deferred tax liability		(24,133)
Other liabilities		(7,464)
Fair value of net assets acquired	**$**	**234,909**

We recorded a measurement period adjustment in the fourth quarter of the year ended December 31, 2021 of $607,000 to the fair value of goodwill and the deferred tax liability. This adjustment related to the tax attributes of the business combination.

The fair value of Global Cooling's identifiable intangible assets and useful lives are as follows (amounts in thousands, except years):

		Fair Value	Useful Life (Years)
Developed technology	$	18,140	6
Customer relationships		7,020	12
Tradenames		26,640	15
Non-compete agreements		1,240	4
In-process research and development		67,440	N/A
Total identifiable intangible assets	**$**	**120,480**	

Fair value measurement methodologies used to calculate the value of any asset can be broadly classified into one of three approaches, referred to as the cost, market and income approaches. In any fair value measurement analysis, all three approaches must be considered, and the approach or approaches deemed most relevant will then be selected for use in the fair value measurement of that asset. The fair values of developed technology and in-process research and development were estimated using a multi-period excess earnings approach. The fair values of customer relationships were estimated using the "distributor method". The fair value of the tradenames is based on the relief from royalty method, which estimates the value of the trade names based on the hypothetical royalty payments that are saved by owning the asset. The fair values of non-compete agreements were estimated using a "with and without" approach, comparing projected cash flows under scenarios assuming the non-compete agreements were and were not in place. The fair value of inventory and property, plant and equipment were determined using the "market approach".

Some of the more significant assumptions inherent in the development of intangible asset fair values, from the perspective of a market participant, include, but are not limited to (i) the amount and timing of projected future cash flows (including revenue and expenses), (ii) the discount rate selected to measure the risks inherent in the future cash flows, (iii) the assessment of the asset's life cycle, and (iv) the competitive trends impacting the asset.

Acquired goodwill

The goodwill of $137.8 million represents future economic benefits expected to arise from synergies from combining operations and commercial organizations to increase market presence and the extension of existing customer relationships. The goodwill recorded is not deductible for income tax purposes.

SciSafe acquisition

On September 18, 2020, BioLife entered into a Stock Purchase Agreement, by and among the Company, SciSafe Holdings, Inc., a Delaware corporation, and the stockholders of SciSafe (collectively, the "SciSafe Sellers") in accordance with the Stock Purchase Agreement, pursuant to which the Company agreed to purchase from the SciSafe Sellers one hundred percent (100%) of the issued and outstanding capital shares or other equity interests of SciSafe (the "SciSafe Acquisition"). The SciSafe Acquisition closed October 1, 2020. The acquisition strengthens BioLife's offerings in the cell and gene therapy and broader biopharma markets.

Consideration transferred

The SciSafe Acquisition was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. At the closing of the SciSafe Acquisition, the Company agreed to issue to the SciSafe Sellers 611,683 shares of common stock valued at $29.29 per share and a cash payment of $15 million, with $1.5 million held in escrow to account for adjustments for net working capital and as a security for, and a source of payment of, the Company's indemnity rights. Pending the occurrence of certain events, the Company will issue to the SciSafe Sellers an additional 626,000 shares of common stock, which shall be issuable to SciSafe Sellers upon SciSafe achieving certain specified revenue targets in each year from 2021 to 2024. Under the acquisition method of accounting, the assets acquired and liabilities assumed from SciSafe were recorded as of the acquisition date, at their respective fair values, and consolidated with those of BioLife. The fair value calculations required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Total consideration transferred (in thousands):

Cash consideration	$	15,000
Stock consideration		17,916
Contingent consideration		3,663
Working capital adjustment		(53)
Total consideration transferred	**$**	**36,526**

Fair value of net assets acquired

The table below represents the purchase price allocation to the net assets acquired based on their fair values (amounts in thousands).

Cash	$	500
Accounts receivable, net		945
Prepaid expenses and other current assets		31
Property, plant and equipment, net		3,400
Customer relationships		7,420
Tradenames		4,020
Non-compete agreements		660
Goodwill		24,943
Other assets		1,547
Accounts payable		(885)
Deferred tax liability		(3,297)
Other liabilities		(2,758)
Fair value of net assets acquired	**$**	**36,526**

On September 30, 2020, the Company advanced SciSafe $500,000 in cash for working capital purposes. This cash and a payable due to the Company were both assumed in the transaction and are both reflected in the fair value of net assets acquired.

The fair value of SciSafe's identifiable intangible assets and useful lives are as follows (amounts in thousands except years):

		Fair Value	Useful Life (Years)
Customer relationships	$	7,420	14
Tradenames		4,020	19
Non-compete agreements		660	4
Total identifiable intangible assets	**$**	**12,100**	

Fair value measurement methodologies used to calculate the value of any asset can be broadly classified into one of three approaches, referred to as the cost, market and income approaches. In any fair value measurement analysis, all three approaches must be considered, and the approach or approaches deemed most relevant will then be selected for use in the fair value measurement of that asset. The fair values of customer relationships were estimated using a multi-period excess earnings approach. The fair value of the tradenames is based on the relief from royalty method which estimates the value of the trade names based on the hypothetical royalty payments that are saved by owning the asset. The fair values of non-compete agreements were estimated using a "with and without" approach, comparing projected cash flows under scenarios assuming the non-compete agreements were and were not in place. The fair value of property, plant and equipment was determined using the "market approach". The fair value of the milestone contingent consideration was determined using a scenario analysis valuation method which incorporates BioLife's assumptions with respect to the likelihood of achievement of certain revenue milestones, revenue volatility, credit risk, timing of earnout share issuances and a risk-adjusted discount rate to estimate the present value of the expected earnout share issuances.

Some of the more significant assumptions inherent in the development of intangible asset fair values, from the perspective of a market participant, include, but are not limited to (i) the amount and timing of projected future cash flows (including revenue and expenses), (ii) the discount rate selected to measure the risks inherent in the future cash flows, (iii) the assessment of the asset's life cycle, and (iv) the competitive trends impacting the asset.

Indemnification asset

In 2020, the Company recognized a $130,000 liability for a non-income tax contingency related to the acquisition of SciSafe. At the date of acquisition, we recognized an indemnification asset at the same time and on the same basis as the recognized liability, to the extent that collection is reasonably assured, in accordance with ASC 805. When indemnified, subsequent changes in the indemnified item are offset by changes in the indemnification asset. We assess the realizability of the indemnification asset each reporting period. Changes in the principal portion of non-income tax contingencies, as well as changes in any related indemnification asset, are included in operating income. The indemnification asset is included within prepaid expenses and other current assets on the balance sheet.

Acquired goodwill

The goodwill of $24.9 million represents future economic benefits expected to arise from synergies from combining operations and commercial organizations to increase market presence and the extension of existing customer relationships. The goodwill recorded is not deductible for income tax purposes.

Custom Biogenic Systems Acquisition

On November 10, 2019, we entered into an Asset Purchase Agreement, by and among the Company, Arctic Solutions, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, and CBS, a Michigan corporation, pursuant to which we agreed to purchase from CBS substantially all of CBS's assets, properties and rights (the "CBS Acquisition"). CBS, a privately held company with operations located near Detroit, Michigan, designs and manufactures liquid nitrogen laboratory freezers and cryogenic equipment and also offers a related cloud-based monitoring system that continuously assesses biologic sample storage conditions and alerts equipment owners if a fault condition occurs. The CBS Acquisition closed on November 12, 2019.

In connection with the CBS Acquisition, we paid to CBS (i) a base payment in the amount of $15.0 million, consisting of a cash payment of $11.0 million paid at the closing of the CBS Acquisition, less a cash holdback escrow of $550,000 to satisfy certain indemnification claims, and an aggregate number of shares of our common stock, with an aggregate fair value equal to $4.0 million, less a holdback escrow of shares of Common Stock with an aggregate value equal to $3.0 million to satisfy potential payments related to any product liability claims outstanding as of March 13, 2019, and (ii) potential earnout payments in calendar years 2020, 2021, 2022, 2023 and 2024 of up to an aggregate of, but not exceeding, $15.0 million payable to the sole shareholder of CBS upon achieving certain specified revenue targets in each year for certain product lines. The revenue targets set for 2020 and 2021 were not met and no amounts were paid or are considered payable for the earnouts related to those years.

The CBS Acquisition was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. Under the acquisition method of accounting, the acquired assets and liabilities assumed from CBS were recorded as of the acquisition date, at their fair values, and consolidated with BioLife. The fair value estimates required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Total consideration transferred (in thousands):

Cash consideration	$	11,000
Stock consideration		4,000
Contingent consideration		856
Total consideration transferred	**$**	**15,856**

Fair Value of Net Assets Acquired

The table below represents the purchase price allocation to the net assets acquired based on their fair values (amounts in thousands).

Accounts receivable, net	$	1,044
Inventory		3,232
Prepaid expenses and other current assets		29
Property, plant and equipment, net		3,615
Customer relationships		560
Tradenames		800
Developed technology		5,430
Goodwill		2,954
Accounts Payable		(1,197)
Other liabilities		(611)
Fair value of net assets acquired	**$**	**15,856**

The fair value of CBS's identifiable intangible assets and weighted average useful lives are as follows (amounts in thousands except years):

		Fair Value	Useful Life (Years)
Customer relationships	$	560	6
Tradenames		800	6
Developed technology		5,430	9
Total identifiable intangible assets	$	6,790	

Fair value measurement methodologies used to calculate the value of any asset can be broadly classified into one of three approaches, referred to as the cost, market and income approaches. In any fair value measurement analysis, all three approaches must be considered, and the approach or approaches deemed most relevant will then be selected for use in the fair value measurement of that asset. The fair value of identifiable intangible assets was determined primarily using variations of the income approach, which is based on the present value of the future after-tax cash flows attributable to each identifiable intangible asset. The fair value of inventories was determined using both the cost approach and the market approach and the fair value of property, plant and equipment was determined using the cost and market approach.

Some of the more significant assumptions inherent in the development of intangible asset fair values, from the perspective of a market participant, include, but are not limited to (i) the amount and timing of projected future cash flows (including revenue and expenses), (ii) the discount rate selected to measure the risks inherent in the future cash flows, (iii) the assessment of the asset's life cycle, and (iv) the competitive trends impacting the asset. Some of the more significant assumptions inherent in valuing the contingent consideration, include, but are not limited to (i) the amount and timing of projected future revenue, (ii) the volatility rate selected to measure the risks inherent in the revenue, and (iii) risk free interest rate.

Acquired Goodwill

The goodwill of $3.0 million represents future economic benefits expected to arise from synergies from combining operations and commercial organizations to increase market presence and the extension of existing customer relationships. All of the goodwill recorded is deductible for income tax purposes.

SAVSU Acquisition

On August 8, 2019, we closed the acquisition of SAVSU pursuant to a Share Exchange Agreement. Pursuant to the Share Exchange Agreement, SAVSU Origin, LLC agreed to transfer to us and we agreed to acquire from the seller 8,616 shares of common stock of SAVSU, representing the remaining 56% of the outstanding shares of SAVSU that we did not previously own, in exchange for 1,100,000 shares of BioLife common stock. As a result of the acquisition, SAVSU became a wholly-owned subsidiary on August 8, 2019, the acquisition date.

Consideration transferred

The SAVSU acquisition was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. The acquisition of 56% of SAVSU was funded through a transfer of 1,100,000 shares of BioLife common stock, which had a fair value of $18.12 per share or $19.9 million at time of closing. The total value of 100% of SAVSU consisting of the fair value of the stock issued and the fair value of our existing investment in SAVSU was $35.8 million at time of closing. Prior to the acquisition, we accounted for our investment of SAVSU using the equity method of accounting which resulted in a recorded book value of $5.8 million at the acquisition date. We remeasured to fair value the equity interest in SAVSU held immediately before the business combination. The fair value of our equity interest was determined to be $15.9 million on our existing 44% ownership based on the fair value of shares transferred at the time of acquisition for the 56% we did not previously own. As a result, we recorded a non-operating gain of $10.1 million.

Under the acquisition method of accounting, the assets acquired and liabilities assumed from SAVSU were recorded as of the acquisition date, at their respective fair values, and consolidated with those of BioLife. The fair value estimates required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Total consideration paid for the acquisition of SAVSU is as follows (amounts in thousands):

Stock consideration for 55.6% equity interest purchased	$	19,932

This stock consideration plus the fair value of our existing equity investment in SAVSU of $15.9 million results in the total purchase price for accounting purposes of $35.8 million.

Fair Value of Net Assets Acquired

The table below represents the purchase price allocation to the net assets acquired based on their fair values (amounts in thousands).

Cash and cash equivalents	$	1,251
Accounts receivable, net		753
Prepaid expenses and other current assets		19
Property, plant and equipment, net		546
Operating right-of-use asset		233
Assets held for lease		2,441
Customer relationships		80
Tradenames		1,320
Developed technology		10,750
Goodwill		21,037
Accounts Payable and accrued expenses		(807)
Deferred tax liabilities		(1,541)
Other liabilities		(232)
Fair value of net assets acquired	**$**	**35,850**

The fair value of SAVSU's identifiable intangible assets and useful lives are as follows (amounts in thousands except years):

		Fair Value	Useful Life (Years)
Customer relationships	$	80	6
Tradenames		1,320	9
Developed technology		10,750	7 - 8
Total identifiable intangible assets	**$**	**12,150**	

Astero Acquisition

On April 1, 2019, BioLife completed the acquisition of all the outstanding shares of Astero. Astero's ThawSTAR product line is comprised of a family of automated thawing devices for frozen cell and gene therapies packaged in cryovials and cryobags. The products improve the quality of administration of high-value, temperature-sensitive biologic therapies to patients by standardizing the thawing process and reducing the risks of contamination and overheating, which are inherent with the use of traditional water baths.

In connection with the acquisition, the Company paid (i) a base payment in the amount of $12.5 million consisting of an initial cash payment of $8.0 million at the closing of the transactions, subject to adjustment for working capital, net debt and transaction expenses, and a deferred cash payment that was paid into escrow and subsequently paid to Astero of $4.5 million which was payable upon the earlier of Astero meeting certain product development milestones or one year after the date of the Closing and (ii) earnout payments in calendar years 2019, 2020 and 2021 of up to an aggregate of $3.5 million, was payable upon Astero achieving certain specified revenue targets in each year and a separate earnout payment of $5.0 million for calendar year 2021, which was payable upon Astero achieving a cumulative revenue target over the three-year period from 2019 to 2021. In the second quarter of 2020 we paid $483,000 for the earnout related to 2019 revenues. Revenue targets for 2020, 2021, and the cumulative period from 2019 to 2021 were not met and no amounts were paid or are considered payable for the earnouts related to those years.

Consideration transferred

The Astero acquisition was accounted for as a purchase of a business under FASB ASC Topic 805, *Business Combinations*. Under the acquisition method of accounting, the assets acquired and liabilities assumed from Astero were recorded as of the acquisition date, at their respective fair values, and consolidated with those of BioLife. The fair value estimates required critical estimates, including, but not limited to, future expected cash flows, revenue and expense projections, discount rates, revenue volatility, and royalty rates.

Total consideration recorded for the acquisition of Astero is as follows (amounts in thousands):

Cash consideration	$	12,521
Contingent consideration		1,491
Working capital adjustment		(71)
Total consideration transferred	**$**	**13,941**

Fair Value of Net Assets Acquired

The table below represents the purchase price allocation to the net assets acquired based on their fair values (amounts in thousands).

Cash and cash equivalents	$	11
Accounts receivable, net		154
Inventory		456
Customer relationships		160
Tradenames		470
Developed technology		2,840
In-process research and development		650
Goodwill		9,515
Other assets		99
Accounts Payable		(250)
Other liabilities		(164)
Fair value of net assets acquired	**$**	**13,941**

The fair value of Astero's identifiable intangible assets and useful lives are as follows (amounts in thousands except years):

		Fair Value	Useful Life (Years)
Customer relationships	$	160	4
Tradenames		470	9
Developed technology		2,840	5 - 9
In-process research and development		650	N/A
Total identifiable intangible assets	**$**	**4,120**	

Fair value measurement methodologies used to calculate the value of any asset can be broadly classified into one of three approaches, referred to as the cost, market and income approaches. In any fair value measurement analysis, all three approaches must be considered, and the approach or approaches deemed most relevant will then be selected for use in the fair value measurement of that asset. The fair value of identifiable intangible assets was determined by third-party appraisal primarily using variations of the income approach, which is based on the present value of the future after-tax cash flows attributable to each identifiable intangible asset. The fair value of inventories was determined using both the cost approach and the market approach.

Some of the more significant assumptions inherent in the development of intangible asset fair values, from the perspective of a market participant, include, but are not limited to (i) the amount and timing of projected future cash flows (including revenue and expenses), (ii) the discount rate selected to measure the risks inherent in the future cash flows, (iii) the assessment of the asset's life cycle, and (iv) the competitive trends impacting the asset. Some of the more significant assumptions inherent in valuing the contingent consideration, include, but are not limited to (i) the amount and timing of projected future revenue, (ii) the volatility rate selected to measure the risks inherent in the revenue, and (iii) risk free interest rate.

Acquired Goodwill

The goodwill of $9.5 million represents future economic benefits expected to arise from synergies from combining operations and commercial organizations to increase market presence and the extension of existing customer relationships. All but $1.1 million of the goodwill recorded is not deductible for income tax purposes.

Revenue, net income and pro forma presentation

The Company recorded revenue from Sexton of $1.8 million and a net loss of $1.0 million from September 1, 2021, the date of acquisition, to December 31, 2021. The Company recorded revenue from Global Cooling of $39.1 million and a net loss of $19.6 million from May 3, 2021, the date of acquisition, to December 31, 2021. The Company recorded revenue from SciSafe of $1.8 million and a net loss of $416,000 from October 1, 2020, the date of acquisition, to December 31, 2020. The Company recorded revenue from CBS of $2.1 million and net income of $187,000 from November 12, 2019, the date of acquisition, to December 31, 2019. The Company recorded revenue from SAVSU of $692,000 and a net loss of $1.7 million from August 8, 2019, the date of acquisition, to December 31, 2019. The Company recorded revenue from Astero of $1.2 million and a net loss of $1.5 million from April 1, 2019, the date of acquisition, to December 31, 2019. The Company has included the operating results of the acquisitions in its Unaudited Condensed Consolidated Statements of Operations since their respective acquisition date.

The following unaudited pro forma financial information presents the combined results of operations of Sexton as if the acquisition had occurred on January 1, 2020 after giving effect to certain pro forma adjustments. These pro forma adjustments include intangible amortization, stock-based compensation expense and salary expense related to a key employee, and the income tax effect of the adjustments made:

(In thousands)	**2021 (unaudited)**	**2020 (unaudited)**
Total revenue	$ 122,494	$ 50,856
Net (loss) income	$ (9,860)	$ (1,028)

The following unaudited pro forma financial information presents the combined results of operations of Global Cooling as if the acquisition had occurred on January 1, 2020 after giving effect to certain pro forma adjustments. These pro forma adjustments include intangible amortization, amortization of increased inventory basis, depreciation expense, lease expense, transaction costs, interest expense, stock-based compensation expense and salary expense related to a key employee, and the income tax effect of the adjustments made:

(In thousands)	**2021 (unaudited)**	**2020 (unaudited)**
Total revenue	$ 143,732	$ 87,370
Net income (loss)	$ (16,375)	$ 501

The following unaudited pro forma financial information presents the combined results of operations of SciSafe as if the acquisition had occurred on January 1, 2019 after giving effect to certain pro forma adjustments. These pro forma adjustments include intangible amortization, depreciation expense, stock-based compensation expense, and the income tax effect of the adjustments made:

(In thousands)	**2020 (unaudited)**	**2019 (unaudited)**
Total revenue	$ 52,613	$ 43,221
Net income (loss)	$ 1,798	$ (4,528)

The following unaudited pro forma financial information presents the combined results of operations of CBS as if the acquisition had occurred on January 1, 2018 after giving effect to certain pro forma adjustments. These pro forma adjustments include amortization expense on the acquired identifiable intangible assets, adjustments to stock-based compensation expense for equity compensation issued to employees and the income tax effect of the adjustments made:

(In thousands)	2019 (unaudited)
Total revenue	$ 37,001
Net income (loss)	$ (493)

The following unaudited pro forma financial information presents the combined results of operations of SAVSU as if the acquisition had occurred on January 1, 2018 after giving effect to certain pro forma adjustments. These pro forma adjustments include amortization expense on the acquired identifiable intangible assets, adjustments to stock-based compensation expense for equity compensation issued to employees and the income tax effect of the adjustments made:

(In thousands)	2019 (unaudited)
Total revenue	$ 28,824
Net income (loss)	$ (1,518)

The following unaudited pro forma financial information presents the combined results of operations of Astero as if the acquisition had occurred on January 1, 2018 after giving effect to certain pro forma adjustments. These pro forma adjustments include amortization expense on the acquired identifiable intangible assets, adjustments to stock-based compensation expense for equity compensation issued to employees and the income tax effect of the adjustments made:

(In thousands)	2019 (unaudited)
Total revenue	$ 28,745
Net income (loss)	$ (183)

13. Consolidated balance sheet detail

Property and equipment

Property and equipment consist of the following as of December 31, 2021 and 2020:

(In thousands)	2021	2020
Property and equipment		
Leasehold improvements	$ 3,840	$ 2,393
Furniture and computer equipment	1,861	902
Manufacturing and other equipment	16,675	10,076
Construction in-progress	2,022	591
Subtotal	24,398	13,962
Less: Accumulated depreciation	(6,741)	(3,842)
Net property and equipment	$ 17,657	$ 10,120

Depreciation expense for property and equipment was $2.9 million, $1.4 million, and $544,000 for the years ended December 31, 2021, 2020, and 2019, respectively.

Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consist of the following as of December 31, 2021 and 2020:

(In thousands)	2021	2020
Accrued expenses	$ 1,656	$ 472
Accrued taxes	27	112
Accrued compensation	4,351	2,898
Deferred revenue, current	814	931
Other	294	130
Total accrued expenses and other current liabilities	$ 7,142	$ 4,543

Warranty reserve liability

We reserve estimated exposures on known claims, as well as on a portion of anticipated claims, for product warranty and rework cost, based on historical product liability claims. Claim costs are deducted from the accrual when paid. Factors that could have an impact on the warranty accrual in any given period include the following: changes in manufacturing quality, changes in product costs, changes in product mix and any significant changes in sales volume.

A rollforward of our warranty liability is as follows:

(In thousands)	2021	2020
Beginning balance	$ 212	$ 191
Warranty reserve acquired in the acquisition of Global Cooling	3,353	-
Provision for warranties	9,845	137
Settlements of warranty claims	(4,012)	(116)
Ending Balance	$ 9,398	$ 212

14. Employee benefit plan

The Company sponsors 401(k) defined contribution plans for its employees. These plans provide for pre-tax and post-tax contributions for all employees. Employee contributions are voluntary. Employees may contribute up to 100% of their annual compensation to these plans, as limited by an annual maximum amount as determined by the Internal Revenue Service. The Company matches employee contributions in amounts to be determined at the Company's sole discretion. The Company made contributions of $822,000, $347,000, and $158,000 to the plans for the years ended December 31, 2021, 2020, and 2019.

15. Subsequent events

The Company has evaluated events subsequent to December 31, 2021 through the date of this filing to assess the need for potential recognition or disclosure. Based upon this evaluation, it was determined that no subsequent events occurred that require recognition or disclosure in the Consolidated Financial Statements.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Form 10-K. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures as of the end of the period covered by this Form 10-K were not effective, due to the material weaknesses in our internal controls over financial reporting described below.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal 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. 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. Because of 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 BioLife Solutions have been detected.

(b) Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act). Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control—Integrated Framework (2013 framework).

In accordance with guidance issued by the Securities and Exchange Commission, companies are permitted to exclude acquisitions from their final assessment of internal control over financial reporting for the first fiscal year in which the acquisition occurred. Our management's evaluation of internal control over financial reporting excluded the internal control activities of Global Cooling, Inc. ("Global Cooling" acquired on May 3, 2021) and Sexton Biotechnologies, Inc. ("Sexton" acquired on September 1, 2021) as discussed in Note 12, "Acquisitions," of the Notes to the Consolidated Financial Statements. We have included the financial results of these acquired businesses in the consolidated financial statements from the date of acquisition. These acquired businesses constituted approximately 19% of our total consolidated assets (excluding goodwill and intangible assets related to the transactions, which were integrated into our systems and control environment) and 35% of the total consolidated revenue included in our consolidated financial statements as of and for the year ended December 31, 2021.

Based on our assessment under the framework in Internal Control—Integrated Framework (2013 framework), our management concluded that our internal control over financial reporting was not effective as of December 31, 2021 due to the existence of material weaknesses described below.

A material weakness in internal control is a deficiency in internal control, or combination of control deficiencies, that adversely affects the Company's ability to initiate, authorize, record, process, or report external financial data reliably in accordance with GAAP such that there is more than a remote likelihood that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected.

Control Environment, Risk Assessment, and Monitoring Activities

Management did not maintain appropriately designed entity-level controls impacting the control environment, risk assessment procedures, and monitoring activities to prevent or detect material misstatements to the consolidated financial statements in a timely manner. These material weaknesses were attributed to:

- Insufficient number of qualified resources and inadequate oversight and accountability over the performance of controls;
- Ineffective identification and assessment of risks impacting internal control over financial reporting; and,
- Ineffective monitoring controls, as the Company did not effectively evaluate whether the components of internal control were present and functioning.

Control Activities and Information and Communication

Additionally, management did not adequately design and implement effective control activities, including general controls over information technology, and effective policies and procedures, resulting in additional material weaknesses within certain business processes. As a result, the following additional material weaknesses were identified:

- Management did not maintain effective controls over information system logical access within certain key financial systems, including inadequate segregation of duties impacting the revenue and inventory processes at certain of the Company's subsidiaries;

- Management did not establish effective accounting policies and procedures and related controls over complex financial statement areas, including revenue recognition, lease modifications, modifications to share-based payments, income taxes, and financial instruments with characteristics of liabilities and equity;

- Management did not maintain effectively designed and implemented accounting policies, procedures, and related controls over assets held for lease;

- Management did not maintain effectively designed and implemented accounting policies, procedures, and related controls over the preparation and review of projected financial information used in determining the valuation of acquired intangible assets and contingent consideration in business combinations as well as the quantitative impairment analysis of indefinite-lived intangible assets;

- Management did not maintain effectively designed and implemented policies, procedures, and related controls over the presentation and disclosure of amounts presented in the consolidated financial statements in accordance with the applicable financial reporting requirements, including controls over the completeness and accuracy of underlying data to support the amounts presented.

After giving full consideration to these material weaknesses, and the additional analyses and other procedures that we performed to ensure that our consolidated financial statements included in this Annual Report on Form 10-K were prepared in accordance with U.S. GAAP, our management, including our CEO and CFO, has concluded that our consolidated financial statements present fairly, in all material respects, our financial position, results of operations and cash flows for the periods disclosed in conformity with U.S. GAAP.

These control deficiencies create a reasonable possibility that a material misstatement to the consolidated financial statements will not be prevented or detected on a timely basis, and therefore, we concluded that the deficiencies represent material weaknesses in our internal control over financial reporting, and our internal control over financial reporting was not effective as of December 31, 2021.

Management has been actively engaged in developing and implementing remediation plans to address these material weaknesses as described below in section (c).

The Company's independent registered public accounting firm, BDO USA, LLP, who audited our internal controls over financial reporting, has issued an adverse opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2021, as stated in its report.

(c) Remediation

With respect to the material weaknesses described above, management has continued to test and evaluate the elements of the remediation plan implemented to date.

Management of the Company and the Board of Directors are committed to maintaining a strong internal control environment and to making further progress in remediating the material weaknesses described in section (b). The following steps either have been planned for implementation or have been implemented in the Company's ongoing efforts to remediate the material weaknesses identified:

- The Company reassigned all system administrator rights to personnel who do not perform key accounting duties;

- The Company plans to hire and retain additional individuals with the appropriate skills related to technical accounting and internal control over financial reporting;

- The Company will enhance its reconciliations and management review controls with the added stability of new hires and the implementation of technology solutions to automate visibility and enforcement of the independent review and documentation of journal entries, including proper segregation of duties, thus mitigating risks of both unintentional errors and fraud; and

- The Company plans to develop processes and procedures to enhance the precision of management review of financial statement information.

As we continue to evaluate and test the remediation plan outlined above, we may also identify additional measures to address the material weaknesses or modify certain of the remediation procedures described above. We also may implement additional changes to our internal control over financial reporting as may be appropriate in the course of remediating the material weaknesses. Management, with the oversight of the Audit Committee, will continue to take steps necessary to remedy the material weaknesses to reinforce the overall design and capability of our control environment.

(d) Changes in Internal Control Over Financial Reporting

Other than the controls implemented to remediate the material weaknesses described above, there have been no changes in our internal control over financial reporting during the fiscal quarter ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

(e) Attestation Report of the Independent Registered Public Accounting Firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Directors
BioLife Solutions, Inc.
Bothell, Washington

Opinion on Internal Control over Financial Reporting

We have audited BioLife Solutions, Inc.'s (the "Company's") internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). In our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We do not express an opinion or any other form of assurance on management's statements referring to any corrective actions taken by the Company after the date of management's assessment.

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, 2021 and 2020, the related consolidated statements of operations and comprehensive loss (income), shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and our report dated March 31, 2022 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 "Item 9A, 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 U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

As indicated in the accompanying "Item 9A, Management's Report on Internal Control over Financial Reporting", management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Global Cooling, Inc. and Sexton Biotechnologies, Inc., which were acquired on May 3, 2021 and September 1, 2021, respectively, and which are included in the consolidated balance sheets of the Company as of December 31, 2021, and the related consolidated statements of operations and comprehensive loss (income), shareholders' equity, and cash flows for the year then ended. Global Cooling, Inc. constituted 16% of total assets as of December 31, 2021, and 33% of total revenues for the year then ended. Sexton Biotechnologies, Inc. constituted 3% of total assets as of December 31, 2021, and 2% of total revenues for the year then ended. Management did not assess the effectiveness of internal control over financial reporting of Global Cooling, Inc. and Sexton Biotechnologies, Inc. because of the timing of the acquisitions. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Global Cooling, Inc. and Sexton Biotechnologies, Inc.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. Material weaknesses have been identified and described in management's assessment. These material weaknesses related to management's failure to design and maintain effective controls over financial reporting, specifically related to the following: (1) entity-level controls impacting the control environment, risk assessment procedures, and monitoring controls to prevent or detect material misstatements to the consolidated financial statements; (2) information system logical access within certain key financial systems, including inadequate segregation of duties impacting the revenue and inventory processes at certain of the Company's subsidiaries; (3) accounting policies and related controls over complex financial statement areas, including revenue recognition, lease modifications, modifications to share-based payments, income taxes, and financial instruments with characteristics of liabilities and equity; (4) accounting policies, procedures, and related controls over assets held for lease; (5) controls over the preparation and review of projected financial information used in determining the valuation of acquired intangible assets and contingent consideration in business combinations as well as the quantitative impairment analysis of indefinite-lived intangible assets; and (6) policies, procedures and related controls over the presentation and disclosure of amounts presented in the consolidated financial statements in accordance with the applicable financial reporting requirements, including controls over the completeness and accuracy of underlying data to support the amounts presented.

These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2021 financial statements, and this report does not affect our report dated March 31, 2022 on those financial statements.

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/ BDO USA, LLP

Seattle, Washington

March 31, 2022

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTION THAT PREVENTS INSPECTIONS

None.

PART III

Pursuant to General Instructions G to Form 10-K, the information required for Part III, Items 10, 11, 12, 13 and 14, is incorporated herein by reference from the Company's proxy statement for the 2022 Annual Meeting of Stockholders.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Financial Statements (Included Under Item 8): The Index to the Financial Statements is included on page 28 of this Annual Report on Form 10-K and is incorporated herein by reference.

(2) Financial Statement Schedules: Schedules to the Financial Statements have been omitted because the information required to be set forth therein is not applicable or is shown in the accompanying Financial Statements or notes thereto.

(b) Exhibits

Exhibit Number	Document
2.1†*	Stock Purchase Agreement, dated March 13, 2019, by and among the Company, Astero Bio Corporation, the stockholders of Astero Bio Corporation and the representative of the sellers (included as Exhibit 2.1 to the current report on Form 8-K filed on April 5, 2019)
2.2†	Share Exchange Agreement, dated August 7, 2019, by and among the Company, SAVSU Technologies, Inc. and SAVSU Origin LLC (included as Exhibit 2.1 to the current report on Form 8-K filed on August 13, 2019)
2.3†*	Asset Purchase Agreement, dated November 10, 2019, by and among the Company, Arctic Solutions, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, and Custom Biogenic Systems, Inc. (included as Exhibit 2.1 to the current report on Form 8-K filed on November 15, 2019)
2.4†*	Stock Purchase Agreement, dated September 18, 2020, by and among the Company, SciSafe, the stockholders of SciSafe party thereto and Garrie Richardson (included as Exhibit 2.1 to the current report on Form 8-K filed on September 24, 2020)
2.5†*	Agreement and Plan of Merger, dated as of March 19, 2021, by and among the Company, BLFS Merger Subsidiary, Inc., Global Cooling, Inc. and Albert Vierling and William Baumel, in their capacity as the representatives of the stockholders of Global Cooling, Inc. (included as Exhibit 2.1 to the current report on Form 8-K filed on March 25, 2021)
2.6†*	Agreement and Plan of Merger, dated as of August 9, 2021, by and among the Company, BLFS Merger Sub, Inc., Sexton Biotechnologies, Inc. and Fortis Advisors LLC, in their capacity as the representatives of the stockholders of Sexton Biotechnologies, Inc. (filed herewith)
3.1	Amended and Restated Certificate of Incorporation of BioLife Solutions, Inc. (included as Exhibit 4.1 to the Registration Statement on Form S-8 filed on June 24, 2013)
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of BioLife Solutions, Inc. (included as Exhibit 3.1 to the Current Report on Form 8-K filed on January 30, 2014)
3.3	Amended and Restated Bylaws of BioLife Solutions, Inc., effective April 25, 2013 (included as Exhibit A to the Registrant's Definitive Information Statement on Schedule 14C filed March 27, 2013)
3.4	Certificate of Designations, Preferences, and Rights of Series A Preferred Stock (included as Exhibit 3.1 to the current report on Form 8-K filed on July 6, 2017)
4.1	Description of the Company's Securities Registered under Section 12 of the Exchange Act (incorporated by reference to the Company's registration statement on Form 8-A, as filed on March 19, 2014)
10.1**	Second Amended and Restated 2013 Performance Incentive Plan (included as Appendix A to the Registrant's Definitive Proxy Statement filed on April 14, 2017)
10.2**	Amendment No. 1 to Second Amended and Restated 2013 Performance Incentive Plan (included as Exhibit 10.2 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2020 filed March 31, 2021)
10.3**	BioLife Solutions, Inc. Form of Non-Plan Stock Option Agreement (included as Exhibit 4.4 to the Registration Statement on Form S-8 filed on June 24, 2013)
10.4**	Form of Restricted Stock Purchase Agreement pursuant to the Second Amended & Restated 2013 Performance Incentive Plan (included as Exhibit 10.4 to the Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 filed on May 16, 2016)
10.5**	Form of Stock Option Agreement pursuant to the Second Amended & Restated 2013 Performance Incentive Plan (included as Exhibit 10.5 to the Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 filed on May 16, 2016)
10.6	Common Stock Purchase Warrant issued to WAVI Holding AG (included as Exhibit 10.7 to the Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 filed on May 16, 2016)

10.7	Share Purchase Agreement, dated May 14, 2020, between the Company and Casdin Partners Master Fund, L.P. (included as Exhibit 10.1 to the Current Report on Form 8-K filed on May 27, 2020)
10.8	Underwriting Agreement, dated July 2, 2020, between Biolife Solutions, Inc. and Cowen and Company, LLC, Oppenheimer & Co. Inc. and Stephens Inc. (included as Exhibit 10.1 to the Current Report on Form 8-K filed on July 8, 2020)
10.9	Lease Agreement dated August 1, 2007 for facility space 3303 Monte Villa Parkway, Bothell, WA 98021 (included as Exhibit 10.27 and Exhibit 10.29 to the Annual Report on Form 10-KSB for the fiscal year ended December 31, 2007 filed April 1, 2008)
10.10	First Amendment to the Lease, dated November 4, 2008, between the Company and Monte Villa Farms, LLC (included as Exhibit 10.16 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2008 filed March 31, 2009)
10.11	Second Amendment to the Lease, dated March 2, 2012, between the Company and Monte Villa Farms, LLC (included as Exhibit 10.30 to the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2012 filed May 14, 2012)
10.12	Third Amendment to the Lease, dated June 15, 2012, between the Company and Monte Villa Farms, LLC (included as Exhibit 10.37 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2012 filed March 29, 2013)
10.13	Fourth Amendment to the Lease, dated November 26, 2012, between the Company and Monte Villa Farms, LLC (included as Exhibit 10.41 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2012 filed March 29, 2013)
10.14	Fifth Amendment to Lease, dated August 19, 2014, by and between the Company and Monte Villa Farms LLC (included as Exhibit 10.1 Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2014 filed on November 6, 2014)
10.15	Sixth Amendment to the Lease, dated March 3, 2017, by and between the Company and Monte Villa Farms LLC (filed herewith)
10.16	Seventh Amendment to the Lease, dated December 4, 2018, by and between the Company and Monte Villa Farms LLC (filed herewith)
10.17	Eighth Amendment to the Lease, dated November 1, 2019, by and between the Company and Monte Villa Farms LLC (filed herewith)
10.18	Ninth Amendment to the Lease, dated November 12, 2020, by and between the Company and Monte Villa Farms LLC (filed herewith)
10.19	Tenth Amendment to the Lease, dated October 8, 2021, by and between the Company and ARE-SEATTLE No. 38, LLC (filed herewith)
10.20	Eleventh Amendment to the Lease, dated February 22, 2022, by and between the Company and ARE-SEATTLE No. 38, LLC (filed herewith)
10.21	Lease Agreement dated January 29, 2021 for facility space 301 Treble Cove Road, Billerica, MA 01862 (filed herewith)
10.22	Commercial Lease and Deposit Receipt Agreement dated November 2, 2020 for facility space 3505 and 3507 Edison Way, Menlo Park, CA 94025 (filed herewith)
10.23	Extension and Amendment of Lease dated February 24, 2022 for facility space 3505 and 3507 Edison Way, Menlo Park, CA 94025 (filed herewith)
10.24	Lease Agreement dated April 1, 2011 for facility space 6000 Poston Road, The Plains, OH 45710 (filed herewith)
10.25	Lease Extension Agreement dated May 30, 2018 for facility space 6000 Poston Road, The Plains, OH 45710 (filed herewith)
10.26	Lease Agreement dated October 1, 2019 for facility space 1102 Indiana Avenue, Indianapolis, IN 46202 (filed herewith)
10.27	First Amendment to the Lease, dated August 31, 2021 for facility space 1102 Indiana Avenue, Indianapolis, IN 46202 (filed herewith)
10.28	Form of Warrant issued to purchasers in the March 25, 2014 public offering (incorporated by reference to Exhibit 4.1 to the Company's report on Form 8-K filed March 20, 2014)
10.29**	Amended Employment Agreement dated December 1, 2020 between the Company and Michael Rice (incorporated by reference to Exhibit 10.11 to the Company's report on Form 10-K filed March 31, 2021)
10.30**	Amended Employment Agreement dated December 1, 2020 between the Company and Aby Mathew (incorporated by reference to Exhibit 10.12 to the Company's report on Form 10-K filed March 31, 2021)
10.31**	Amended Employment Agreement dated December 1, 2020 between the Company and Todd Berard (incorporated by reference to Exhibit 10.13 to the Company's report on Form 10-K filed March 31, 2021)
10.32**	Amended Employment Agreement effective December 1, 2020 between the Company and Karen Foster (incorporated by reference to Exhibit 10.17 to the Company's report on Form 10-K filed March 31, 2021)
10.33**	Amended Employment Agreement dated November 4, 2021 between the Company and Roderick de Greef (filed herewith)
10.34**	Employment Agreement dated January 1, 2021 between the Company and Sarah Aebersold (incorporated by reference to Exhibit 10.24 to the Company's report on Form 10-K filed March 31, 2021)
10.35**	Amended Employment Agreement dated December 31, 2020 between the Company and Marcus Schulz (incorporated by reference to Exhibit 10.11 to the Company's report on Form 10-K filed March 31, 2021)
10.36**	Employment Agreement dated November 4, 2021 between the Company and Troy Wichterman (filed herewith)
10.37	Board of Directors Services Agreement entered into May 4, 2015 by and between the Company and Other Non-Employee Directors (included as Exhibit 10.3 to the Current Report on Form 8-K filed on May 5, 2015)
21.1	List of the Company's Subsidiaries
23.1	Consent of BDO USA, LLP (filed herewith)
	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
31.2	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.1	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
32.2	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
101.INS	Inline XBRL Instance Document (filed herewith)
101.SCH	Inline XBRL Taxonomy Extension Schema (filed herewith)
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase (filed herewith)
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase (filed herewith)
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase (filed herewith)
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase (filed herewith)
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Certain sensitive financial, commercial and strategic information relating to the Company has been redacted in the marked portions of the exhibit.

** Management contract or compensatory plan or arrangement.

† The exhibits and schedules to this Exhibit have been omitted in accordance with Regulation S-K Item 601(b)(2). The Registrant agrees to furnish supplementally a copy of all omitted exhibits and schedules to the Securities and Exchange Commission upon its request.

(c) Excluded financial statements:

None.

ITEM 16. FORM 10-K SUMMARY

The Company has elected not to include a summary pursuant to this Item 16.

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.

Date: March 31, 2022

BIOLIFE SOLUTIONS, INC.

/s/ MICHAEL RICE
Michael Rice
Chief Executive Officer (principal 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.

Date: March 31, 2022

/s/ MICHAEL RICE
Michael Rice
Chief Executive Officer (principal executive officer)
and Chairman of the Board of Directors

Date: March 31, 2022

/s/ TROY WICHTERMAN
Troy Wichterman
Chief Financial Officer (principal financial
officer and principal accounting officer)

Date: March 31, 2022

/s/ JOSEPH SCHICK
Joseph Schick
Director

Date: March 31, 2022

/s/ AMY DUROSS
Amy DuRoss
Director

Date: March 31, 2022

/s/ RACHEL ELLINGSON
Rachel Ellingson
Director

Date: March 31, 2022

/s/ JOYDEEP GOSWAMI
Joydeep Goswami
Director

Exhibit 2.6

AGREEMENT AND PLAN OF MERGER

by and among

BIOLIFE SOLUTIONS, INC.,
as the Purchaser,

BLFS MERGER SUB, INC.,
as Merger Sub,

FORTIS ADVISORS LLC,
in the capacity as the Seller Representative,

and

SEXTON BIOTECHNOLOGIES, INC.,
as the Company,

Dated as of August 9, 2021

I. MERGER 5
1.1. Merger 5
1.2. Effective Time 5
1.3. Effect of the Merger 5
1.4. Tax Treatment 5
1.5. Certificate of Incorporation and Bylaws 5
1.6. Directors and Officers of the Surviving Corporation 5
1.7. Additional Action 6
1.8. Merger Consideration 6
1.9. Effect of Merger on Company Securities 6
1.10. Surrender of Company Securities and Disbursement of Merger Consideration 7
1.11. Effect of Transaction on Merger Sub Stock 9
1.12. Closing Calculations 9
1.13. Merger Consideration Adjustment 9
1.15. Taking of Necessary Action; Further Action 11
1.15. Appraisal and Dissenter's Rights 11
1.16. Escrow 12
1.17. Post-Closing Payments 12
1.18. Discharge of Indebtedness and Transaction Expenses 12

II. CLOSING 13
2.1. Closing 13

III. REPRESENTATIONS AND WARRANTIES OF THE PURCHASER 13
3.1. Organization and Standing 13
3.2. Authorization; Binding Agreement 13
3.3. Governmental Approvals 14
3.4. Non-Contravention 14
3.5. Capitalization 14
3.6. SEC Filings and Purchaser Financials 15
3.7. Absence of Certain Changes 16
3.8. Compliance with Laws 16
3.9. Actions; Orders; Permits 16
3.10. Merger Sub Activities 16
3.11. Investment Company Act 16
3.12. Finders and Brokers 16
3.13. Independent Investigation 16

IV. REPRESENTATIONS AND WARRANTIES OF THE COMPANY 17
4.1. Organization and Standing 17
4.2. Authorization; Binding Agreement 17
4.3. Capitalization 18
4.4. Subsidiaries 19
4.5. Governmental Approvals 19
4.6. Non-Contravention 19
4.7. Financial Statements 19
4.8. Absence of Certain Changes 20
4.9. Compliance with Laws 20
4.10. Company Permits 21
4.11. Litigation 21
4.12. Material Contracts 21

4.13. Intellectual Property 23
4.14. Taxes and Returns 24
4.15. Real Property 25
4.16. Personal Property 26
4.17. Title to and Sufficiency of Assets 26
4.18. Employee Matters 26
4.19. Benefit Plans 27
4.20. Environmental Matters 29
4.21. Transactions with Related Persons 30
4.22. Insurance 30
4.23. Top Customers and Suppliers 30
4.24. Certain Business Practices 31
4.25. Investment Company Act 31
4.26. Finders and Brokers 31
4.27. Independent Investigation 31
4.28. No Other Representations 32

V. COVENANTS 32
5.1. Access and Information 32
5.2. Conduct of Business of the Company 33
5.3. No Solicitation 35
5.4. No Trading 36
5.5. Notification of Certain Matters 36
5.6. Efforts 37
5.7. Tax Matters 37
5.8. Further Assurances 37
5.9. The Registration Statement 37
5.10. Company Stockholder Approval 37
5.11. Public Announcements 37
5.12. Confidential Information 38
5.13. Documents and Information 39
5.14. Employees and Benefits 39
5.15. D&O Indemnity 40

VI. SURVIVAL AND INDEMNIFICATION 41
6.1. Survival 41
6.2. Indemnification by Participating Holders 41
6.3 Indemnification by the Purchaser 42
6.4. Limitations and General Indemnification Provisions 42
6.5. Indemnification Procedures 43
6.6. Indemnification Payments 44
6.7. Exclusive Remedy 45

VII. CLOSING CONDITIONS 45
7.1. Conditions to Each Party’s Obligations 45
7.2. Conditions to Obligations of the Company 45
7.3. Conditions to Obligations of the Purchaser 46
7.4. Frustration of Conditions 48

VIII. TERMINATION AND EXPENSES 48
8.1. Termination 48

8.2. Effect of Termination 49
8.3. Fees and Expenses 49

IX. MISCELLANEOUS 49
9.1. Notices 49
9.2. Binding Effect; Assignment 50
9.3. Third Parties 50
9.4. Waiver of Conflicts 50
9.5. Governing Law; Jurisdiction 51
9.6. WAIVER OF JURY TRIAL 51
9.7. Specific Performance 52
9.8. Severability 52
9.9. Amendment 52
9.10. Waiver 52
9.11. Entire Agreement 52
9.12. Interpretation 53
9.13. Counterparts 53
9.14. Seller Representative 53
9.15 Disclosure Schedules 56

X. DEFINITIONS 57
10.1. Certain Definitions 57
10.2. Section References 65

INDEX OF EXHIBITS

Exhibit	**Description**
Exhibit A	Form of Non-Competition Agreement
Exhibit B	Form of Letter of Transmittal
Exhibit C	Form of Escrow Agreement
Exhibit D	Illustrative Calculation of Working Capital
Exhibit E	Form of Certificate of Merger
Exhibit F	Form of Certificate of Incorporation
Exhibit G	Registration Rights

AGREEMENT AND PLAN OF MERGER

This Agreement and Plan of Merger (this "***Agreement***") is made and entered into as of August 9, 2021 by and among (i) **BioLife Solutions, Inc.**, a Delaware corporation (the "***Purchaser***"), (ii) **BLFS Merger Sub, Inc.**, a Delaware corporation and a wholly-owned direct subsidiary of the Purchaser ("***Merger Sub***"), (iii) **Fortis Advisors LLC**, a Delaware limited liability company solely in the capacity as the representative, agent and attorney-in-fact, from and after the Effective Time for the Participating Holders (as defined below) as of immediately prior to the Effective Time in accordance with the terms and conditions of this Agreement (the "***Seller Representative***"), and (iv) **Sexton Biotechnologies, Inc.,** a Delaware corporation (the "***Company***"). The Purchaser, Merger Sub and the Company are sometimes referred to herein individually as a "***Party***" and, collectively, as the "***Parties***".

RECITALS:

A. The Company is a developer of bio production tools for cell and gene therapy intended to allow flexible integration to accelerate process development, whose products include purpose-built CGT tools and media, enabling biotech firms to increase the probability of positive clinical outcomes and reduce time-to-market, failure points and labor costs;

B. The Purchaser directly owns all of the issued and outstanding capital stock of Merger Sub, which was formed for the sole purpose of the Merger (as defined below);

C. The Parties intend to effect the merger of Merger Sub with and into the Company, with the Company continuing as the surviving entity (the "***Merger***"), as a result of which all of the issued and outstanding capital stock of the Company immediately prior to the Effective Time, shall no longer be outstanding and shall automatically be cancelled and shall cease to exist, and shall be exchanged for the right for each Company Stockholder to receive its respective portion of the Merger Consideration (as defined herein), all upon the terms and subject to the conditions set forth in this Agreement and in accordance with the applicable provisions of the Delaware General Corporation Law ("***DGCL***");

E. The boards of directors of the Company, the Purchaser and Merger Sub have each (i) determined that the Merger is fair, advisable and in the best interests of their respective companies and stockholders, and (ii) approved this Agreement and the transactions contemplated hereby, including the Merger, upon the terms and subject to the conditions set forth herein, and the boards of directors of the Company and Merger Sub have determined that they shall recommend to their respective stockholders the approval and adoption of this Agreement and the transactions contemplated hereby, including the Merger;

F. Simultaneously with the execution and delivery of this Agreement, the Person identified on Schedule I has entered into a Non-Competition and Non-Solicitation Agreement in favor of Purchaser and the Company, the form of which is attached as Exhibit A hereto (the, "***Non-Competition Agreement***"), which will become effective as of the Closing;

G. The Parties intend that the Merger will qualify as a tax-free "reorganization" within the meaning of Section 368(a) of the Code (as defined herein); and

H. Certain capitalized terms used herein are defined in Article X hereof.

NOW, THEREFORE, in consideration of the premises set forth above, which are incorporated in this Agreement as if fully set forth below, and the representations, warranties, covenants and agreements contained in this Agreement, and intending to be legally bound hereby, the Parties hereto agree as follows:

ARTICLE I
MERGER

1.1 Merger. At the Effective Time, and subject to and upon the terms and conditions of this Agreement, and in accordance with the applicable provisions of the DGCL, Merger Sub and the Company shall consummate the Merger, pursuant to which Merger Sub shall be merged with and into the Company, following which the separate corporate existence of Merger Sub shall cease and the Company shall continue as the surviving corporation. The Company, as the surviving corporation after the Merger, is hereinafter sometimes referred to as the "***Surviving Corporation***" (provided, that references to the Company for periods after the Effective Time shall include the Surviving Corporation).

1.2 Effective Time. On the Closing Date, the Parties hereto shall cause the Merger to be consummated by filing the Certificate of Merger, substantially in the form attached hereto as Exhibit E, for the merger of Merger Sub with and into the Company (the "***Certificate of Merger***") with the Secretary of State of the State of Delaware in accordance with the relevant provisions of the DGCL and shall make all other filings or recordings required by the DGCL (the time of such filing, or such later time as may be specified in the Certificate of Merger, being the "***Effective Time***").

1.3 Effect of the Merger. At the Effective Time, the effect of the Merger shall be as provided in this Agreement, the Certificate of Merger and the applicable provisions of the DGCL. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time, all the property, rights, privileges, agreements, powers and franchises, debts, Liabilities, duties and obligations of Merger Sub and the Company shall become the property, rights, privileges, agreements, powers and franchises, debts, Liabilities, duties and obligations of the Surviving Corporation, which shall include the assumption by the Surviving Corporation of any and all agreements, covenants, duties and obligations of Merger Sub and the Company set forth in this Agreement to be performed after the Effective Time.

1.4 Tax Treatment. For United States federal income tax purposes, the Merger is intended to constitute a "reorganization" within the meaning of Section 368 of the Code. The Parties adopt this Agreement as a "plan of reorganization" within the meaning of Sections 1.368-2(g) and 1.368-3(a) of the United States Treasury Regulations.

1.5 Certificate of Incorporation and Bylaws. At the Effective Time, by virtue of the Merger and without any action on the part of any of the Parties or the holders of any of their equity securities, (a) the Certificate of Incorporation of the Surviving Corporation shall be amended and restated in its entirety in the form attached hereto as Exhibit F, and (b) the Bylaws of the Surviving Corporation shall automatically be amended and restated in their entirety to read identically to the Bylaws of Merger Sub as in effect immediately prior to the Effective Time, except that the name of the Surviving Corporation in such Bylaws shall be amended to be "Sexton Biotechnologies, Inc.", and such amended and restated Certificate of Incorporation and Bylaws shall become the respective Certificate of Incorporation and Bylaws of the Surviving Corporation.

1.6 Directors and Officers of the Surviving Corporation. At the Effective Time, the board of directors and executive officers of the Surviving Corporation shall be the board of directors and executive officers of Merger Sub, each to hold office in accordance with the Certificate of Incorporation and Bylaws of the Surviving Corporation until their respective successors are duly elected or appointed and qualified or their earlier death, resignation or removal.

1.7 Additional Action . The Surviving Corporation may, at any time after the Effective Time, take any action, including executing and delivering any document, in the name and on behalf of either the Company or Merger Sub, in order to make the Merger effective pursuant to the DGCL.

1.8 Merger Consideration. As consideration for the Merger, each Participating Holder shall be entitled to receive from the Purchaser an amount of consideration determined pursuant to Section 1.9 based on an aggregate consideration value (the "***Merger Consideration***") equal to (a) Thirty Million Dollars ($30,000,000) plus (or minus if negative) (b) the Net Working Capital less the Target Net Working Capital Amount, minus (or plus if negative) (c) the amount of Closing Net Debt, minus (d) the amount of any unpaid Transaction Expenses; *provided*, that the amount of Merger Consideration otherwise payable at Closing to Participating Holders is subject to the withholding of the Escrow Shares deposited in the Escrow Account in accordance with Section 1.16 and the deposit of the Representative Reserve Amount to the Representative Reserve Fund in accordance with Section 1.10(b), and after the Closing is subject to adjustment in accordance with Section 1.13 and reduction for the indemnification obligations of the Indemnifying Parties set forth in Article VI. Other than the payment of the Representative Reserve Amount to the Representative Reserve Fund, all Merger Consideration shall be payable in the form of shares of Purchaser Common Stock (the "***Merger Consideration Shares***"), which shall be valued at the Purchaser Stock Price (subject to appropriate adjustment for any stock dividend, stock split, stock combination, recapitalization or other similar transaction during the period between such valuation determination and the Closing).

1.9 Effect of Merger on Company Securities. At the Effective Time, by virtue of the Merger and without any action on the part of any Party or the holders of any Company Securities or the holders of any shares of capital stock of the Purchaser or Merger Sub:

(a) *Purchaser Shares*. Each share of Company Stock held by the Purchaser or Merger Sub immediately prior to the Effective Time shall automatically be cancelled and retired and shall cease to exist, and no consideration shall be delivered or deliverable in exchange therefor (the "***Purchaser Shares***").

(b) *Company Preferred Stock*. Each share of Company Preferred Stock (other than Purchaser Shares and Dissenting Shares) issued and outstanding immediately prior to the Effective Time will automatically be cancelled and converted solely into the right to receive Merger Consideration in the amount of (i) thirty three cents ($0.33) (the "***Per Share Preferred Return***"), plus (ii) the Per Share Closing Merger Consideration, plus (iii) a contingent right to receive its Pro Rata Share of any Post-Closing Payment (together, the "***Preferred Stock Merger Consideration***"), subject to delivery of the Transmittal Documents in accordance with Section 1.10.

(c) *Company Common* Stock. Each share of Company Common Stock (other than Purchaser Shares and Dissenting Shares) issued and outstanding immediately prior to the Effective Time, including Restricted Shares, will automatically be cancelled and converted solely into the right to receive Merger Consideration in the amount of (i) the Per Share Closing Merger Consideration plus (ii) a contingent right to receive its Pro Rata Share of any Post-Closing Payment (together, the "***Common Stock Merger Consideration***"), subject to delivery of the Transmittal Documents in accordance with Section 1.10.

(d) *Dissenting Shares*. Each of the Dissenting Shares issued and outstanding immediately prior to the Effective Time shall be cancelled and cease to exist in accordance with Section 1.15 and shall thereafter represent only the right to receive the applicable payments set forth in Section 1.15

(e) *Company Options*. On the terms and subject to the conditions of this Agreement, at the Effective Time, each outstanding Company Option, whether or not then vested and exercisable, shall become fully vested and be canceled and extinguished in exchange for the right to receive, with respect to each share of Company Common Stock subject to such Company Option, Merger Consideration in the amount of (i) (A) the Per Share Closing Merger Consideration, *less* (B) the per-share exercise price of such Company Option, (the "***Closing Option Merger Consideration***") plus (ii) a contingent right to receive its Pro Rata Share of any Post-Closing Payment (collectively, the "***Option Merger Consideration***"). At or before the Closing, the Company, the Company board of directors or any committee thereof, as applicable, shall adopt any resolutions and take any actions (including obtaining any employee consents) that may be necessary to provide that, at the Effective Time (i) each Company Option that is unexpired and unexercised as of the Effective Time, whether or not then vested, shall be canceled in exchange for the consideration described in this Section 1.9(e) and (ii) the Company Equity Plan shall be terminated.

(f) *Company Restricted Shares*. Each share of Company Common Stock that remains restricted or unvested pursuant to a restricted stock award agreement (each such restricted or unvested share, a "***Restricted Share***") as of immediately prior the Effective Time shall, as of immediately prior to the Effective Time, be deemed vested and any restricted periods applicable thereto shall expire. Each such share of Company Common Stock shall be converted into the right to receive the Common Stock Merger Consideration in accordance with Section 1.9(c). At or before the Effective Time, the Company's board of directors or any committee thereof, as applicable, shall adopt any resolutions and take any actions that may be necessary to provide that, as of immediately prior to the Effective Time each Restricted Share shall be deemed vested and any restricted periods applicable thereto shall have expired.

1.10 Surrender of Company Securities and Disbursement of Merger Consideration.

(a) Prior to the Effective Time, the Purchaser shall appoint Broadridge Financial Solutions, Inc., its transfer agent, or another agent reasonably acceptable to the Company (the "***Exchange Agent***"), for the purpose of exchanging the certificates representing Company Stock ("***Company Certificates***"). At or prior to the Effective Time, the Purchaser shall deposit, or cause to be deposited, with the Exchange Agent the Merger Consideration Shares to be issued in respect of Company Stock pursuant to Section 1.9(b), 1.9(c) and 1.9(e). At least five (5) Business Days prior to the Closing Date, the Purchaser shall send, or shall cause the Exchange Agent to send, to each Company Stockholder and each holder of Company Options, a letter of transmittal for use in such exchange, in the form attached hereto as Exhibit B (a "***Letter of Transmittal***") (which, with respect to Company Stock, shall specify that the delivery of Company Certificates in respect of the Merger Consideration shall be effected, and risk of loss and title shall pass, only upon proper delivery of the Company Certificates (or a Lost Certificate Affidavit) to the Exchange Agent) for use in such exchange.

(b) At the Closing, the Parties shall cause the Company to pay, without adjustment to the calculation of Closing Company Cash, or, if the Company does not have sufficient cash, the Purchaser shall pay, $100,000 (the "***Representative Reserve Fund Amount***") to the account specified for the Seller Representative in the Estimated Closing Statement (the "***Representative Reserve Fund***").

(c) Each Company Stockholder and holder of Company Options shall be entitled to receive the consideration for its Company Preferred Stock, Company Common Stock and Company Options as set forth in Section 1.9, but subject to the delivery to the Exchange Agent of, in respect of the Company Stock, the Company Certificate(s) for its Company Stock (or a Lost Certificate Affidavit), and, in respect of the Company Stock and Company Options, a properly completed and duly executed Letter of Transmittal (collectively, the "***Transmittal Documents***"). Until so surrendered, each Company Certificate shall represent after the Effective Time for all purposes only the right to receive such portion of the Preferred Stock Merger Consideration or Common Stock Merger Consideration attributable to such Company Certificate. After the Effective Time, the Purchaser shall cause the Exchange Agent to promptly (and in any event, within five (5) days after receipt of the applicable Transmittal Documents) deliver or cause to be delivered to such Company Stockholder and holder of Company Options from whom duly executed and properly transmitted Transmittal Documents have been received the Merger Consideration Shares to which such Person is entitled at Closing under Section 1.9 pursuant to the delivery instructions in such Person's Letter of Transmittal.

(d) If any portion of the Merger Consideration is to be delivered or issued to a Person other than the Person in whose name the surrendered Company Certificate is registered immediately prior to the Effective Time, it shall be a condition to such delivery that (i) the transfer of such Company Stock shall have been permitted in accordance with the terms of the Company's Organizational Documents and any stockholders agreement with respect to the Company, each as in effect immediately prior to the Effective Time, (ii) such Company Certificate shall be properly endorsed or shall otherwise be in proper form for transfer and, (iii) the recipient of such portion of the Merger Consideration, or the Person in whose name such portion of the Merger Consideration is delivered or issued, shall have executed and delivered the Transmittal Documents, and (iv) the Person requesting such delivery shall pay to the Exchange Agent any transfer or other Taxes required as a result of such delivery to a Person other than the registered holder of such Company Certificate or establish to the satisfaction of the Exchange Agent that such Tax has been paid or is not payable.

(e) Notwithstanding anything to the contrary contained herein, in the event that any Company Certificate shall have been lost, stolen or destroyed, in lieu of delivery of a Company Certificate to the Exchange Agent, the Company Stockholder may instead deliver to the Exchange Agent an affidavit of lost certificate and indemnity of loss in form and substance reasonably acceptable to the Purchaser (a "***Lost Certificate Affidavit***"), which at the reasonable discretion of the Purchaser may include a requirement that the owner of such lost, stolen or destroyed Company Certificate deliver a bond in such sum as it may reasonably direct as indemnity against any claim that may be made against the Purchaser or the Surviving Corporation with respect to the shares of Company Stock represented by the Company Certificates alleged to have been lost, stolen or destroyed. Any Lost Certificate Affidavit properly delivered in accordance with this Section 1.10(e) shall be treated as a Company Certificate for all purposes of this Agreement.

(f) After the Effective Time, there shall be no further registration of transfers of Company Stock. If, after the Effective Time, Company Certificates are presented to the Surviving Corporation, the Purchaser or the Exchange Agent, they shall be canceled and exchanged for the applicable portion of the Merger Consideration provided for, and in accordance with the procedures set forth in this Section 1.10. No dividends or other distributions declared or made after the date of this Agreement with respect to Purchaser Common Stock with a record date after the Effective Time will be paid to the holders of any Company Certificates that have not yet been surrendered with respect to the Purchaser Common Stock to be issued upon surrender thereof until the holders of record of such Company Certificates shall surrender such certificates (or provide a Lost Certificate Affidavit), if applicable, and provide the other Transmittal Documents. Subject to applicable Law, following surrender of any such Company Certificates (or delivery of a Lost Certificate Affidavit), if applicable, and delivery of the other Transmittal Documents, Purchaser shall promptly deliver to the record holders thereof, without interest, the certificates representing the Purchaser Common Stock issued in exchange therefor and the amount of any such dividends or other distributions with a record date after the Effective Time theretofore paid with respect to such Purchaser Common Stock.

(g) All securities issued upon the surrender of Company Securities in accordance with the terms hereof shall be deemed to have been issued in full satisfaction of all rights pertaining to such Company Securities. Any portion of the Merger Consideration made available to the Exchange Agent pursuant to Section 1.10(a) that remains unclaimed by Company Stockholders eighteen (18) months after the Effective Time shall be returned to the Purchaser, upon demand, and any such Company Stockholder who has not exchanged its Company Stock for the applicable portion of the Merger Consideration in accordance with this Section 1.10 prior to that time shall thereafter look only to the Purchaser for payment of the portion of the Merger Consideration in respect of such shares of Company Stock without any interest thereon (but with any dividends paid with respect thereto). Notwithstanding the foregoing, none of the Surviving Corporation, the Purchaser or any Party hereto shall be liable to any Person for any amount properly paid to a public official pursuant to any applicable abandoned property, escheat or similar Law.

(h) Notwithstanding anything to the contrary contained herein, no fraction of a share of Purchaser Common Stock will be issued by virtue of the Merger or the transactions contemplated hereby, and each Person who would otherwise be entitled to a fraction of a share of Purchaser Common Stock (after aggregating all fractional shares of Purchaser Common Stock that otherwise would be received by such holder) shall instead have the number of shares of Purchaser Common Stock issued to such Person rounded up in the aggregate to the nearest whole share of Purchaser Common Stock.

1.11 Effect of Transaction on Merger Sub Stock. At the Effective Time, by virtue of the Merger and without any action on the part of any Party or the holders of any Company Securities or the holders of any shares of capital stock of the Purchaser or Merger Sub, each share of Merger Sub Common Stock outstanding immediately prior to the Effective Time shall be converted into an equal number of shares of common stock of the Surviving Corporation, with the same rights, powers and privileges as the shares so converted and shall constitute the only outstanding shares of capital stock of the Surviving Corporation.

1.12 Closing Calculations. At least three (3) Business Days prior to the Closing Date, the Company shall deliver to the Purchaser a statement certified by the Company's chief executive officer (the "***Estimated Closing Statement***") setting forth (i) an estimated balance sheet of the Company as of the Closing Date and (a) a good faith calculation of the Company's estimate of the Closing Net Debt, Net Working Capital and Transaction Expenses, in each case, as of the Reference Time, and the resulting Merger Consideration, Per Share Closing Merger Consideration and Closing Option Merger Consideration based on such estimates, in reasonable detail, along with the amount owed to each third party payee of Indebtedness or Transaction Expenses and (b) the name, address and number and type of Company Securities held of record by each Company Stockholder and holder of Company Options and the Pro Rata Share of each and amount and type of Merger Consideration due to each as of the Closing (the "***Allocation Schedule***"). Promptly upon delivering the Estimated Closing Statement to the Purchaser, if requested by the Purchaser, the Company will meet with the Purchaser to review and discuss the Estimated Closing Statement and the Company will consider in good faith the Purchaser's comments to the Estimated Closing Statement. The Estimated Closing Statement and the determinations contained therein shall be prepared in accordance with the Accounting Principles and otherwise in accordance with this Agreement.

1.13 Merger Consideration Adjustment .

(a) Within ninety (90) days after the Closing Date, Purchaser shall deliver to Seller Representative a statement (the "***Closing Statement***") certified by Purchaser's Chief Financial Officer (the "***CFO***") setting forth (i) a balance sheet of the Company as of the Reference Time and (ii) a good faith calculation of the Closing Net Debt, Net Working Capital and Transaction Expenses and each component thereof, in each case, as of the Reference Time, and the resulting Merger Consideration using the formula in Section 1.8. The Closing Statement shall be prepared, and the Closing Net Debt, Net Working Capital, and Transaction Expenses and the resulting Merger Consideration and Merger Consideration Shares shall be determined in accordance with the Accounting Principles and otherwise in accordance with this Agreement.

(b) After delivery of the Closing Statement, each of the Seller Representative and the Purchaser, and their respective Representatives on their behalves, shall be permitted reasonable access to the books, records, working papers, files, facilities and personnel of the Surviving Corporation and the Purchaser relating to the preparation of the Closing Statement. The Seller Representative and the Purchaser, and their respective Representatives on their behalves, may make inquiries of the CFO and related Purchaser and Surviving Corporation personnel and advisors regarding questions concerning or disagreements with the Closing Statement arising in the course of their review thereof, and Purchaser and the Surviving Corporation shall provide reasonable cooperation in connection therewith. If the Seller Representative has any objections to the Closing Statement, the Seller Representative shall deliver to the Purchaser a statement setting forth its objections thereto (in reasonable detail) (an "***Objection Statement***"). If an Objection Statement is not delivered by the Seller Representative within thirty (30) days following the date of delivery of the Closing Statement, then the Seller Representative will have waived its right to contest the Closing Statement, all determinations and calculations set forth therein, and the resulting Merger Consideration set forth therein. If an Objection Statement is delivered within such thirty (30) day period, then the Seller Representative and the Purchaser shall negotiate in good faith to resolve any such objections for a period of twenty (20) days thereafter. If the Seller Representative and the Purchaser do not reach a final resolution within such twenty (20) day period, then upon the written request of either the Purchaser or the Seller Representative (the date of receipt of such notice by the other Party, the "***Independent Expert Notice Date***"), the Purchaser and the Seller Representative will mutually engage and refer the dispute to the Independent Expert for final resolution of the dispute in accordance with Section 1.13(c). For purposes hereof, the "***Independent Expert***" shall mean a mutually acceptable independent (i.e., no prior material business relationship with any party for the prior two (2) years) accounting firm appointed by the Purchaser and the Seller Representative, which appointment will be made no later than ten (10) days after the Independent Expert Notice Date); provided, that if the Independent Expert does not accept its appointment or if the Purchaser and the Seller Representative cannot agree on the Independent Expert, in either case within twenty (20) days after the Independent Expert Notice Date, either the Purchaser or the Seller Representative may require, by written notice to the other party, that the Independent Expert be selected by the New York City Regional Office of the AAA in accordance with the AAA's procedures. The parties agree that the Independent Expert will be deemed to be independent even though a Party or its Affiliates may, in the future, designate the Independent Expert to resolve disputes of the types described in this Section 1.13. The Parties acknowledge that any information provided pursuant to this Section 1.13 will be subject to the confidentiality obligations of Section 5.12.

(c) If a dispute with respect to the Closing Statement is submitted in accordance with this Section 1.13 to the Independent Expert for final resolution, the Parties will follow the procedures set forth in this Section 1.13(c). Each of the Seller Representative and the Purchaser agrees to execute and to require the Independent Expert to execute, a reasonable engagement letter with respect to the determination to be made by the Independent Expert. All fees and expenses of the Independent Expert will be borne by the Purchaser. Except as provided in the preceding sentence, all other costs and expenses incurred by the Seller Representative in connection with resolving any dispute hereunder before the Independent Expert will be borne by the Participating Holders, and all other costs and expenses incurred by the Purchaser in connection with resolving any dispute hereunder before the Independent Expert will be borne by the Purchaser. The Independent Expert will determine only those issues still in dispute as of the Independent Expert Notice Date and the Independent Expert's determination will be based solely upon and consistent with the terms and conditions of this Agreement. The determination by the Independent Expert will be based solely on presentations with respect to such disputed items by the Purchaser and the Seller Representative to the Independent Expert and not on the Independent Expert's independent review; provided, that such presentations will be deemed to include any work papers, records, accounts or similar materials delivered to the Independent Expert by a party in connection with such presentations and any materials delivered to the Independent Expert in response to requests by the Independent Expert. Each of the Seller Representative and the Purchaser will use their commercially reasonable efforts to make their respective presentations as promptly as practicable following submission to the Independent Expert of the disputed items, and each of the Purchaser and the Seller Representative will be entitled, as part of its presentation, to respond to the presentation of the other Representative Party and any questions and requests of the Independent Expert. In deciding any matter, the Independent Expert will be bound by the provisions of this Agreement, including this this Section 1.13. With respect to each disputed item, the Independent Expert may not allow a value that is greater than the greatest value, or smaller than the smallest value, for such disputed item claimed by either party in the Closing Statement or Objection Statement, respectively. The activities of the Independent Expert in connection herewith are not (and should not be considered to be or treated as) an arbitration proceeding or similar arbitral process and that no formal arbitration rules should be followed (including rules with respect to procedures and discovery). The Seller Representative and the Purchaser will request that the Independent Expert's determination be made within forty-five (45) days after its engagement, or as soon thereafter as possible, will be set forth in a written statement delivered to the Purchaser and the Seller Representative and will be final, conclusive, non-appealable and binding for all purposes hereunder (other than in the case of fraud or manifest error). A decision rendered by the Independent Expert pursuant to this Section 1.13 may be filed as a judgment in any court of competent jurisdiction. Either Purchaser or the Seller Representative may seek specific enforcement or take other necessary legal action to enforce any decision of the Independent Expert pursuant to this Section 1.13.

(d) For purposes hereof, the term "***Adjustment Amount***" shall mean (x) the Merger Consideration as finally determined in accordance with this Section 1.13, less (y) the Merger Consideration that was issued at the Closing (including to the Escrow Account and to the Representative Reserve Fund) pursuant to the Estimated Closing Statement.

(i) If the Adjustment Amount is a positive number, then Purchaser shall, within ten (10) Business Days after such final determination of the Merger Consideration, pay the additional Merger Consideration, in the form specified in Section 1.8 and Section 1.9, to the Participating Holders in accordance with their Pro Rata Shares, provided that the amount of additional Merger Consideration payable hereunder shall not exceed the value of the Escrow Property in the Escrow Account at the time.

(ii) If the Adjustment Amount is a negative number, then the Seller Representative and the Purchaser shall, within three (3) Business Days after such final determination, provide joint written instructions to the Escrow Agent to distribute to Purchaser a number of Escrow Shares (and, after distribution of all Escrow Shares, other Escrow Property) with a value equal to the absolute value of the Adjustment Amount. Purchaser will promptly cancel any Escrow Shares distributed to it by the Escrow Agent promptly after its receipt thereof. The Escrow Account shall be the sole source of recovery for any payments by the Participating Holders under this Section 1.13(d), and the Participating Holders shall not be required under this Section 1.13(d) to pay any amounts in excess of the Escrow Property in the Escrow Account at such time.

1.14 Taking of Necessary Action; Further Action. If, at any time after the Effective Time, any further action is necessary or desirable to carry out the purposes of this Agreement and to vest the Surviving Corporation with full right, title and possession to all assets, property, rights, privileges, powers and franchises of the Company and Merger Sub, the officers and directors of the Surviving Corporation are fully authorized to take, and will take, all such lawful and necessary action, so long as such action is not inconsistent with this Agreement.

1.15 Appraisal and Dissenter's Rights.' No Company Stockholder who has validly exercised its appraisal rights pursuant to Section 262 of the DGCL (a "***Dissenting Stockholder***") with respect to its Company Stock (such shares, "***Dissenting Shares***") shall be entitled to receive any portion of the Merger Consideration with respect to the Dissenting Shares owned by such Dissenting Stockholder unless and until such Dissenting Stockholder shall have effectively withdrawn or lost its appraisal rights under the DGCL. Each Dissenting Stockholder shall be entitled to receive only the payment resulting from the procedure set forth in Section 262 of the DGCL with respect to the Dissenting Shares owned by such Dissenting Stockholder. The Company shall give the Purchaser (a) prompt notice of any written demands for appraisal, attempted withdrawals of such demands, and any other instruments served pursuant to applicable Laws that are received by the Company relating to any Dissenting Stockholder's rights of appraisal and (b) the opportunity to direct all negotiations and proceedings with respect to demand for appraisal under the DGCL. The Company shall not, except with the prior written consent of the Purchaser, voluntarily make any payment with respect to any demands for appraisal, offer to settle or settle any such demands or approve any withdrawal of any such demands.

1.16 Escrow.

(a) At or prior to the Closing, the Purchaser, the Seller Representative and Continental Stock Transfer and Trust Company (or such other escrow agent mutually acceptable to the Purchaser and the Company), as escrow agent (the "***Escrow Agent***"), shall enter into an Escrow Agreement, effective as of the Effective Time, in the form attached hereto as Exhibit C (the "***Escrow Agreement***"), pursuant to which the Purchaser shall issue to the Escrow Agent a number of shares of Purchaser Common Stock (with each share valued at the Purchaser Stock Price) equal to ten percent (10%) of the Net Merger Consideration (the "***Escrow Amount***") (together with any equity securities paid as dividends or distributions with respect to such shares or into which such shares are exchanged or converted, the "***Escrow Shares***") to be held, along with any other dividends, distributions or other income on the Escrow Shares (together with the Escrow Shares, the "***Escrow Property***"), in a segregated escrow account (the "***Escrow Account***") and disbursed therefrom in accordance with the terms of Section 1.13 and Article VI hereof and the Escrow Agreement. The Escrow Property shall be allocated among and transferred to the Participating Holders in accordance with their Pro Rata Shares. The Escrow Property shall serve as the sole source of payment for the obligations of the Participating Holders pursuant to Article VI (other than for Fraud Claims). Unless otherwise required by Law, all distributions made from the Escrow Account shall be treated by the Parties as an adjustment to the number of shares of Merger Consideration received by the Participating Holders pursuant to Article I hereof.

(b) The Escrow Property shall not be subject to any indemnification claim to the extent made after the date which is eighteen (18) months after the Closing Date (the "***Expiration Date***"); *provided, however,* with respect to any indemnification claims made in accordance with Article VI hereof on or prior to the Expiration Date that remain unresolved at the time of the Expiration Date ("***Pending Claims***"), all or a portion of the Escrow Property reasonably necessary to satisfy such Pending Claims (as determined based on the amount of the indemnification claim included in the Claim Notice provided by the Purchaser under Article VI and the Purchaser Stock Price as of the Expiration Date) shall remain in the Escrow Account until such time as such Pending Claim shall have been finally resolved and paid pursuant to the provisions of Article VI. After the Expiration Date, any Escrow Property remaining in the Escrow Account that is not subject to Pending Claims, if any, and not subject to resolved but unpaid claims in favor of an Indemnified Party, shall be transferred by the Escrow Agent to the Participating Holders that have previously delivered the Transmittal Documents in accordance with Section 1.10, with each such Participating Holder receiving its Pro Rata Share of such Escrow Property. Promptly after the final resolution of all Pending Claims and payment of all indemnification obligations in connection therewith, the Escrow Agent shall transfer any remaining Escrow Property remaining in the Escrow Account to the Participating Holders with each Participating Holder receiving its Pro Rata Share of such Escrow Property.

1.17 Post-Closing Payments. All Post-Closing Payments shall be distributed to Participating Holders in accordance with their Pro Rata Shares of such amounts.

1.18 Discharge of Indebtedness and Transaction Expenses. Following the Closing, the Purchaser shall and shall cause the Surviving Corporation to, timely discharge all Indebtedness and Transaction Expenses reflected in the calculation of Merger Consideration.

ARTICLE II
CLOSING

2.1 Closing. Subject to the satisfaction or waiver of the conditions set forth in Article VII, the consummation of the transactions contemplated by this Agreement (the "***Closing***") shall take place at the offices of Ellenoff Grossman & Schole, LLP, counsel to the Purchaser, 1345 Avenue of the Americas, New York, NY 10105, on September 1, 2021 or, if later, the second (2nd) Business Day after all the Closing conditions to this Agreement have been satisfied or waived (excluding the conditions that by their nature can only be satisfied at the Closing, but subject to the satisfaction or waiver of such conditions by the Party entitled to the benefit therefrom), or at such other date, time or place as the Purchaser and the Company may agree (the date and time at which the Closing is actually held being the "***Closing Date***"). Except as otherwise set forth herein, all actions to be taken and all documents to be executed and delivered by all Parties at the Closing will be deemed to have been taken and executed simultaneously and no actions will be deemed to have been taken nor documents executed or delivered until all have been taken, executed and delivered.

ARTICLE III

REPRESENTATIONS AND WARRANTIES OF THE PURCHASER

Except as set forth in (i) the disclosure schedules delivered by the Purchaser to the Company on the date hereof (the "***Purchaser Disclosure Schedules***") or (ii) the SEC Reports that are available on the SEC's website through EDGAR, the Purchaser represents and warrants to the Company, as of the date hereof and as of the Closing, as follows:

3.1 Organization and Standing. Each of the Purchaser and Merger Sub is a corporation duly incorporated, validly existing and in good standing under the Laws of Delaware. Each of the Purchaser and Merger Sub has all requisite corporate power and authority to own, lease and operate its properties and to carry on its business as now being conducted. Each of the Purchaser and Merger Sub is duly qualified or licensed and in good standing to do business in each jurisdiction in which the character of the property owned, leased or operated by it or the nature of the business conducted by it makes such qualification or licensing necessary, except where the failure to be so qualified or licensed or in good standing can be cured without material cost or expense. The Purchaser has heretofore made available to the Company accurate and complete copies of its and Merger Sub's Organizational Documents, as currently in effect. The Purchaser is not in violation of any provision of its Organizational Documents in any material respect.

3.2 Authorization; Binding Agreement. Each of the Purchaser and Merger Sub has all requisite corporate power and authority to execute and deliver this Agreement and each Ancillary Document to which it is a party, to perform its respective obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and each Ancillary Document to which it is a party and the consummation of the transactions contemplated hereby and thereby (a) have been duly and validly authorized by the board of directors of the Purchaser and Merger Sub, and (b) no other corporate proceedings on the part of the Purchaser or Merger Sub are necessary to authorize the execution and delivery of this Agreement and each Ancillary Document to which it is a party or to consummate the transactions contemplated hereby and thereby. This Agreement has been, and each Ancillary Document to which the Purchaser or Merger Sub is or is to be a party shall be when delivered, duly and validly executed and delivered by the Purchaser and Merger Sub, as applicable, and, assuming the due authorization, execution and delivery of this Agreement and such Ancillary Documents by the other parties hereto and thereto, constitutes, or when delivered shall constitute, the valid and binding obligation of the Purchaser and Merger Sub, enforceable against the each in accordance with its terms, except to the extent that enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization and moratorium laws and other laws of general application affecting the enforcement of creditors' rights generally or by any applicable statute of limitation or by any valid defense of set-off or counterclaim, and the fact that equitable remedies or relief (including the remedy of specific performance) are subject to the discretion of the court from which such relief may be sought (collectively, the "***Enforceability Exceptions***").

3.3 Governmental Approvals. Except as otherwise described in Schedule 3.3, no Consent of or with any Governmental Authority, on the part of the Purchaser or Merger Sub is required to be obtained or made in connection with the execution, delivery or performance by the Purchaser or Merger Sub of this Agreement and each Ancillary Document to which it is a party or the consummation by the Purchaser and Merger Sub of the transactions contemplated hereby and thereby, other than (a) any filings required with Nasdaq or the SEC with respect to the transactions contemplated by this Agreement and (b) applicable requirements, if any, of the Securities Act, the Exchange Act, or any state "blue sky" securities Laws, and the rules and regulations thereunder.

3.4 Non-Contravention. Except as otherwise described in Schedule 3.4, the execution and delivery by the Purchaser and Merger Sub of this Agreement and each Ancillary Document to which each is a party, the consummation by the Purchaser and Merger Sub of the transactions contemplated hereby and thereby, and compliance by the Purchaser and Merger Sub with any of the provisions hereof and thereof, will not (a) conflict with or violate any provision of the Purchaser's or Merger Sub's Organizational Documents, (b) subject to obtaining the Consents from Governmental Authorities referred to in Section 3.3 hereof, conflict with or violate any Law, Order or Consent applicable to the Purchaser or Merger Sub or any of their properties or assets, or (c) (i) violate, conflict with or result in a breach of, (ii) constitute a default (or an event which, with notice or lapse of time or both, would constitute a default) under, (iii) result in the termination, withdrawal, suspension, cancellation or modification of, (iv) accelerate the performance required by the Purchaser or Merger Sub under, (v) result in a right of termination or acceleration under, (vi) give rise to any obligation to make payments or provide compensation under, (vii) result in the creation of any Lien upon any of the properties or assets of the Purchaser or Merger Sub under, (viii) give rise to any obligation to obtain any third party Consent or provide any notice to any Person or (ix) give any Person the right to declare a default, exercise any remedy, claim a rebate, chargeback, penalty or change in delivery schedule, accelerate the maturity or performance, cancel, terminate or modify any right, benefit, obligation or other term under, any of the terms, conditions or provisions of, any Purchaser Material Contract.

3.5 Capitalization.

(a) The issued and outstanding total number and class of all equity securities of the Purchaser are set forth on Schedule 3.5(a). All outstanding Purchaser equity securities are duly authorized, validly issued, fully paid and non-assessable and are not subject to or issued in violation of any purchase option, right of first refusal, preemptive right, subscription right or any similar right under any provision of applicable Law, Purchaser's Organizational Documents or any Contract to which Purchaser is a party. None of the outstanding equity securities of Purchaser have been issued in violation of any applicable securities Laws.

(b) Prior to giving effect to the merger, Merger Sub is authorized to issue 1,000 shares of Merger Sub Common Stock, of which 1,000 shares are issued and outstanding, and all of which are owned by the Purchaser.

(c) Except as set forth on Schedule 3.5(a) or Schedule 3.5(c) there are no (i) outstanding options, warrants, puts, calls, convertible securities, preemptive or similar rights, (ii) bonds, debentures, notes or other Indebtedness having general voting rights or that are convertible or exchangeable into securities having such rights or (iii) subscriptions or other rights, agreements, arrangements, Contracts or commitments of any character (other than this Agreement and the Ancillary Documents), (A) relating to the issued or unissued shares of Purchaser or (B) obligating Purchaser to issue, transfer, deliver or sell or cause to be issued, transferred, delivered, sold or repurchased any options or shares or securities convertible into or exchangeable for such shares, or (C) obligating Purchaser to grant, extend or enter into any such option, warrant, call, subscription or other right, agreement, arrangement or commitment for such capital shares. Except as set forth in Schedule 3.5(c), there are no shareholders agreements, voting trusts or other agreements or understandings to which Purchaser is a party with respect to the voting of any shares of Purchaser.

(d) The Merger Consideration Shares, when issued and delivered in accordance with the terms of this Agreement, will be duly authorized, validly issued, fully paid and non-assessable and will not be subject to or issued in violation of any purchase option, right of first refusal, preemptive right, subscription right or any similar right under any provision of applicable Law, Purchaser's Organizational Documents or any Contract to which Purchaser is a party or by which it is bound. The Merger Consideration Shares will be issued in compliance with all applicable securities Laws and, when issued, will be free and clear of all Liens (other than applicable restrictions on transfer imposed by applicable securities Laws applicable to securities generally). No Company Stockholder will have any obligation to make a further payment in connection with its acquisition of Merger Consideration Shares.

3.6 SEC Filings and Purchaser Financials .

(a) Since January 1, 2018, Purchaser has timely filed all forms, reports, schedules, statements, registration statements, prospectuses and other documents required to be filed or furnished by Purchaser with the SEC under the Securities Act or the Exchange Act, together with any amendments, restatements or supplements thereto, and will file all such forms, reports, schedules, statements and other documents required to be filed subsequent to the date of this Agreement. Except to the extent available on the SEC's web site through EDGAR, Purchaser has delivered to the Company copies in the form filed with the SEC of all of the following: (i) Purchaser's annual reports on Form 10-K for each fiscal year of Purchaser beginning with the first year Purchaser was required to file such a form, (ii) Purchaser's quarterly reports on Form 10-Q for each fiscal quarter that Purchaser filed such reports to disclose its quarterly financial results in each of the fiscal years of Purchaser referred to in clause (i) above, (iii) all other forms, reports, registration statements, prospectuses and other documents (other than preliminary materials) filed by Purchaser with the SEC since the beginning of the first fiscal year referred to in clause (i) above (the forms, reports, registration statements, prospectuses and other documents referred to in clauses (i), (ii) and (iii) above, whether or not available through EDGAR, are, collectively, the "***SEC Reports***") and (iv) all certifications and statements required by (A) Rules 13a-14 or 15d-14 under the Exchange Act, and (B) 18 U.S.C. §1350 (Section 906 of SOX) with respect to any report referred to in clause (i) above (collectively, the "***Public Certifications***"). The SEC Reports (x) were prepared in accordance with the requirements of the Securities Act, the Exchange Act and SOX, as the case may be, and the rules and regulations thereunder and (y) did not, as of their respective effective dates (in the case of SEC Reports that are registration statements filed pursuant to the requirements of the Securities Act) and at the time they were filed with the SEC (in the case of all other SEC Reports) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. The Public Certifications are each true as of their respective dates of filing. As used in this Section 3.6, the term "file" shall be broadly construed to include any manner permitted by SEC rules and regulations in which a document or information is furnished, supplied or otherwise made available to the SEC.

(b) The financial statements and notes of Purchaser contained or incorporated by reference in the SEC Reports (the "***Purchaser Financials***"), fairly present in all material respects the financial position and the results of operations, changes in stockholders' equity, and cash flows of Purchaser at the respective dates of and for the periods referred to in such financial statements, all in accordance with (i) GAAP methodologies applied on a consistent basis throughout the periods involved and (ii) Regulation S-X or Regulation S-K, as applicable (except as may be indicated in the notes thereto and for the omission of notes and audit adjustments in the case of unaudited quarterly financial statements to the extent permitted by Regulation S-X or Regulation S-K, as applicable).

(c) Except for (i) those liabilities that are reflected or reserved for in its unaudited consolidated financial statements for the six months ended June 30, 2021 as filed with the SEC in its Quarterly Report on Form 10-Q before the execution of this Agreement, (ii) liabilities and obligations incurred as permitted under this Agreement, and (iii) liabilities incurred since June 30, 2021 in the ordinary course of business (none of which is a Liability for breach of Contract or violation of any applicable Law), Purchaser and its Subsidiaries do not have any material Liabilities.

3.7 Absence of Certain Changes. Except as set forth on Schedule 3.7, since June 30, 2021, Purchaser has (a) conducted its business only in the ordinary course of business and (b) not been subject to a Material Adverse Effect.

3.8 Compliance with Laws. The Purchaser is, and has since its formation been, in compliance in all material respects with all Laws applicable to it and the conduct of its business, and the Purchaser has not received written notice alleging any violation of applicable Law in any material respect by the Purchaser.

3.9 Actions; Orders; Permits. There is no pending or, to the Knowledge of the Purchaser, threatened material Action to which the Purchaser is subject. There is no material Action that the Purchaser has pending against any other Person. The Purchaser is not subject to any material Orders of any Governmental Authority, nor are any such Orders pending. The Purchaser holds all material Permits necessary to lawfully conduct its business as presently conducted, and to own, lease and operate its assets and properties, all of which are in full force and effect.

3.10 Merger Sub Activities. Since its formation, Merger Sub has not engaged in any business activities other than as contemplated by this Agreement, does not own directly or indirectly any ownership, equity, profits or voting interest in any Person and has no assets or Liabilities except those incurred in connection with this Agreement and the Ancillary Documents to which it is a party and the Transactions, and, other than this Agreement and the Ancillary Documents to which it is a party, Merger Sub is not party to or bound by any Contract.

3.11 Investment Company Act. The Purchaser is not an "investment company" or a Person directly or indirectly "controlled" by or acting on behalf of an "investment company", or required to register as an "investment company", in each case within the meaning of the Investment Company Act of 1940, as amended.

3.12 Finders and Brokers. Except as set forth on Schedule 3.12, no broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission from the Purchaser, Merger Sub or any of their respective Affiliates in connection with the transactions contemplated hereby based upon arrangements made by or on behalf of the Purchaser.

3.13 Independent Investigation. Without limiting Section 6.4(e) hereof, the Purchaser has conducted its own independent investigation, review and analysis of the business, results of operations, prospects, condition (financial or otherwise) or assets of the Company, and acknowledges that it has been provided adequate access to the personnel, properties, assets, premises, books and records, and other documents and data of the Company for such purpose. The Purchaser acknowledges and agrees that: (a) in making its decision to enter into this Agreement and to consummate the transactions contemplated hereby, it has relied solely upon its own investigation and the express representations and warranties of the Company set forth in this Agreement (including the related portions of the Company Disclosure Schedules) and in any certificate delivered to Purchaser pursuant hereto; and (b) none of the Company nor its respective Representatives have made any representation or warranty as to the Company, or this Agreement, except as expressly set forth in this Agreement (including the related portions of the Company Disclosure Schedules) or in any certificate delivered to Purchaser pursuant hereto.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as set forth in the disclosure schedules delivered by the Company to the Purchaser on the date hereof (the "***Company Disclosure Schedules***"), the Company hereby represents and warrants to the Purchaser, as of the date hereof and as of the Closing, as follows:

4.1 Organization and Standing. The Company is a corporation duly incorporated, validly existing and in good standing under the Laws of Delaware and has all requisite corporate power and authority to own, lease and operate its properties and to carry on its business as now being conducted. The Company is duly qualified or licensed and in good standing in the jurisdiction in which it is incorporated or registered and in each other jurisdiction where it does business or operates to the extent that the character of the property owned, or leased or operated by it or the nature of the business conducted by it makes such qualification or licensing necessary, except for any failure to register in such other jurisdictions that would not result in a Material Adverse Effect. Schedule 4.1 lists all jurisdictions in which the Company is qualified to conduct business and all names other than its legal name under which the Company does business. The Company has provided to the Purchaser accurate and complete copies of its Organizational Documents, each as amended to date and as currently in effect. The Company is not in violation of any provision of its Organizational Documents.

4.2 Authorization; Binding Agreement. The Company has all requisite corporate power and authority to execute and deliver this Agreement and each Ancillary Document to which it is or is required to be a party, to perform the Company's obligations hereunder and thereunder and to consummate the transactions contemplated hereby and thereby, subject to obtaining the Required Company Stockholder Approval. The execution and delivery of this Agreement and each Ancillary Document to which the Company is or is required to be a party and the consummation of the transactions contemplated hereby and thereby, (a) have been duly and validly authorized by the Company's board of directors in accordance with the Company's Organizational Documents, the DGCL, any other applicable Law and (b) other than the Required Company Stockholder Approval, no other corporate proceedings on the part of the Company are necessary to authorize the execution and delivery of this Agreement and each Ancillary Document to which it is a party or to consummate the transactions contemplated hereby and thereby. This Agreement has been, and each Ancillary Document to which the Company is or is required to be a party shall be when delivered, duly and validly executed and delivered by the Company and assuming the due authorization, execution and delivery of this Agreement and any such Ancillary Document by the other parties hereto and thereto, constitutes, or when delivered shall constitute, the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to the Enforceability Exceptions. The Company's board of directors, by unanimous written consent (i) determined that this Agreement and the Merger and the other transactions contemplated hereby are advisable, fair to, and in the best interests of, the Company and its stockholders, (ii) approved this Agreement and the Merger and the other transactions contemplated by this Agreement in accordance with the DGCL, (iii) directed that this Agreement be submitted to the Company's stockholders for adoption and (iv) resolved to recommend that the Company stockholders adopt this Agreement.

4.3 Capitalization.

(a) The Company is authorized to issue (i) 25,751,517 shares of Company Common Stock, 10,000,000 of which shares are issued and outstanding, and (ii) 15,151,517 shares of Company Preferred Stock, all of which shares are issued and outstanding. Prior to giving effect to the transactions contemplated by this Agreement, all of the issued and outstanding Company Stock and other equity interests of the Company are set forth on Schedule 4.3(a), along with the record owners thereof. All of the outstanding shares and other equity interests of the Company have been duly authorized, are fully paid and non-assessable and were not issued in violation of any purchase option, right of first refusal, preemptive right, subscription right or any similar right under any provision of the DGCL, any other applicable Law, the Company Charter or any Contract to which the Company is a party or by which it is bound. The Company holds no shares or other equity interests of the Company in its treasury. None of the outstanding shares or other equity interests of the Company were issued in violation of any applicable securities Laws. The rights, privileges and preferences of the Company Preferred Stock are as stated in the Company Charter and as provided by the DGCL.

(b) The Company has reserved 600,000 shares of Company Common Stock for issuance to officers, directors, employees and consultants of the Company pursuant to the Company Equity Plan, which was duly adopted by the Company's board of directors and approved by the Company's stockholders. Of such shares of Company Common Stock reserved for issuance under the Company Equity Plan, (x) 249,524 of such shares are reserved for issuance upon exercise of currently outstanding Company Options, (y) none of such shares are currently issued and outstanding that were issued upon exercise of Company Options previously granted under the Company Equity Plan, and (z) 350,476 shares remain available for future awards permitted under the Company Equity Plan. The Company has furnished to the Purchaser complete and accurate copies of the Company Equity Plan and forms of agreements used thereunder. Schedule 4.3(b) sets forth the record owners of all outstanding Company Options (including the grant date, number and type of shares issuable thereunder, the exercise price, the expiration date and any vesting schedule). Other than as set forth on Schedule 4.3(b), there are no securities convertible into equity interests of the Company or preemptive rights or rights of first refusal or first offer, nor are there any Contracts, commitments, arrangements or restrictions to which the Company is a party or bound relating to any equity securities of the Company, whether or not outstanding. There are no outstanding or authorized equity appreciation, phantom equity or similar rights with respect to the Company. Except as set forth on Schedule 4.3(b), there are no voting trusts, proxies, shareholder agreements or any other agreements or understandings to which the Company is a party with respect to the voting of the Company's equity interests. Except as set forth in the Company Charter, there are no outstanding contractual obligations of the Company to repurchase, redeem or otherwise acquire any equity interests or securities of the Company, nor has the Company granted any registration rights to any Person with respect to the Company's equity securities. All of the Company's securities have been granted, offered, sold and issued in compliance with all applicable securities Laws. Except as set forth on Schedule 4.3(b), as a result of the consummation of the transactions contemplated by this Agreement, no equity interests of the Company are issuable and no rights in connection with any interests, warrants, rights, options or other securities of the Company accelerate or otherwise become triggered (whether as to vesting, exercisability, convertibility or otherwise).

(c) Each Company Option intended to qualify as an "incentive stock option" under the Code so qualifies. Each grant of a Company Option was duly authorized no later than the date on which the grant of such Company Option was by its terms to be effective by all necessary corporate action, and: (i) the stock option agreement governing such grant was duly executed and delivered by each party thereto; (ii) each such grant was made in accordance with the terms of the Company Equity Plan and all other applicable Laws; and (iii) the per share exercise price of each Company Option was equal or greater than the fair market value, as reasonably determined by the Company's board of directors, of a share of Company Common Stock on the applicable grant date.

(d) Except as disclosed in the Company Financials, since January 1, 2019, the Company has not declared or paid any distribution or dividend in respect of its equity interests and has not repurchased, redeemed or otherwise acquired any equity interests of the Company, and the board of directors of the Company has not authorized any of the foregoing.

4.4 Subsidiaries. The Company does not have any Subsidiaries (provided, that in the event of the breach of the foregoing representation and warranty, without limiting any rights or remedies available to the Parties under this Agreement, any reference in this Agreement to the Company will include its Subsidiary to the extent reasonably applicable). The Company does not own or have any rights to acquire, directly or indirectly, any equity interests of, or otherwise Control, any Person. The Company is not a participant in any joint venture, partnership or similar arrangement. There are no outstanding contractual obligations of the Company to provide funds to, or make any investment (in the form of a loan, capital contribution or otherwise) in, any other Person.

4.5 Governmental Approvals. Except as otherwise described in Schedule 4.5, no material Consent of or with any Governmental Authority on the part of the Company is required to be obtained or made in connection with the execution, delivery or performance by the Company of this Agreement or any Ancillary Documents or the consummation by the Company of the transactions contemplated hereby or thereby other than such filings as are expressly contemplated by this Agreement.

4.6 Non-Contravention. Except as otherwise described in Schedule 4.6, the execution and delivery by the Company of this Agreement and each Ancillary Document to which any the Company is or is required to be a party, and the consummation by the Company of the transactions contemplated hereby and thereby and compliance by the Company with the provisions hereof and thereof, will not (a) conflict with or violate any provision of the Company's Organizational Documents, (b) subject to obtaining the Consents from Governmental Authorities referred to in Section 4.5 hereof, and any condition precedent to such Consent or waiver having been satisfied, conflict with or violate any Law, Order or Consent applicable to the Company or any of its properties or assets, or (c) (i) violate, conflict with or result in a material breach of, (ii) constitute a default (or an event which, with notice or lapse of time or both, would constitute a default) under, (iii) result in the termination, withdrawal, suspension, cancellation or modification of, (iv) accelerate the performance of any material obligation required by the Company under, (v) result in a right of termination or acceleration under, (vi) give rise to any obligation to make payments or provide compensation under, (vii) result in the creation of any Lien (other than a Permitted Lien) upon any of the material properties or assets of the Company under, (viii) give rise to any obligation to obtain any material third party Consent or provide any material notice to any Person or (ix) give any Person the right to declare a default, exercise any remedy, claim a rebate, chargeback, penalty or change in delivery schedule, accelerate the maturity or performance, cancel, terminate or modify any right, benefit, obligation or other term under, any of the terms, conditions or provisions of any Company Material Contract.

4.7 Financial Statements.

(a) As used herein, the term "***Company Financials***" means the (i) reviewed financial statements of the Company (including, in each case, any related notes thereto), consisting of the balance sheet of the Company as of December 31, 2020 and December 31, 2019, and the related income statements, changes in stockholder equity and statements of cash flows for the fiscal years then ended, (the "***Reviewed Company Financials***"), and (ii) the Company prepared financial statements, consisting of the balance sheet of the Company as of June 30, 2021 (the "***Interim Balance Sheet Date***") and the related income statement, changes in stockholder equity and statement of cash flows for the six (6) months then ended. True and correct copies of the Company Financials have been provided to the Purchaser. The Company Financials (i) reflect fairly, in all material respects, the books and records of the Company as of the times and for the periods referred to therein, (ii) were prepared in accordance with GAAP and the Accounting Principles, consistently applied throughout and among the periods involved (except that the unaudited statements exclude the footnote disclosures and other presentation items required for GAAP and exclude year-end adjustments which will not be material in amount), and (iii) fairly present in all material respects the financial position of the Company as of the respective dates thereof and the results of the operations and cash flows of the Company for the periods indicated. The Company has never been subject to the reporting requirements of Sections 13(a) and 15(d) of the Exchange Act.

(b) The Company maintains books and records reflecting its assets and Liabilities and maintains internal accounting controls designed to provide reasonable assurance that (i) the Company does not maintain any off-the-book accounts and that the Company's assets are used only in accordance with the Company's management directives, (ii) transactions are executed with management's authorization, (iii) transactions are recorded as necessary to permit preparation of the financial statements of the Company and to maintain accountability for the Company's assets, and (iv) accounts, notes and other receivables and inventory are properly recorded. All of the financial books and records of the Company have been maintained in the ordinary course and in accordance with applicable Laws. The Company has not been involved in any fraud that involves management or other employees who have a significant role in the internal controls over financial reporting of the Company. Since its formation, the Company has not received any written complaint, allegation, assertion or claim that the accounting or auditing practices, procedures, methodologies or methods of the Company or its internal accounting controls are not in compliance with applicable Law.

(c) The Company does not have any Indebtedness for borrowed money other than the Indebtedness set forth on Schedule 4.7(c), which schedule sets for the amounts (including principal and any accrued but unpaid interest or other obligations) with respect to such Indebtedness. Except as disclosed on Schedule 4.7(c), no Indebtedness of the Company for borrowed money contains any restriction upon (i) the prepayment of any of such Indebtedness, (ii) the incurrence of Indebtedness by the Company, or (iii) the ability of the Company to grant any Lien on its properties or assets.

(d) Except as set forth on Schedule 4.7(d), the Company is not subject to any material Liabilities, except for those that are (i) adequately reflected or reserved on or provided for in the balance sheet of the Company as of the Interim Balance Sheet Date contained in the Company Financials, (ii) that were incurred after the Interim Balance Sheet Date in the ordinary course of business (other than Liabilities for breach of any Contract or violation of any Law), or (iii) incurred as Transaction Expenses or pursuant to the terms of this Agreement.

(e) All accounts, notes and other receivables, whether or not accrued, and whether or not billed, of the Company (the "***Accounts Receivable***") arose from sales actually made or services actually performed in the ordinary course of business and represent valid obligations to the Company arising from its business.

4.8 Absence of Certain Changes. Except as set forth on Schedule 4.8, since the Interim Balance Sheet Date, each the Company has (a) conducted its business only in the ordinary course of business, (b) not been subject to a Material Adverse Effect and (c) has not taken any action or committed or agreed to take any action that would be prohibited by Section 5.2(b) (without giving effect to Schedule 5.2) if such action were taken on or after the date hereof without the consent of the Purchaser.

4.9 Compliance with Laws. The Company is not nor since its formation has it been in material conflict or material non-compliance with, or in material default or material violation of, nor has the Company received any written or, to the Knowledge of the Company, oral notice of any material conflict or material non-compliance with, or material default or material violation of, any applicable Laws by which it or any of its properties, assets, employees, business or operations are or were bound.

4.10 Company Permits. The Company holds all material Permits necessary to lawfully conduct in all material respects its business as presently conducted, and to own, lease and operate its assets and properties (collectively, the "***Company Permits***"). The Company has made available to the Purchaser true, correct and complete copies of all material Company Permits, all of which material Company Permits are listed on Schedule 4.10. All of the material Company Permits are in full force and effect, and no suspension or cancellation of any of the material Company Permits is pending or, to the Company's Knowledge, threatened. The Company is not in violation in any material respect of the terms of any material Company Permit, and the Company has not received any written or, to the Knowledge of the Company, oral notice of any Actions relating to the revocation or modification of any Company Permit.

4.11 Litigation. Except as described on Schedule 4.11, there is no (a) Action of any nature currently pending or, to the Company's Knowledge, threatened (and no such Action has been brought since its formation); or (b) Order now pending or outstanding or that was rendered by a Governmental Authority since its formation, in either case of (a) or (b) by or against the Company, its current or former directors, officers or equity holders (provided, that any litigation involving the directors, officers or equity holders of the Company must be related to their roles as such and the Company's business, equity securities or assets), its business, equity securities or assets. The items listed on Schedule 4.11, if finally determined adversely to the Company, will not have, either individually or in the aggregate, a Material Adverse Effect upon the Company. To the Knowledge of the Company, none of the current or former officers or directors of any the Company have been charged with, indicted for, arrested for, or convicted of any felony or any crime involving fraud.

4.12 Material Contracts.

(a) Schedule 4.12(a) sets forth a true, correct and complete list of, and the Company has made available to the Purchaser (including written summaries of oral Contracts), true, correct and complete copies of, each Contract to which the Company is a party or by which the Company is bound (each Contract required to be set forth on Schedule 4.12(a), a "***Company Material Contract***") that:

(i) contains covenants that limit the ability of the Company (A) to compete in any line of business or with any Person or in any geographic area or to sell, or provide any service or product or solicit any Person, including any non-competition covenants, employee and customer non-solicit covenants, exclusivity restrictions, rights of first refusal or most-favored pricing clauses or (B) to purchase or acquire an interest in any other Person;

(ii) involves any joint venture, profit-sharing, partnership, limited liability company or other similar agreement or arrangement relating to the formation, creation, operation, management or control of any partnership or joint venture;

(iii) involves any exchange traded, over the counter or other swap, cap, floor, collar, futures contract, forward contract, option or other derivative financial instrument;

(iv) evidences Indebtedness (whether incurred, assumed, guaranteed or secured by any asset) of any the Company having an outstanding principal amount in excess of $100,000;

(v) involves the acquisition or disposition, directly or indirectly (by merger or otherwise), of assets with an aggregate value in excess of $100,000 (other than in the ordinary course of business) or shares or other equity interests of the Company or another Person;

(vi) relates to any merger, consolidation or other business combination with any other Person or the acquisition or disposition of any other entity or its business or material assets or the sale of the Company, its business or material assets;

(vii) by its terms, individually or with all related Contracts, calls for aggregate payments or receipts by the Company under such Contract or Contracts of at least $100,000 per year;

(viii) is with any Top Customer or Top Supplier;

(ix) obligates the Company to provide continuing indemnification or a guarantee of obligations of a third party after the date hereof in excess of $100,000;

(x) is between the Company and any directors, officers or employees of the Company (other than at-will employment arrangements with employees entered into in the ordinary course of business), including all non-competition, severance and indemnification agreements, or any Related Person;

(xi) obligates the Company to make any capital commitment or expenditure in excess of $100,000 (including pursuant to any joint venture);

(xii) relates to a material settlement of any Action entered into within two (2) years prior to the date of this Agreement or under which the Company has outstanding obligations (other than customary confidentiality obligations);

(xiii) provides another Person (other than any manager, director or officer of the Company) with a power of attorney;

(xiv) relates to the development, ownership, licensing or use of any Intellectual Property by, to or from any the Company, other than Contracts with customers in the ordinary course of business and Off-the-Shelf Software; or

(xv) is otherwise material to the Company and not described in clauses (i) through (xiv) above.

(b) Except as disclosed in Schedule 4.12(b), with respect to each Company Material Contract: (i) such Company Material Contract is valid and binding and enforceable in all respects against the Company and, to the Knowledge of the Company, each other party thereto, and is in full force and effect (except, in each case, as such enforcement may be limited by the Enforceability Exceptions); (ii) the consummation of the transactions contemplated by this Agreement will not affect the validity or enforceability of any Company Material Contract; (iii) the Company is not in breach or default in any material respect under such Company Material Contract; (iv) to the Knowledge of the Company, no other party to such Company Material Contract is in breach or default in any material respect, and no event has occurred that with the passage of time or giving of notice or both would constitute such a material breach or default by such other party, or permit termination or acceleration by any the Company, under such Company Material Contract; (v) the Company has not received written or, to the Knowledge of the Company, oral notice of an intention by any party to any such Company Material Contract that provides for a continuing obligation by any party thereto to terminate such Company Material Contract or amend the terms thereof, other than modifications in the ordinary course of business; and (vi) the Company has not waived any material rights under any such Company Material Contract.

4.13 Intellectual Property.

(a) Schedule 4.13(a)(i) sets forth: (i) all U.S. and foreign registered Patents, Trademarks, Copyrights and Internet Assets and applications owned by the Company ("***Company Registered IP***"); and (ii) all material unregistered Intellectual Property owned or purported to be owned by the Company. Schedule 4.13(a)(ii) sets forth all Intellectual Property licenses, sublicenses and other agreements or permissions (other than "shrink wrap," "click wrap," and "off the shelf" software agreements and other agreements for Software commercially available on reasonable terms to the public generally with license, maintenance, support and other fees of less than $20,000 per year (collectively, "***Off-the-Shelf Software***")) ("Company IP Licenses"), under which the Company is a licensee of any material Intellectual Property. The Company owns, free and clear of all Liens (other than Permitted Liens), has valid and enforceable rights in, and has the unrestricted right to use, sell, license, transfer or assign, all Intellectual Property necessary for the conduct of its business, except for the Intellectual Property that is the subject of the Company IP Licenses. No item of Company Registered IP that consists of a pending Patent application fails to identify all pertinent inventors, and for each Patent and Patent application in the Company Registered IP, the Company has obtained valid assignments of inventions from each inventor. Except as set forth on Schedule 4.13(a)(iii), all Company Registered IP is owned exclusively by the Company without obligation to pay royalties, licensing fees or other fees, and the Company has recorded assignments of all Company Registered IP.

(b) The Company has a valid and enforceable license to use all Intellectual Property that is the subject of the Company IP Licenses. The Company has performed all material obligations imposed on it in the Company IP Licenses required to be performed prior to the date hereof, has made all payments required to date, and the Company is not, nor, to the Knowledge of the Company, is any other party thereto, in breach or default thereunder. All registrations for Copyrights, Patents, Trademarks and Internet Assets that are owned by the Company are valid, in force and in good standing with all required fees and maintenance fees due and owing prior to the date hereof having been paid with no Actions pending, and all applications to register any Copyrights, Patents and Trademarks are pending and in good standing.

(c) Schedule 4.13(c) sets forth all licenses, sublicenses and other agreements or permissions under which the Company is the licensor, other than licenses granted to customers of the Company in the ordinary course of business (each, an "***Outbound IP License***"). The Company has performed all material obligations imposed on it in the Outbound IP Licenses required to be performed prior to the date hereof, and the Company is not, nor, to the Knowledge of the Company, is any other party thereto, in breach or default thereunder.

(d) To the Company's Knowledge, no Action is pending or threatened against the Company that challenges the validity, enforceability, ownership, or right to use, sell, license or sublicense any Intellectual Property currently owned, licensed, used or held for use by the Company. Except as set forth in Schedule 4.13(d)the Company has not received any written or, to the Knowledge of the Company, oral notice or claim asserting or suggesting that any infringement, misappropriation, violation, dilution or unauthorized use of the Intellectual Property of any other Person is or may be occurring or has or may have occurred, as a consequence of the business activities of the Company. There are no Orders to which the Company is a party or is otherwise bound that (i) restrict the rights of the Company to use, transfer, license or enforce any Intellectual Property owned by the Company, (ii) restrict the conduct of the business of the Company in order to accommodate a third Person's Intellectual Property, or (iii) grant any third Person any right with respect to any Intellectual Property owned by the Company. The Company is not currently infringing, and has not, in the past, infringed, misappropriated or violated any Intellectual Property of any other Person in any material respect in connection with the ownership, use or license of any Intellectual Property owned or purported to be owned by the Company or, to the Knowledge of the Company, otherwise in connection with the conduct of the respective businesses of the Company. To the Company's Knowledge, no third party is currently, or has been, infringing upon, misappropriating or otherwise violating any Intellectual Property owned by the Company in any material respect.

(e) All officers, directors, employees and independent contractors of the Company have assigned to the Company all Intellectual Property arising from the services performed for the Company by such Persons and all such assignments of Company Registered IP have been recorded. No current or former officers, employees or independent contractors of the Company have claimed any ownership interest in any Intellectual Property owned by the Company. To the Knowledge of the Company, there has been no violation of the Company's policies or practices related to protection of Company Owned IP or any confidentiality or nondisclosure Contract relating to the Intellectual Property owned by the Company. The Company has taken commercially reasonable security measures in order to protect the secrecy, confidentiality and value of the material Company Owned IP.

(f) To the Knowledge of the Company, no Person has obtained unauthorized access to third party information and data (including personally identifiable information) in the possession of the Company, nor has there been any other material compromise of the security, confidentiality or integrity of such information or data, and no written or, to the Knowledge of the Company, oral complaint relating to an improper use or disclosure of, or a breach in the security of, any such information or data has been received by the Company. The Company has complied in all material respects with all applicable Laws and Contract requirements relating to privacy, personal data protection, and the collection, processing and use of personal information and its own privacy policies and guidelines.

4.14 Taxes and Returns.

(a) The Company has or will have timely filed, or caused to be timely filed, all material federal, state, local and foreign Tax Returns required to be filed by it (taking into account all available extensions), which Tax Returns are true, accurate, correct and complete in all material respects, and has paid, collected or withheld, or caused to be paid, collected or withheld, all material Taxes required to be paid, collected or withheld, other than such Taxes for which adequate reserves in the Company Financials have been established.

(b) There is no Action currently pending or, to the Knowledge of the Company, threatened against the Company by a Governmental Authority in a jurisdiction where the Company does not file Tax Returns that it is or may be subject to taxation by that jurisdiction.

(c) The Company is not being audited by any Tax authority nor has it been notified in writing or, to the Knowledge of the Company, orally by any Tax authority that any such audit is contemplated or pending. There are no claims, assessments, audits, examinations, investigations or other Actions pending against the Company in respect of any Tax, and the Company has not been notified in writing of any proposed Tax claims or assessments against it (other than, in each case, claims or assessments for which adequate reserves in the Company Financials have been established).

(d) There are no Liens with respect to any Taxes upon the Company's assets, other than Permitted Liens.

(e) The Company has collected or withheld all material Taxes currently required to be collected or withheld by it, and all such Taxes have been paid to the appropriate Governmental Authorities or set aside in appropriate accounts for future payment when due.

(f) The Company does not have any outstanding waivers or extensions of any applicable statute of limitations to assess any amount of Taxes. There are no outstanding requests by the Company for any extension of time within which to file any Tax Return or within which to pay any Taxes shown to be due on any Tax Return.

(g) The Company has not made any change in accounting method (except as required by a change in Law) or received a ruling from, or signed an agreement with, any taxing authority that would reasonably be expected to have a material impact on its Taxes following the Closing.

(h) The Company has not participated in, or sold, distributed or otherwise promoted, any "reportable transaction," as defined in U.S. Treasury Regulation section 1.6011-4.

(i) The Company does not have any Liability for the Taxes of another Person that are not adequately reflected in the Company Financials (i) under any applicable Tax Law, (ii) as a transferee or successor, or (iii) by contract, indemnity or otherwise (excluding commercial agreements entered into in the ordinary course of business the primary purpose of which is not the sharing of Taxes). The Company is not party to or bound by any Tax indemnity agreement, Tax sharing agreement or Tax allocation agreement or similar agreement, arrangement or practice (excluding commercial agreements entered into in the ordinary course of business the primary purpose of which is not the sharing of Taxes) with respect to Taxes (including advance pricing agreement, closing agreement or other agreement relating to Taxes with any Governmental Authority) that will be binding on the Company with respect to any period following the Closing Date.

(j) The Company has not requested, nor is it the subject of or bound by any private letter ruling, technical advice memorandum, closing agreement or similar ruling, memorandum or agreement with any Governmental Authority with respect to any Taxes, nor is any such request outstanding.

(k) The Company: (i) has not constituted either a "distributing corporation" or a "controlled corporation" (within the meaning of Section 355(a)(1)(A) of the Code) in a distribution of securities (to any Person or entity that is not a member of the consolidated group of which the Company is the common parent corporation) qualifying for, or intended to qualify for, Tax-free treatment under Section 355 of the Code (A) within the two-year period ending on the date hereof or (B) in a distribution which could otherwise constitute part of a "plan" or "series of related transactions" (within the meaning of Section 355(e) of the Code) in conjunction with the transactions contemplated by this Agreement; and (ii) is not and has not ever been (A) a U.S. real property holding corporation within the meaning of Section 897(c)(2) of the Code, or (B) a member of any consolidated, combined, unitary or affiliated group of corporations for any Tax purposes other than a group of which the Company is or was the common parent corporation.

4.15 Real Property. Schedule 4.15 contains a complete and accurate list of all premises currently leased or subleased or otherwise used or occupied by the Company for the operation of the business of the Company, and of all current leases, lease guarantees, and agreements related thereto, including all amendments, terminations and modifications thereof or waivers thereto (collectively, the "***Company Real Property Leases***"). The Company has provided to the Purchaser a true and complete copy of each of the Company Real Property Leases, and in the case of any oral Company Real Property Lease, a written summary of the material terms of such Company Real Property Lease. The Company Real Property Leases are valid, binding and enforceable against the Company and, to the Knowledge of the Company, each other party thereto in accordance with their terms and are in full force and effect. To the Knowledge of the Company, no event has occurred which (whether with or without notice, lapse of time or both or the happening or occurrence of any other event) would constitute a default on the part of the Company or any other party under any of the Company Real Property Leases, and the Company has not received written notice of any such condition. The Company does not own and has not ever owned any real property or any interest in real property (other than the leasehold interests in the Company Real Property Leases).

4.16 Personal Property. Each item of Personal Property which is currently owned or leased by the Company with a book value or fair market value of greater than Fifty Thousand Dollars ($50,000) is set forth on Schedule 4.16, along with, to the extent applicable, a list of lease agreements, lease guarantees, security agreements and other agreements related thereto (such leases, including all amendments, terminations and modifications thereof or waivers thereto, the "***Company Personal Property Leases***"). Except as set forth in Schedule 4.16, all such items of Personal Property are in operating condition and repair (reasonable wear and tear excepted consistent with the age of such items), and are suitable for their intended use in the business of the Company. The operation of the Company's business as it is now conducted is not dependent upon the right to use any material Personal Property of Persons other than the Company, except for such Personal Property that is owned, leased or licensed by or otherwise contracted to the Company. The Company has provided to the Purchaser a true and complete copy of each of the Company Personal Property Leases, and in the case of any oral Company Personal Property Lease, a written summary of the material terms of such Company Personal Property Lease. The Company Personal Property Leases are valid, binding and enforceable against the Company and, to the Knowledge of the Company, each other party thereto, in accordance with their terms and are in full force and effect.

4.17 Title to and Sufficiency of Assets. The Company has good and marketable title to, or a valid leasehold interest in or right to use, all of its material assets, free and clear of all Liens other than (a) Permitted Liens, (b) the rights of lessors under leasehold interests, (c) Liens specifically identified on the Interim Balance Sheet and (d) Liens set forth on Schedule 4.17. The assets (including Intellectual Property rights and contractual rights) of the Company constitute all of the material assets, rights and properties that are required in the operation of the businesses of the Company as it is now conducted, and taken together, are adequate and sufficient for the operation of the business of the Company as currently conducted in all material respect.

4.18 Employee Matters.

(a) The Company is not a party to any collective bargaining agreement or other similar Contract covering any group of employees, labor organization or other representative of any of the employees of the Company, and the Company has no Knowledge of any activities or proceedings of any labor union or other party to organize or represent such employees. There has not occurred or, to the Knowledge of the Company, been threatened any strike, slow-down, picketing, work-stoppage, or other similar labor activity with respect to any such employees. Schedule 4.18(a) sets forth all unresolved labor Actions, if any, that are pending or, to the Knowledge of the Company, threatened between the Company and Persons employed by or providing services as independent contractors to the Company. No current officer of the Company has provided the Company written or, to the Knowledge of the Company, oral notice of his or her plan to terminate his or her employment with the Company.

(b) Except as set forth in Schedule 4.18(b), the Company (i) is and has been in compliance in all material respects with all applicable Laws respecting employment and employment practices, terms and conditions of employment, health and safety and wages and hours, and other applicable Laws relating to discrimination, disability, labor relations, hours of work, payment of wages and overtime wages, pay equity, immigration, workers compensation, working conditions, employee scheduling, occupational safety and health, family and medical leave, and employee terminations, and has not received written or, to the Knowledge of the Company, oral notice that there is any pending Action involving unfair labor practices against the Company, (ii) is not liable for any material past due arrears of wages or any material penalty for failure to comply with any of the foregoing, and (iii) is not liable for any material payment to any Governmental Authority with respect to unemployment compensation benefits, social security or other benefits or obligations for employees, independent contractors or consultants (other than routine payments to be made in the ordinary course of business). There are no Actions pending or, to the Knowledge of the Company, threatened against the Company brought by or on behalf of any applicant for employment, any current or former employee, any Person alleging to be a current or former employee, or any Governmental Authority, relating to any such applicable Law, or alleging breach of any express or implied contract of employment, wrongful termination of employment, or alleging any other discriminatory, wrongful or tortious conduct in connection with the employment relationship.

(c) Schedule 4.18(c) hereto sets forth a complete and accurate list as of the date hereof of all employees of the Company showing for each as of such date (i) the employee's name, job title or description, employer, location, salary level (including any bonus, commission, deferred compensation or other remuneration payable (other than any such arrangements under which payments are at the discretion of the Company)), (ii) any bonus, commission or other remuneration other than salary paid during the fiscal year ending December 31, 2020, and (iii) any wages, salary, bonus, commission or other compensation due and owing to each employee during or for the fiscal year ending December 31, 2021. Except as set forth on Schedule 4.18(c), (A) no employee is a party to a written employment Contract with the Company and each is employed "at will", and (B) the Company has paid in full to all its employees all wages, salaries, commission, bonuses and other compensation due to their employees as of or prior to the date hereof, including overtime compensation, and the Company does not have any Liability with respect to severance payments to any such employees under the terms of any written or, to the Company's Knowledge, oral agreement. Except as set forth in Schedule 4.18(c), each Company employee has entered into the Company's standard form of employee non-disclosure, inventions and restrictive covenants agreement with the Company (whether pursuant to a separate agreement or incorporated as part of such employee's overall employment agreement), a copy of which has been made available to the Purchaser by the Company.

(d) Schedule 4.18(d) contains a list of all independent contractors (including consultants) currently engaged by the Company, along with the position, the entity engaging such Person, date of retention and rate of remuneration for each such Person. Except as set forth on Schedule 4.18(d), all of such independent contractors are a party to a written Contract with the Company, a copy of which has been provided to the Purchaser by the Company. For the purposes of applicable Law, including the Code, all independent contractors who are currently, or have ever been, engaged by the Company have been properly treated as independent contractors and not employees of the Company.

4.19 Benefit Plans.

(a) Set forth on Schedule 4.19(a) is a true and complete list of each Benefit Plan sponsored, administered or maintained by the Company for Company employees (excluding, for the avoidance of doubt, any Benefit Plan sponsored, administered or maintained by any professional employer organization in which Company employees may participate pursuant to an agreement with such professional employer organization) (each, a "***Company Benefit Plan***"). With respect to each Company Benefit Plan, there are no funded benefit obligations for which contributions have not been made or properly accrued and there are no unfunded benefit obligations that have not been accounted for by reserves, or otherwise properly footnoted in accordance with GAAP on the Company Financials. The Company is not and has not in the past been a member of a "controlled group" for purposes of Section 414(b), (c), (m) or (o) of the Code, nor does the Company have any Liability with respect to any collectively-bargained for plans, whether or not subject to the provisions of ERISA.

(b) Each Company Benefit Plan is and has been operated at all times in compliance with all applicable Laws in all material respects, including ERISA and the Code. Each Company Benefit Plan which is intended to be "qualified" within the meaning of Section 401(a) of the Code (i) has been determined by the IRS to be so qualified (or is based on a prototype plan which has received a favorable opinion letter) during the period from its adoption to the date of this Agreement and (ii) its related trust has been determined to be exempt from taxation under Section 501(a) of the Code or the Company has requested an initial favorable IRS determination of qualification or exemption within the period permitted by applicable Law.

(c) With respect to each Company Benefit Plan which covers any current or former officer, director, consultant or employee (or beneficiary thereof) of the Company, the Company has provided to Purchaser accurate and complete copies, if applicable, of: (i) all Company Benefit Plan texts and agreements and related trust agreements or annuity Contracts (including any amendments, modifications or supplements thereto); (ii) all summary plan descriptions and material modifications thereto; (iii) the most recent Forms 5500, if applicable, and annual report, including all schedules thereto; (iv) the most recent annual and periodic accounting of plan assets; (v) the most recent nondiscrimination testing reports; (vi) the most recent determination letter received from the IRS, if any; (vii) the most recent actuarial valuation; and (viii) all material communications with any Governmental Authority.

(d) With respect to each Company Benefit Plan: (i) such Company Benefit Plan has been administered and enforced in all material respects in accordance with its terms, the Code and ERISA; (ii) no breach of fiduciary duty has occurred; (iii) no Action is pending, or to the Company's Knowledge, threatened (other than routine claims for benefits arising in the ordinary course of administration); (iv) no prohibited transaction, as defined in Section 406 of ERISA or Section 4975 of the Code, has occurred, excluding transactions effected pursuant to a statutory or administration exemption; and (v) all contributions and premiums due through the date hereof have been made in all material respects as required under ERISA or have been fully accrued in all material respects on the Company Financials.

(e) No Company Benefit Plan is a "defined benefit plan" (as defined in Section 414(j) of the Code), a "multiemployer plan" (as defined in Section 3(37) of ERISA) or a "multiple employer plan" (as described in Section 413(c) of the Code) or is otherwise subject to Title IV of ERISA or Section 412 of the Code, and the Company has not incurred any Liability under Title IV of ERISA. The Company does not currently maintain and has never maintained, and is not required currently and has never been required to contribute to or otherwise participate in, a multiple employer welfare arrangement or voluntary employees' beneficiary association as defined in Section 501(c)(9) of the Code.

(f) Except as set forth on Schedule 4.19(f), there is no arrangement under any Company Benefit Plan with respect to any employee that would result in the payment of any amount that by operation of Sections 280G or 162(m) of the Code would not be deductible by the Company and no arrangement exists pursuant to which the Company will be required to "gross up" or otherwise compensate any person because of the imposition of any excise tax on a payment to such person.

(g) With respect to each Company Benefit Plan which is a "welfare plan" (as described in Section 3(1) of ERISA): (i) no such plan provides medical or death benefits with respect to current or former employees of the Company beyond their termination of employment (other than coverage mandated by Law, which is paid solely by such employees); and (ii) there are no reserves, assets, surplus or prepaid premiums under any such plan. The Company has complied in all material respects with the provisions of Section 601 et seq. of ERISA and Section 4980B of the Code.

(h) Except as set forth on Schedule 4.19(h), the consummation of the transactions contemplated by this Agreement and the Ancillary Documents will not: (i) entitle any individual to severance pay, unemployment compensation or other benefits or compensation; (ii) accelerate the time of payment or vesting, or increase the amount of any compensation due, or in respect of, any individual; or (iii) result in or satisfy a condition to the payment of compensation that would, in combination with any other payment, result in an "excess parachute payment" within the meaning of Section 280G of the Code. The Company has not incurred any Liability for any Tax imposed under Chapter 43 of the Code or civil liability under Section 502(i) or (l) of ERISA.

(i) Except to the extent required by Section 4980B of the Code or similar state Law, the Company does not provide health or welfare benefits to any former or retired employee or is obligated to provide such benefits to any active employee following such employee's retirement or other termination of employment or service.

(j) Each Company Benefit Plan that is subject to Section 409A of the Code (each, a "***Section 409A Plan***") as of the Closing Date is indicated as such on Schedule 4.19(j). Each Section 409A Plan has been administered in compliance, and is in documentary compliance, with the applicable provisions of Section 409A of the Code, the regulations thereunder and other official guidance issued thereunder. The Company does not have any obligation to any employee or other service provider with respect to any Section 409A Plan that may be subject to any Tax under Section 409A of the Code. No payment to be made under any Section 409A Plan is, or to the Knowledge of the Company will be, subject to the penalties of Section 409A(a)(1) of the Code. There is no Contract or plan to which any the Company is a party or by which it is bound to compensate any employee, consultant or director for penalty taxes paid pursuant to Section 409A of the Code.

4.20 Environmental Matters. Except as set forth in Schedule 4.20:

(a) The Company is and has been in compliance in all material respects with all applicable Environmental Laws, including obtaining, maintaining in good standing, and complying in all material respects with all Permits required for its business and operations by Environmental Laws ("***Environmental Permits***"), no Action is pending or, to the Company's Knowledge, threatened to revoke, modify, or terminate any such Environmental Permit.

(b) The Company is not the subject of any outstanding Order or Contract with any Governmental Authority in respect of any (i) Environmental Laws, (ii) Remedial Action, or (iii) Release or threatened Release of a Hazardous Material. The Company has not assumed, contractually or by operation of Law, any Liabilities under any Environmental Laws.

(c) No Action has been made or is pending, or to the Company's Knowledge, threatened against the Company or any assets of the Company alleging either or both that the Company may be in material violation of any Environmental Law or Environmental Permit or may have any material Liability under any Environmental Law.

(d) The Company has not manufactured, treated, stored, disposed of, arranged for or permitted the disposal of, generated, handled or Released any Hazardous Material in a manner that has given or would reasonably be expected to give rise to any material Liability under applicable Environmental Laws.

(e) There is no investigation of the business, operations, or currently owned, operated, or leased property of the Company or, to the Company's Knowledge, previously owned, operated, or leased property of the Company pending or, to the Company's Knowledge, threatened that would reasonably be expected to lead to the imposition of any Liens under any Environmental Law or material Environmental Liabilities.

(f) To the Knowledge of the Company, there is not located at any of the properties of the Company any (i) underground storage tanks, (ii) asbestos-containing material, or (iii) equipment containing polychlorinated biphenyls.

(g) The Company has provided to the Purchaser all environmentally related site assessments, audits, studies, reports, analysis and results of investigations that have been performed in respect of the currently or previously owned, leased, or operated properties of the Company, in each case, to the extent in the Company's possession.

4.21 Transactions with Related Persons. Except as set forth on Schedule 4.21, neither the Company nor any of its Affiliates, nor any officer, director, manager, employee, trustee or beneficiary of the Company or any of its Affiliates, nor any immediate family member of any of the foregoing (whether directly or indirectly through an Affiliate of such Person) (each of the foregoing, a "***Related Person***") is presently, or in the past has been, a party to any transaction with the Company, including any Contract or other arrangement (a) providing for the furnishing of services by (other than as officers, directors or employees of the Company), (b) providing for the rental of real property or Personal Property from or (c) otherwise requiring payments to (other than for services or expenses as directors, officers or employees of the Company in the ordinary course of business) any Related Person or any Person in which any Related Person has an interest as an owner, officer, manager, director, trustee or partner or in which any Related Person has any direct or indirect interest (other than the ownership of securities representing no more than two percent (2%) of the outstanding voting power or economic interest of a publicly traded company). Except as set forth on Schedule 4.21, the Company does not have outstanding any Contract with any Related Person (other than employment agreements), and no Related Person owns any real property or Personal Property, or right, tangible or intangible (including Intellectual Property) which is material to the business of the Company. The assets of the Company do not include any receivable or other obligation from a Related Person, and the liabilities of the Company do not include any payable or other obligation or commitment to any Related Person.

4.22 Insurance.

(a) Schedule 4.22(a) lists all insurance policies held by the Company relating to the Company or its business, properties, assets, directors, officers and employees, copies of which have been provided to the Purchaser. All premiums due and payable under all such insurance policies have been timely paid and the Company is otherwise in material compliance with the terms of such insurance policies. The Company does not have any self-insurance or co-insurance programs. Since its formation the Company has not received any notice from, or on behalf of, any insurance carrier relating to or involving any adverse change or any change other than in the ordinary course of business, in the conditions of insurance, any refusal to issue an insurance policy or non-renewal of a policy.

(b) Schedule 4.22(b) identifies each individual insurance claim in excess of $50,000 made by the Company. The Company has reported to its insurers all claims and pending circumstances that would reasonably be expected to result in a claim, except where such failure to report such a claim would not be reasonably likely to be material to the Company. The Company has not made any claim against an insurance policy as to which the insurer is denying coverage.

4.23 Top Customers and Suppliers. Schedule 4.23 lists, by dollar volume received or paid, as applicable, for the twelve (12) months ended on December 31, 2020 and for the six (6) months ended June 30, 2021, the ten (10) largest customers of the Company (the "***Top Customers***") and the ten largest suppliers of goods or services to the Company (the "***Top Suppliers***"), along with the amounts of such dollar volumes. (i) No Top Supplier or Top Customer within the last twelve (12) months has cancelled or otherwise terminated, or, to the Company's Knowledge, provided any notice that it intends to cancel or otherwise terminate, any material relationships of such Person with the Company, (ii) no Top Supplier or Top Customer has during the last twelve (12) months decreased materially or, to the Company's Knowledge, threatened in writing to stop, decrease or limit materially its material relationships with a the Company or threatened in writing to stop, decrease or limit materially its products or services to the Company or its usage or purchase of the products or services of the Company, (iii) to the Company's Knowledge, no Top Supplier or Top Customer has threatened in writing to refuse to pay any amount due to the Company or seek to exercise any remedy against the Company, and (iv) the Company has not, within the past two (2) years, been engaged in any material dispute with any Top Supplier or Top Customer.

4.24 Certain Business Practices.

(a) Neither the Company, nor any of its Representatives acting on its behalf has (i) used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees, to foreign or domestic political parties or campaigns or violated any provision of the U.S. Foreign Corrupt Practices Act of 1977 or any other local or foreign anti-corruption or bribery Law or (iii) made any other unlawful payment in exchange for any favorable treatment for the Company. Neither the Company, nor any of its Representatives acting on its behalf has given or agreed to give any unlawful gift or benefit in any material amount to any customer, supplier, governmental employee or other Person who is or may be in a position to help or hinder the Company or assist the Company in connection with any actual or proposed transaction.

(b) The operations of the Company are and have been conducted at all times in compliance with applicable money laundering statutes in all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Authority, and no Action involving the Company with respect to any of the foregoing is pending or, to the Knowledge of the Company, threatened.

(c) Neither the Company nor any of its directors or officers, or, to the Knowledge of the Company, any other Representative acting on behalf of the Company is currently identified on the specially designated nationals or other blocked person list or otherwise currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("***OFAC***"), and the Company has not, since its formation, used any funds, or loaned, contributed or otherwise made available such funds to any Subsidiary, joint venture partner or other Person, in connection with any sales or operations in Cuba, Iran, Syria, Sudan, Myanmar or any other country sanctioned by OFAC or for the purpose of financing the activities of any Person currently subject to, or otherwise in violation of, any U.S. sanctions administered by OFAC.

4.25 Investment Company Act. The Company is not an "investment company" or a Person directly or indirectly "controlled" by or acting on behalf of an "investment company", or required to register as an "investment company", in each case within the meaning of the Investment Company Act of 1940, as amended.

4.26 Finders and Brokers. Except as set forth in Schedule 4.26, the Company has not incurred any Liability for any brokerage, finder's or other fee or commission in connection with the transactions contemplated hereby.

4.27 Independent Investigation. Without limiting Section 6.4(e) hereof, the Company has conducted its own independent investigation, review and analysis of the business, results of operations, prospects, condition (financial or otherwise) or assets of the Purchaser. The Company acknowledges and agrees that: (a) in making its decision to enter into this Agreement and to consummate the transactions contemplated hereby, it has relied solely upon its own investigation and the express representations and warranties of the Purchaser set forth in Agreement (including the related portions of the Purchaser Disclosure Schedules) and in any certificate delivered to the Company pursuant hereto; and (b) neither the Purchaser nor any of its Representatives have made any representation or warranty as to the Purchaser or this Agreement, except as expressly set forth in this Agreement (including the related portions of the Purchaser Disclosure Schedules) or in any certificate delivered to the Company pursuant hereto.

4.28 No Other Representations. Notwithstanding any provision of this Agreement to the contrary, except for the representations and warranties made by the Company in this Article IV, none of the Company, Company Stockholders, or any other Person makes any representation or warranty with respect to the Company or its businesses, operations, assets, liabilities, condition (financial or otherwise) or prospects, notwithstanding the delivery or disclosure to the Purchaser of any documentation, forecasts, projections, plans or other information with respect to any one or more of the foregoing. Except for the representations and warranties made by the Company in this Article IV, all other representations and warranties, whether express or implied, are expressly disclaimed by the Company.

ARTICLE V
COVENANTS

5.1 Access and Information.

(a) During the period from the date of this Agreement and continuing until the earlier of the termination of this Agreement in accordance with Section 8.1 or the Closing (the "***Interim Period***"), subject to Section 5.12, the Company shall give, and shall cause its Representatives to give, the Purchaser and its Representatives, at reasonable times during normal business hours and upon reasonable intervals and notice, reasonable access to all offices and other facilities and to all employees, properties Contracts, agreements, commitments, books and records, financial and operating data and other information (including Tax Returns, internal working papers, client files, client Contracts and director service agreements), of or pertaining to the Company, as the Purchaser or its Representatives may reasonably request regarding the Company and its businesses, assets, Liabilities, financial condition, prospects, operations, management, employees and other aspects and request each of the Company's Representatives to reasonably cooperate with the Purchaser and its Representatives in their investigation*; provided, however,* that the Purchaser and its Representatives shall conduct any such activities in such a manner as not to unreasonably interfere with the business or operations of the Company. Notwithstanding the foregoing, nothing herein shall require the Company to provide access or to disclose any information to the Purchaser or its Representatives if such access or disclosure (i) would be in violation of Law applicable to the Company; or (ii) would result in the waiver of any applicable attorney-client privilege.

(b) During the Interim Period, subject to Section 5.12, the Purchaser shall give, and shall cause its Representatives to give, the Company and its Representatives, at reasonable times during normal business hours and upon reasonable intervals and notice, reasonable access to all offices and other facilities and to all employees, properties Contracts, agreements, commitments, books and records, financial and operating data and other information (including Tax Returns, internal working papers, client files, client Contracts and director service agreements), of or pertaining to the Purchaser or its Subsidiaries, as the Company or its Representatives may reasonably request regarding the Purchaser, its Subsidiaries and their respective businesses, assets, Liabilities, financial condition, prospects, operations, management, employees and other aspects (including unaudited quarterly financial statements, including a consolidated quarterly balance sheet and income statement, a copy of each material report, schedule and other document filed with or received by a Governmental Authority pursuant to the requirements of applicable securities Laws, and independent public accountants' work papers (subject to the consent or any other conditions required by such accountants, if any) and request each of the Purchaser's Representatives to reasonably cooperate with the Company and its Representatives in their investigation*; provided, however,* that the Company and its Representatives shall conduct any such activities in such a manner as not to unreasonably interfere with the business or operations of the Purchaser or any of its Subsidiaries. Notwithstanding the foregoing, nothing herein shall require the Purchaser to provide access or to disclose any information to the Company or its Representatives if such access or disclosure (i) would be in violation of Law applicable to the Purchaser; or (ii) would result in the waiver of any applicable attorney-client privilege.

(c) Other than (i) as arranged through the Company, or (ii) as expressly provided in this Agreement, the Purchaser is not authorized to and shall not (and shall instruct its Representatives to not) contact any customer, supplier, distributor, lender or other material business relations of the Company, in each case, regarding this Agreement or the transactions contemplated hereby prior to the Closing.

5.2 Conduct of Business of the Company.

(a) Unless the Purchaser shall otherwise consent in writing (such consent not to be unreasonably withheld, conditioned or delayed), during the Interim Period, except as expressly contemplated by this Agreement or the Ancillary Documents or as set forth on Schedule 5.2, the Company shall (i) conduct its business, in all material respects, in the ordinary course of business, (ii) comply, in all material respects, with all Laws applicable to the Company and its businesses, assets and employees, and (iii) use commercially reasonable efforts to preserve intact, in all material respects, its business organization, to keep available the services of its managers, directors, officers, employees and consultants, and to preserve the possession, control and condition of its material assets, all as consistent with past practice.

(b) Without limiting the generality of Section 5.2(a) and except as contemplated by the terms of this Agreement, the Ancillary Documents or as set forth on Schedule 5.2, during the Interim Period, without the prior written consent of the Purchaser (such consent not to be unreasonably withheld, conditioned or delayed), the Company shall not:

(i) amend, waive or otherwise change, in any respect, its Organizational Documents, except as required by applicable Law;

(ii) authorize for issuance, issue, grant, sell, pledge, dispose of or propose to issue, grant, sell, pledge or dispose of any of its equity securities or any options, warrants, commitments, subscriptions or rights of any kind to acquire or sell any of its equity securities, or other securities, including any securities convertible into or exchangeable for any of its shares or other equity securities or securities of any class and any other equity-based awards, or engage in any hedging transaction with a third Person with respect to such securities;

(iii) split, combine, recapitalize or reclassify any of its shares or other equity interests or issue any other securities in respect thereof or pay or set aside any dividend or other distribution (whether in cash, equity or property or any combination thereof) in respect of its equity interests, or directly or indirectly redeem, purchase or otherwise acquire or offer to acquire any of its securities;

(iv) incur, create, assume, prepay or otherwise become liable for any Indebtedness (directly, contingently or otherwise) in excess of $100,000 individually or $250,000 in the aggregate, make a loan or advance to or investment in any third party (other than advancement of expenses to employees in the ordinary course of business), or guarantee or endorse any Indebtedness, Liability or obligation of any Person in excess of $100,000 individually or $250,000 in the aggregate;

(v) increase the wages, salaries or compensation of its employees other than in the ordinary course of business, and in any event not in the aggregate by more than five percent (5%), or make or commit to make any bonus payment (whether in cash, property or securities) to any employee, or materially increase other benefits of employees generally, or enter into, establish, materially amend or terminate any Company Benefit Plan with, for or in respect of any current consultant, officer, manager director or employee, in each case other than as required by applicable Law, pursuant to the terms of any Company Benefit Plans or in the ordinary course of business;

(vi) make or rescind any material election relating to Taxes, settle any claim, action, suit, litigation, proceeding, arbitration, investigation, audit or controversy relating to Taxes, file any amended Tax Return or claim for refund, or make any material change in its accounting or Tax policies or procedures, in each case except as required by applicable Law or in compliance with GAAP;

(vii) transfer or license to any Person or otherwise extend, materially amend or modify, permit to lapse or fail to preserve any material Company Registered IP, Company Licensed IP or other Company IP (excluding non-exclusive licenses of Company IP to Company customers in the ordinary course of business), or disclose to any Person who has not entered into a confidentiality agreement any trade secrets or other material proprietary information;

(viii) terminate, or waive or assign any material right under, any Company Material Contract or enter into any Contract that would be a Company Material Contract, in any case outside of the ordinary course of business;

(ix) fail to maintain its books, accounts and records in all material respects in the ordinary course of business;

(x) establish any Subsidiary or enter into any new line of business;

(xi) fail to use commercially reasonable efforts to keep in force insurance policies or replacement or revised policies providing insurance coverage with respect to its assets, operations and activities in such amount and scope of coverage substantially similar to that which is currently in effect;

(xii) revalue any of its material assets or make any material change in accounting methods, principles or practices, except to the extent required to comply with GAAP or applicable Law;

(xiii) waive, release, assign, settle or compromise any Action (including any Action relating to this Agreement or the transactions contemplated hereby), other than waivers, releases, assignments, settlements or compromises that involve only the payment of monetary damages (and not the imposition of equitable relief on, or the admission of wrongdoing by, the Company or its Affiliates) not in excess of $100,000 (individually or in the aggregate), or otherwise pay, discharge or satisfy any Actions, unless such amount has been reserved in the Company Financials;

(xiv) close or materially reduce its activities, or effect any layoff or other personnel reduction or change, at any of its facilities;

(xv) acquire, including by merger, consolidation, acquisition of equity interests or assets, or any other form of business combination, any corporation, partnership, limited liability company, other business organization or any division thereof, or any material amount of assets outside the ordinary course of business;

(xvi) make capital expenditures in excess of $100,000 individually for any project (or set of related projects) or $250,000 in the aggregate;

(xvii) adopt a plan of complete or partial liquidation, dissolution, merger, consolidation, restructuring, recapitalization or other reorganization;

(xviii) voluntarily incur any Liability in excess of $100,000 individually or $250,000 in the aggregate other than pursuant to the terms of a Company Material Contract or Company Benefit Plan;

(xix) sell, lease, license, transfer, exchange or swap, mortgage or otherwise pledge or encumber (including securitizations), or otherwise dispose of any material portion of its properties, assets or rights;

(xx) enter into any agreement, understanding or arrangement with respect to the voting of equity securities of the Company;

(xxi) accelerate the collection of any trade receivables or delay the payment of trade payables or any other liabilities other than in the ordinary course of business;

(xxii) enter into, amend, waive or terminate (other than terminations in accordance with their terms) any transaction with any Related Person (other than compensation and benefits and advancement of expenses, in each case, provided in the ordinary course of business); or

(c) authorize or agree to do any of the foregoing actions.

5.3 No Solicitation.

(a) For purposes of this Agreement, (i) an "***Acquisition Proposal***" means any inquiry, proposal or offer, or any indication of interest in making an offer or proposal, from any Person or group at any time relating to an Alternative Transaction, and (ii) an "***Alternative Transaction***" means (A) with respect to the Company and its Affiliates, a transaction (other than the transactions contemplated by this Agreement) concerning the sale of (x) all or any material part of the business or assets of the Company (other than in the ordinary course of business) or (y) any material portion of the shares or other equity interests or profits of the Company (other than issuances of shares in accordance with the conversion or exchange of existing securities or issuances of incentive equity in the ordinary course of business), in any case, whether such transaction takes the form of a sale of shares or other equity interests, assets, merger, consolidation, issuance of debt securities, management Contract, joint venture or partnership, or otherwise and (B) with respect to the Purchaser and its Affiliates, a transaction (other than the transactions contemplated by this Agreement) concerning a business combination involving Purchaser.

(b) During the Interim Period, in order to induce the other Parties to continue to commit to expend management time and financial resources in furtherance of the transactions contemplated hereby, each Party shall not, and shall cause its Representatives to not, without the prior written consent of the Company and the Purchaser, directly or indirectly, (i) solicit, assist, initiate or facilitate the making, submission or announcement of, or intentionally encourage, any Acquisition Proposal, (ii) furnish any non-public information regarding such Party or its Affiliates or their respective businesses, operations, assets, Liabilities, financial condition, prospects or employees to any Person or group (other than a Party to this Agreement or their respective Representatives) in connection with or in response to an Acquisition Proposal, (iii) engage or participate in discussions or negotiations with any Person or group with respect to, or that could reasonably be expected to lead to, an Acquisition Proposal, (iv) approve, endorse or recommend, or publicly propose to approve, endorse or recommend, any Acquisition Proposal, (v) negotiate or enter into any letter of intent, agreement in principle, acquisition agreement or other similar agreement related to any Acquisition Proposal, or (vi) release any third Person from, or waive any provision of, any confidentiality agreement to which such Party is a party.

(c) Each Party shall notify the others as promptly as practicable (and in any event within forty eight (48) hours) in writing of the receipt by such Party or any of its Representatives of (i) any bona fide inquiries, proposals or offers, requests for information or requests for discussions or negotiations regarding or constituting any Acquisition Proposal or any bona fide inquiries, proposals or offers, requests for information or requests for discussions or negotiations that could be expected to result in an Acquisition Proposal, and (ii) any request for non-public information relating to such Party or its Affiliates in connection with any Acquisition Proposal, specifying in each case, the material terms and conditions thereof (including a copy thereof if in writing or a written summary thereof if oral) and the identity of the party making such inquiry, proposal, offer or request for information. Each Party shall keep the others promptly informed of the status of any such inquiries, proposals, offers or requests for information. During the Interim Period, each Party shall, and shall cause its Representatives to, immediately cease and cause to be terminated any solicitations, discussions or negotiations with any Person with respect to any Acquisition Proposal and shall, and shall direct its Representatives to, cease and terminate any such solicitations, discussions or negotiations.

5.4 No Trading. The Company acknowledges and agrees that it is aware, and that the Company's Affiliates are aware (and each of their respective Representatives is aware or, upon receipt of any material nonpublic information of the Purchaser, will be advised) of the restrictions imposed by U.S. federal securities laws and the rules and regulations of the SEC and Nasdaq promulgated thereunder or otherwise (the "***Federal Securities Laws***") and other applicable foreign and domestic Laws on a Person possessing material nonpublic information about a publicly traded company. The Company hereby agrees that, while it is in possession of such material nonpublic information, it shall not purchase or sell any securities of the Purchaser (other than to engage in the Merger in accordance with Article I), communicate such information to any third party as would violate Federal Securities Laws, take any other action with respect to the Purchaser in violation of such Federal Securities Laws, or cause or encourage any third party to do any of the foregoing.

5.5 Notification of Certain Matters. During the Interim Period, each Party shall give prompt notice to the other Parties if such Party or its Affiliates: (a) fails to comply with or satisfy any covenant, condition or agreement to be complied with or satisfied by it or its Affiliates hereunder in any material respect; (b) receives any notice or other communication in writing from any third party (including any Governmental Authority) alleging (i) that the Consent of such third party is or may be required in connection with the transactions contemplated by this Agreement or (ii) any non-compliance with any Law by such Party or its Affiliates; (c) receives any notice or other communication from any Governmental Authority in connection with the transactions contemplated by this Agreement; (d) discovers any fact or circumstance that, or becomes aware of the occurrence or non-occurrence of any event the occurrence or non-occurrence of which, would reasonably be expected to cause or result in any of the conditions to the Closing set forth in Article VII not being satisfied or the satisfaction of those conditions being materially delayed; or (e) becomes aware of the commencement or threat, in writing, of any Action against such Party or any of its Affiliates, or any of their respective properties or assets, or, to the Knowledge of such Party, any officer, director, partner, member or manager, in his, her or its capacity as such, of such Party or of its Affiliates with respect to the consummation of the transactions contemplated by this Agreement. No such notice shall constitute an acknowledgement or admission by the Party providing the notice regarding whether or not any of the conditions to the Closing have been satisfied or in determining whether or not any of the representations, warranties or covenants contained in this Agreement have been breached.

5.6 Efforts. Subject to the terms and conditions of this Agreement, each Party shall use its commercially reasonable efforts, and shall cooperate fully with the other Parties, to take, or cause to be taken, all actions and to do, or cause to be done, all things reasonably necessary, proper or advisable under applicable Laws and regulations to consummate the transactions contemplated by this Agreement (including the receipt of all applicable Consents of Governmental Authorities) and to comply as promptly as practicable with all requirements of Governmental Authorities applicable to the transactions contemplated by this Agreement.

5.7 Tax Matters. Each of the Parties shall use its reasonable best efforts to cause the Merger to qualify as a "reorganization" within the meaning of Section 368(a) of the Code. None of the Parties shall (and each of the Parties shall cause their respective Subsidiaries not to) take any action, or fail to take any action, that could reasonably be expected to cause the Merger to fail to qualify as a "reorganization" within the meaning of Section 368(a) of the Code. The Parties intend to report and, except to the extent otherwise required by Law, shall report, for federal income tax purposes, the Merger as a "reorganization" within the meaning of Section 368(a) of the Code.

5.8 Further Assurances. The Parties hereto shall further cooperate with each other and use their respective commercially reasonable efforts to take or cause to be taken all actions, and do or cause to be done all things, necessary, proper or advisable on their part under this Agreement and applicable Laws to consummate the transactions contemplated by this Agreement as soon as reasonably practicable, including preparing and filing as soon as practicable all documentation to effect all necessary notices, reports and other filings.

5.9 The Registration Statement. Purchaser hereby covenants and agrees to file a registration statement on Form S-3 or equivalent form ("***Registration Statement***") with the SEC to register the resale of the Merger Consideration Shares, no later than September 2, 2021 and in any event it shall register such shares for resale on the next registration statement on Form S-1, Form S-3 or equivalent form that it files with the SEC, and to use its commercially reasonable efforts to cause the Registration Statement to become effective as promptly as possible after such filing. The Purchaser hereby provides the recipients of the Merger Consideration Shares with the rights set forth in Exhibit G.

5.10 Company Stockholder Approval. The Company shall seek the written consent of the Company Stockholders, in form and substance reasonably acceptable to Purchaser, to approve and adopt this Agreement and the Merger and all of the other transactions contemplated by this Agreement within five (5) Business Days after the date of this Agreement.

5.11 Public Announcements.

(a) The Parties agree that during the Interim Period no public release, filing or announcement concerning this Agreement or the Ancillary Documents or the transactions contemplated hereby or thereby shall be issued by any Party or any of their Affiliates without the prior written consent of the Purchaser and the Company (which consent shall not be unreasonably withheld, conditioned or delayed), except as such release or announcement may be required by applicable Law or the rules or regulations of any securities exchange, in which case the applicable Party shall use commercially reasonable efforts to allow the other Parties reasonable time to comment on, and arrange for any required filing with respect to, such release or announcement in advance of such issuance.

(b) The Parties shall mutually agree upon and, as promptly as practicable after the execution of this Agreement (but in any event within four (4) Business Days thereafter), issue a press release announcing the execution of this Agreement (the "***Signing Press Release***"). Promptly after the issuance of the Signing Press Release, the Purchaser shall file a current report on Form 8-K (the "***Signing Filing***") with the Signing Press Release and a description of this Agreement as required by Federal Securities Laws, which the Company shall review and comment upon prior to filing (with the Company reviewing and commenting upon such Signing Filing in any event no later than the third (3rd) Business Day after its receipt thereof). The Parties shall mutually agree upon and, as promptly as practicable after the Closing (but in any event within four (4) Business Days thereafter), issue a press release announcing the consummation of the transactions contemplated by this Agreement (the "***Closing Press Release***"). Promptly after the issuance of the Closing Press Release, the Purchaser shall file a current report on Form 8-K (the "***Closing Filing***") with the Closing Press Release and a description of the Closing as required by Federal Securities Laws which the Seller Representative shall review and may comment upon prior to filing. In connection with the preparation of the Signing Press Release, the Signing Filing, the Closing Filing, the Closing Press Release, or any other report, statement, filing notice or application made by or on behalf of a Party to any Governmental Authority or other third party in connection with the transactions contemplated hereby, each Party shall, upon request by any other Party, furnish the Parties with all information concerning themselves, their respective directors, officers and equity holders, and such other matters as may be reasonably necessary in connection with the transactions contemplated hereby.

5.12 Confidential Information.

(a) The Company and the Seller Representative hereby agree that during the Interim Period and, in the event that this Agreement is terminated in accordance with Article VIII, for a period of two (2) years after such termination, they shall, and shall cause their respective Representatives to: (i) treat and hold in strict confidence any Purchaser Confidential Information, and will not use for any purpose (except in connection with the consummation of the transactions contemplated by this Agreement or the Ancillary Documents, performing their obligations hereunder or thereunder, enforcing their rights hereunder or thereunder, or in furtherance of their authorized duties on behalf of the Purchaser or its Subsidiaries), nor directly or indirectly disclose, distribute, publish, disseminate or otherwise make available to any third party any of the Purchaser Confidential Information without the Purchaser's prior written consent; and (ii) in the event that the Company, the Seller Representative or any of their respective Representatives, during the Interim Period or, in the event that this Agreement is terminated in accordance with Article VIII, for a period of two (2) years after such termination, becomes legally compelled to disclose any Purchaser Confidential Information, (A) provide the Purchaser to the extent legally permitted with prompt written notice of such requirement so that the Purchaser or an Affiliate thereof may seek, at Purchaser's cost, a protective Order or other remedy or waive compliance with this Section 5.12(a), and (B) in the event that such protective Order or other remedy is not obtained, or the Purchaser waives compliance with this Section 5.12(a), furnish only that portion of such Purchaser Confidential Information which is legally required to be provided and to exercise its commercially reasonable efforts to obtain assurances that confidential treatment will be accorded such Purchaser Confidential Information. In the event that this Agreement is terminated and the transactions contemplated hereby are not consummated, the Company and the Seller Representative shall, and shall cause their respective Representatives to, promptly deliver to the Purchaser or destroy (at Purchaser's election) any and all copies (in whatever form or medium) of Purchaser Confidential Information and destroy all notes, memoranda, summaries, analyses, compilations and other writings related thereto or based thereon; provided, however, that the Company and the Seller Representative and their respective Representatives shall be entitled to keep any records required by applicable Law or bona fide record retention policies; and provided, further, that any Purchaser Confidential Information that is not returned or destroyed shall remain subject to the confidentiality obligations set forth in this Agreement.

(b) The Purchaser hereby agrees that during the Interim Period and, in the event that this Agreement is terminated in accordance with Article VIII, for a period of two (2) years after such termination, it shall, and shall cause its Representatives to: (i) treat and hold in strict confidence any Company Confidential Information, and will not use for any purpose (except in connection with the consummation of the transactions contemplated by this Agreement or the Ancillary Documents, performing its obligations hereunder or thereunder or enforcing its rights hereunder or thereunder), nor directly or indirectly disclose, distribute, publish, disseminate or otherwise make available to any third party any of the Company Confidential Information without the Company's prior written consent; and (ii) in the event that the Purchaser or any of its Representatives, during the Interim Period or, in the event that this Agreement is terminated in accordance with Article VIII, for a period of two (2) years after such termination, becomes legally compelled to disclose any Company Confidential Information, (A) provide the Company to the extent legally permitted with prompt written notice of such requirement so that the Company may seek, at the Company's sole expense, a protective Order or other remedy or waive compliance with this Section 5.12(b) and (B) in the event that such protective Order or other remedy is not obtained, or the Company waives compliance with this Section 5.12(b), furnish only that portion of such Company Confidential Information which is legally required to be provided as advised in writing by outside counsel and to exercise its commercially reasonable efforts to obtain assurances that confidential treatment will be accorded such Company Confidential Information. In the event that this Agreement is terminated and the transactions contemplated hereby are not consummated, the Purchaser shall, and shall cause its Representatives to, promptly deliver to the Company or destroy (at the Company's election) any and all copies (in whatever form or medium) of Company Confidential Information and destroy all notes, memoranda, summaries, analyses, compilations and other writings related thereto or based thereon; provided, however, that the Purchaser and its Representatives shall be entitled to keep any records required by applicable Law or bona fide record retention policies; and provided, further, that any Company Confidential Information that is not returned or destroyed shall remain subject to the confidentiality obligations set forth in this Agreement.

5.13 Documents and Information. After the Closing Date, the Purchaser shall, and shall cause its Subsidiaries (including the Surviving Corporation) to, until the seventh (7th) anniversary of the Closing Date, retain all books, records and other documents pertaining to the business of the Company in existence on the Closing Date and make the same available for inspection and copying by the Seller Representative during normal business hours of the Purchaser and its Subsidiaries, as applicable, upon reasonable request and upon reasonable notice. No such books, records or documents shall be destroyed after the seventh (7th) anniversary of the Closing Date by the Purchaser or its Subsidiaries (including the Surviving Corporation) without first advising the Seller Representative in writing and giving the Seller Representative a reasonable opportunity to obtain possession thereof.

5.14 Employees and Benefits.

(a) The Purchaser has no present intention to terminate the employment of any employees of the Company.

(b) For a period of one (1) year following the Closing Date, the Purchaser shall, or shall cause the Surviving Corporation to, provide to each employee who remains with the Surviving Corporation (i) a base salary or wages that are not less than the base salary or wages provided to such employee immediately prior to the Closing, (ii) variable/incentive/bonus pay programs that, taken as a whole, are substantially similar in value (excluding any value attributable to equity and equity-based compensation) to those provided to such employee immediately prior to the Closing and (iii) other benefit plans and arrangements that are comparable in the aggregate to, those provided to such employee immediately prior to the Closing Date. Notwithstanding the foregoing, this Section 5.14 shall not limit the obligation of any of the Purchaser, the Surviving Corporation or their Affiliates to comply with Laws or to maintain any compensation arrangement or benefit plan in effect. No provision of this Agreement shall be construed as a guarantee of continued employment of any employee for any specified period following the Closing, and this Agreement shall not be construed so as to prohibit the Purchaser and the Surviving Corporation from having the right to terminate the employment of any employee; *provided*, *however*, that any such termination is effected in accordance with Law.

(c) To the extent applicable with respect to employee benefit plans, programs and arrangements that are established or maintained by the Purchaser and its Affiliates (including, for periods after the Closing, the Surviving Corporation) for the benefit of employees of the Company ("***Purchaser Plans***"), employees (and their eligible dependents) shall be given credit for their service with the Company (i) for eligibility and vesting purposes, and solely for purposes of vacation and severance, for benefit accrual purposes, to the extent such service was taken into account under a corresponding Company Benefit Plan immediately prior to the Closing, and (ii) to the extent allowed under the Purchaser Plans, for purposes of satisfying any waiting periods, evidence of insurability requirements, or the application of any pre-existing condition limitations, and to the extent the Purchaser Plans receive all necessary information from the applicable Company Benefit Plans, shall be given credit for amounts paid under a corresponding Company Benefit Plan during the same period for purposes of applying deductibles, copayments and out-of-pocket maximums as though such amounts had been paid in accordance with the terms and conditions of the Purchaser Plans. Notwithstanding the foregoing provisions of this Section 5.14(c), service and other amounts shall not be credited to employees (or their eligible dependents) to the extent the crediting of such service or other amounts would result in duplication of benefits.

(d) On and after Closing, Purchaser and the Surviving Corporation shall be responsible for any and all notices, Liabilities, costs, payments and expenses arising from any action by the Purchaser or the Surviving Corporation (including breach of Contract, defamation or retaliatory discharge) regarding the employees, including any such Liability (i) under any Law that relates to employees, employee benefit matters or labor matters, (ii) for dismissal, wrongful termination or constructive dismissal or termination, or severance pay or other termination pay, or (iii) under or with respect to any benefit plan, program, collective bargaining agreement, Contract, policy, commitment or arrangement of the Company, including with respect to severance or retention plans, or to the extent such severance or retention plans provide payments or benefits with respect to any employee.

(e) In any termination or layoff of any employees of the Company by the Purchaser or the Surviving Corporation on or after the Closing, the Purchaser and the Surviving Corporation will comply fully, if applicable, with the WARN Act and all other applicable Laws requiring notice to employees. The Purchaser shall not, and shall cause the Surviving Corporation to not, at any time prior to sixty (60) days after the Closing Date, effectuate a "plant closing" or "mass layoff" as those terms are defined in the WARN Act or similar Laws affecting in whole or in part any facility, site of employment, operating unit or employee of the Company without complying fully with the requirements of the WARN Act or similar Laws. The Purchaser and the Surviving Corporation will bear the cost of compliance with any such Laws.

5.15 D&O Indemnity.

(a) For six (6) years from and after the Closing Date, the Purchaser agrees to, and to cause the Surviving Corporation to, jointly and severally indemnify and hold harmless all of the Company's past and present officers, managers and directors to the same extent such persons are indemnified by the Company as of the date hereof pursuant to the Organizational Documents of the Company and any applicable Contracts, for acts or omissions occurring at or prior to the Closing Date.

(b) Notwithstanding anything contained in this Agreement to the contrary, this Section 5.15 shall survive the consummation of the Closing indefinitely. In the event that the Purchaser, the Surviving Corporation or any of their respective successors or assigns (i) consolidates with or merges into any other Person, or (ii) transfers all or substantially all of its properties or assets to any Person, then, and in each case, the Purchaser shall cause the successors and assigns of the Purchaser or the Surviving Corporation, as the case may be, to expressly assume and be bound by the obligations set forth in this Section 5.15.

(c) The obligations of the Purchaser and the Surviving Corporation under this Section 5.15 shall not be terminated or modified in such a manner as to adversely affect any indemnitee to whom this Section 5.15 applies without the written consent of such affected indemnitee.

ARTICLE VI
SURVIVAL AND INDEMNIFICATION

6.1 Survival. All representations and warranties of the Company and the Purchaser contained in this Agreement (including all schedules and exhibits hereto and all certificates, documents, instruments and undertakings furnished pursuant to this Agreement) shall survive the Closing through and until and including the Expiration Date; provided, however, that (i) the representations and warranties contained in Sections 3.1 (Organization and Standing), 3.2 (Authorization; Binding Agreement), 3.5 (Capitalization), 3.12 (Finders and Brokers), 4.1 (Organization and Standing), 4.2 (Authorization; Binding Agreement), 4.3 (Capitalization), 4.4 (Subsidiaries) and 4.26 (Finders and Brokers), shall survive until seven (7) years after the Closing Date (the "***Fundamental Representations***") and (ii) the representations and warranties contained in Sections 4.14 (Taxes and Returns) and 4.19 (Benefit Plans), shall each survive until sixty (60) days after the expiration of the applicable statute of limitations. Additionally, Fraud Claims shall survive indefinitely. If written notice of a claim for breach of any representation or warranty has been given before the applicable date when such representation or warranty no longer survives in accordance with this Section 6.1 then the relevant representations and warranties shall survive as to such claim, until the claim has been finally resolved. All covenants, obligations and agreements contained in this Agreement (including all schedules and exhibits hereto and all certificates, documents, instruments and undertakings furnished pursuant to this Agreement), including any indemnification obligations, shall survive the Closing and continue until fully performed in accordance with their terms.

6.2 Indemnification by Participating Holders. Subject to the terms and conditions of this Article VI and as acknowledged in the Letter of Transmittal executed by each Participating Holder, from and after the Closing, the Participating Holders and their respective successors and assigns (each, with respect to any claim made pursuant to this Agreement, a "***Company Indemnifying Party***") will severally (based on their Pro Rata Share) indemnify, defend and hold harmless the Purchaser, its Affiliates and each of their respective officers, directors, managers, employees, successors and permitted assigns (each, with respect to any claim made pursuant to this Agreement, a "***Purchaser Indemnified Party***") from and against any and all losses, Actions, Orders, Liabilities, damages (including consequential damages), diminution in value, Taxes, interest, penalties, Liens, amounts paid in settlement, costs and expenses (including reasonable expenses of investigation and court costs and reasonable attorneys' fees and expenses), (any of the foregoing, a "***Loss***") paid, suffered or incurred by, or imposed upon, any Purchaser Indemnified Party to the extent arising in whole or in part out of or resulting directly or indirectly from (whether or not involving a Third Party Claim): (a) the breach of any representation or warranty made by the Company set forth in this Agreement or in any certificate delivered in connection herewith by the Company, any Participating Holder or the Seller Representative; (b) the breach of any pre-Closing covenant or agreement on the part of the Company set forth in this Agreement or in any certificate delivered in connection herewith by the Company, any Participating Holder or the Seller Representative; (c) any Action by Person(s) who were holders of equity securities of the Company, including options, warrants, convertible debt or other convertible securities or other rights to acquire equity securities of the Company, prior to the Closing arising out of the sale, purchase, termination, cancellation, expiration, redemption or conversion of any such securities; or (d) any Indebtedness of the Company which was not shown on the final Closing Statement pursuant to Section 1.13. Notwithstanding the foregoing, no Participating Holder shall have any Liability for any breach of a representation, warranty, covenant or agreement of any other Participating Holder in such other Participating Holders' Letter of Transmittal or other Ancillary Documents.

6.3 Indemnification by the Purchaser. Subject to the terms and conditions of this Article VI, from and after the Closing, the Purchaser and its successors and assigns (each, with respect to any claim made pursuant to this Agreement, a "***Purchaser Indemnifying Party***" and, together with the Company Indemnifying Parties, the "***Indemnifying Parties***") will indemnify, defend and hold harmless the Participating Holders, their Affiliates and each of their respective officers, directors, managers, employees, successors and permitted assigns (each, with respect to any claim made pursuant to this Agreement, a "***Company Indemnified Party***" and, together with the Purchaser Indemnified Parties, the "***Indemnified Parties***") from and against any and all Loss paid, suffered or incurred by, or imposed upon, any Company Indemnified Party to the extent arising in whole or in part out of or resulting directly or indirectly from (whether or not involving a Third Party Claim): (a) the breach of any representation or warranty made by the Purchaser set forth in this Agreement or in any certificate delivered by the Purchaser or any of its Representatives; or (b) the breach of any covenant or agreement on the part of the Purchaser set forth in this Agreement or in any certificate delivered by the Purchaser or its Representatives.

6.4 Limitations and General Indemnification Provisions.

(a) Except as otherwise expressly provided in this this Article VI, the Indemnified Parties will not be entitled to receive any indemnification payments under clause (a) of Section 6.2 unless and until the aggregate amount of Losses incurred by the applicable Indemnified Parties for which they are otherwise entitled to indemnification under this Article VI exceeds One Hundred Fifty Thousand Dollars ($150,000) (the "***Basket***"), in which case the Purchaser Indemnifying Parties or Company Indemnifying Parties, as applicable, shall be obligated to the applicable Indemnified Parties for the amount of all Losses of the Indemnified Parties from the first dollar of Losses of the Indemnified Parties required to reach the Basket; provided, however, that the Deductible shall not apply to (i) indemnification claims for breaches of any of the Fundamental Representations or (ii) Fraud Claims.

(b) The maximum aggregate amount of indemnification payments to which the Company Indemnifying Parties will be obligated to pay in the aggregate (excluding Fraud Claims) shall not exceed the amount of the Escrow Property in the Escrow Account at such time, and in the case of Fraud Claims, shall not exceed an amount equal to the Merger Consideration actually paid (based on the Purchaser Stock Price). The maximum aggregate amount of indemnification payments to which the Purchaser Indemnifying Parties will be obligated to pay in the aggregate (excluding Fraud Claims) shall not exceed an amount equal to ten percent (10%) of the Net Merger Consideration, and in the case of Fraud Claims, shall not exceed an amount equal to the Merger Consideration actually paid (based on the Purchaser Stock Price).

(c) In no event shall any Indemnified Party be entitled to recover or make a claim for any amounts in respect of, and in no event shall Losses be deemed to include any punitive, special or exemplary damages except to the extent actually paid to a third party in a Third Party Claim.

(d) Solely for purposes of determining the amount of Losses under this Article VI (and, for the avoidance of doubt, not for purposes of determining whether there has been a breach giving rise to the indemnification claim), all of the representations, warranties and covenants set forth in this Agreement (including the disclosure schedules hereto) or any Ancillary Document that are qualified by materiality, Material Adverse Effect or words of similar import or effect will be deemed to have been made without any such qualification.

(e) No investigation or knowledge by an Indemnified Party or their respective Representatives of a breach of a representation, warranty, covenant or agreement of an Indemnifying Party shall affect the representations, warranties, covenants and agreements of the Indemnifying Party or the recourse available to the Indemnified Parties under any provision of this Agreement, including this Article VI, with respect thereto.

(f) The amount of any Losses suffered or incurred by any Indemnified Party shall be reduced by the amount of any insurance proceeds or other offsetting recoveries paid to the Indemnified Party or any Affiliate thereof as a reimbursement with respect to such Losses (and no right of subrogation shall accrue to any insurer hereunder, except to the extent that such waiver of subrogation would prejudice any applicable insurance coverage), net of the costs of collection and the increases in insurance premiums resulting from such Loss or insurance payment.

(g) Each Person entitled to indemnification under this Article VI shall take commercially reasonable steps to mitigate all Losses after becoming aware of any event which gives rise to any Losses that are indemnifiable or recoverable hereunder or in connection herewith.

(h) Any Losses for indemnification under this Agreement shall be determined without duplication of recovery by reason of the state of facts giving rise to such Losses constituting a breach or inaccuracy of more than one representation, warranty, covenant, or agreement of this Agreement.

6.5 Indemnification Procedures.

(a) The Seller Representative shall have the sole right to act on behalf of the Company Indemnifying Parties and Company Indemnified Parties with respect to any indemnification claims made pursuant to this Article VI, including defending and settling any indemnification claims hereunder and receiving any notices on behalf of the Company Indemnifying Parties and Company Indemnified Parties.

(b) In order to make a claim for indemnification hereunder, an Indemnified Party must provide written notice (a "***Claim Notice***") of such claim to the Indemnifying Party and, in the case of a Purchaser Indemnified Party, to the Escrow Agent, which Claim Notice shall include (i) a reasonable description of the facts and circumstances which relate to the subject matter of such indemnification claim to the extent then known and (ii) the amount of Losses suffered by the Indemnified Party in connection with the claim to the extent known or reasonably estimable (provided, that the Indemnified Party may thereafter in good faith adjust the amount of Losses with respect to the claim by providing a revised Claim Notice to the Indemnifying Party and, if the case of a Purchaser Indemnified Party, the Escrow Agent); *provided*, that the copy of any Claim Notice provided to the Escrow Agent shall be redacted for any confidential or proprietary information of the Indemnifying Party or the Indemnified Party described in clause (i).

(c) In the case of any claim for indemnification under this Article VI arising from a claim of a third party (including any Governmental Authority) (a "***Third Party Claim***"), the Indemnified Party must give a Claim Notice with respect to such Third Party Claim to the Indemnifying Party promptly (but in no event later than thirty (30) days) after the Indemnified Party's receipt of notice of such Third Party Claim; *provided*, that the failure to give such notice will not relieve the Indemnifying Party of its indemnification obligations except to the extent that the defense of such Third Party Claim is materially prejudiced by the failure to give such notice. The Indemnifying Party will have the right to defend and to direct the defense against any such Third Party Claim in its name and at its expense, and with counsel selected by the Indemnifying Party, unless (i) the Indemnifying Party fails to acknowledge fully to the Indemnified Party the obligations of the Indemnifying Party to the Indemnified Party (subject to the limitations in this Article VI) within twenty (20) days after receiving notice of such Third Party Claim or contests, in whole or in part, its indemnification obligations therefor or (ii) at any time while such Third Party Claim is pending, (A) there is a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of such defense, (B) the applicable third party alleges a Fraud Claim, (C) such claim is criminal in nature, would reasonably be expected to lead to criminal proceedings, or seeks an injunction or other equitable relief against the Indemnified Party or (D) the amount of the Third Party Claim exceeds or is reasonably expected to exceed the remaining applicable limit on indemnification obligations pursuant to Section 6.4(b) (after deducting any amounts for pending but unresolved indemnification claims and resolved but unpaid indemnification claims). If the Indemnifying Party elects, and is entitled, to compromise or defend such Third Party Claim, it will within twenty (20) days (or sooner, if the nature of the Third Party Claim so requires) notify the Indemnified Party of its intent to do so, and the Indemnified Party will, at the request and expense of the Indemnifying Party, cooperate in the defense of such Third Party Claim. If the Indemnifying Party elects not to, or at any time is not entitled under this Section 6.5 to, compromise or defend such Third Party Claim, fails to notify the Indemnified Party of its election as herein provided or refuses to acknowledge or contests its obligation to indemnify under this Agreement, the Indemnified Party may pay, compromise or defend such Third Party Claim. Notwithstanding anything to the contrary contained herein, the Indemnifying Party will have no indemnification obligations with respect to any such Third Party Claim which is settled by the Indemnified Party without the prior written consent of the Indemnifying Party (which consent will not be unreasonably withheld, delayed or conditioned); *provided*, *however,* that notwithstanding the foregoing, the Indemnified Party will not be required to refrain from paying any Third Party Claim which has matured by a final, non-appealable Order, nor will it be required to refrain from paying any Third Party Claim where the delay in paying such claim would result in the foreclosure of a Lien upon any of the property or assets then held by the Indemnified Party or where any delay in payment would cause the Indemnified Party material economic loss. The Indemnifying Party's right to direct the defense will include the right to compromise or enter into an agreement settling any Third Party Claim; *provided*, that no such compromise or settlement will obligate the Indemnified Party to agree to any settlement that that requires the taking or restriction of any action (including the payment of money not indemnified pursuant to this Article VI and competition restrictions) by the Indemnified Party other than the execution of a release for such Third Party Claim or agreeing to be subject to customary confidentiality obligations in connection therewith, except with the prior written consent of the Indemnified Party (such consent not to be unreasonably withheld, conditioned or delayed). The Indemnified Party will have the right to participate in the defense of any Third Party Claim with counsel selected by it subject to the Indemnifying Party's right to direct the defense.

(d) With respect to any direct indemnification claim that is not a Third Party Claim, the Indemnifying Party will have a period of thirty (30) days after receipt of the Claim Notice to respond thereto. If the Indemnifying Party does not respond within such thirty (30) days, the Indemnifying Party will be deemed to have accepted responsibility for the Losses set forth in such Claim Notice subject to the limitations on indemnification set forth in this Article VI and will have no further right to contest the validity of such Claim Notice. If the Indemnifying Party responds within such thirty (30) days and rejects such claim in whole or in part, the Indemnified Party will be free to pursue such remedies as may be available under this Agreement, any Ancillary Documents or applicable Law.

6.6 Indemnification Payments. Any indemnification claims against the Purchaser Indemnifying Parties shall be satisfied by wire transfer from Purchaser of immediately available funds in accordance with the instructions provided by Seller Representative. Any indemnification claims against the Company Indemnifying Parties (other than for Fraud Claims) shall be satisfied solely by the Escrow Property (with such indemnification first applied against the Escrow Shares and then against any other Escrow Property), and no Company Indemnifying Party shall be required to make any out-of-pocket payment for indemnification other than in connection with Fraud Claims. Any indemnification obligation of an Indemnifying Party under this Article VI will be paid within five (5) Business Days after the determination of such obligation in accordance with this Article VI (and the Purchaser and the Seller Representative will provide or cause to be provided to the Escrow Agent any written instructions or other information or documents required by the Escrow Agent to make any payment required to be made from the Escrow Property). With respect to any indemnification payment to be made by a Company Indemnifying Party, the value of each Escrow Share or any other share of Purchaser Common Stock for purposes of determining the indemnification payment shall be the Purchaser Stock Price on the date that the indemnification claim is finally determined in accordance with this Article VI. Any Escrow Shares or other shares of Purchaser Common Stock received by Purchaser as an indemnification payment shall be promptly cancelled by Purchaser after its receipt thereof.

6.7 Exclusive Remedy. From and after the Closing, except with respect to Fraud Claims or claims seeking injunctions, specific performance or other equitable relief (including pursuant to Section 9.7), or claims explicitly provided for pursuant to the terms of the Letters of Transmittal or other Ancillary Documents, indemnification pursuant to this Article VI shall be the sole and exclusive remedy for the Parties with respect to matters arising under this Agreement of any kind or nature, including for any misrepresentation or breach of any warranty, covenant, or other provision contained in this Agreement or in any certificate or instrument delivered pursuant to this Agreement or otherwise relating to the subject matter of this Agreement, including the negotiation and discussion thereof.

ARTICLE VII
CLOSING CONDITIONS

7.1 Conditions to Each Party's Obligations'. The obligations of each Party to consummate the Merger and the other transactions described herein shall be subject to the satisfaction or written waiver (where permissible) by the Company and the Purchaser of the following conditions:

(a) *Required Company Stockholder Approval*. In accordance with the DGCL and the Company's Organizational Documents, written consents shall have been obtained pursuant to which the requisite Company Stockholders (including any holders of a separate class or series of stock that is required, whether pursuant to the Company's Organizational Documents, any stockholder agreement or otherwise) shall have authorized, approved and consented to, the execution, delivery and performance of this Agreement and each of the Ancillary Documents to which the Company is or is required to be a party or bound, and the consummation of the transactions contemplated hereby and thereby, including the Merger (the "***Required Company Stockholder Approval***").

(b) *Requisite Consents*. The Consents required to be obtained from or made with any third Person in order to consummate the transactions contemplated by this Agreement that are set forth in Schedule 7.1(b) shall have each been obtained or made.

(c) *No Adverse Law or Order*. No Governmental Authority shall have enacted, issued, promulgated, enforced or entered any Law (whether temporary, preliminary or permanent) or Order that is then in effect and which has the effect of making the transactions or agreements contemplated by this Agreement illegal or which otherwise prevents or prohibits consummation of the transactions contemplated by this Agreement.

7.2 Conditions to Obligations of the Company. In addition to the conditions specified in Section 7.1, the obligations of the Company to consummate the Merger and the other transactions contemplated by this Agreement are subject to the satisfaction or written waiver by the Company (where permissible) of the following conditions:

(a) *Representations and Warranties*. All of the representations and warranties of the Purchaser and Merger Sub set forth in this Agreement and in any certificate delivered by or on behalf of the Purchaser or Merger Sub pursuant hereto shall be true and correct on and as of the date of this Agreement and on and as of the Closing Date as if made on the Closing Date, except for (i) those representations and warranties that address matters only as of a particular date (which representations and warranties shall have been accurate as of such date), and (ii) any failures to be true and correct that (without giving effect to any qualifications or limitations as to materiality or Material Adverse Effect), individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect on, or with respect to, the Purchaser.

(b) *Agreements and Covenants*. The Purchaser and Merger Sub shall have performed in all material respects all of the Purchaser's and Merger Sub's obligations and complied in all material respects with all of the Purchaser's and Merger Sub's agreements and covenants under this Agreement to be performed or complied with by each on or prior to the Closing Date.

(c) *No Purchaser Material Adverse Effect*. No Material Adverse Effect shall have occurred with respect to the Purchaser since the date of this Agreement which is continuing and uncured.

(d) Closing Deliveries.

(i) Officer Certificate. The Purchaser shall have delivered to the Company a certificate, dated the Closing Date, signed by an executive officer of the Purchaser in such capacity, certifying as to the satisfaction of the conditions specified in Sections 7.2(a), 7.2(b) and 7.2(c).

(ii) Secretary Certificate. The Purchaser shall have delivered to the Company a certificate from its secretary or other executive officer certifying as to, and attaching, (A) copies of the Purchaser's and Merger Sub's Organizational Documents as in effect as of the Closing Date, (B) the resolutions of the Purchaser's and Merger Sub's boards of directors authorizing and approving the execution, delivery and performance of this Agreement and each of the Ancillary Documents to which each is a party or by which each is bound, and the consummation of the transactions contemplated hereby and thereby, and (C) the incumbency of officers authorized to execute this Agreement or any Ancillary Document to which the Purchaser or Merger Sub is or is required to be a party or otherwise bound.

(iii) Good Standing. The Purchaser shall have delivered to the Company a good standing certificate for the Purchaser and for Merger Sub certified as of a date no earlier than ten (10) days prior to the Closing Date from the proper Governmental Authority of the Purchaser's jurisdiction of organization.

(iv) Escrow Agreement. The Company shall have received a copy of the Escrow Agreement, duly executed by the Purchaser and the Escrow Agent.

7.3 Conditions to Obligations of the Purchaser. In addition to the conditions specified in Section 7.1, the obligations of the Purchaser and Merger Sub to consummate the Merger and the other transactions contemplated by this Agreement are subject to the satisfaction or written waiver by the Purchaser (where permissible) of the following conditions:

(a) *Representations and Warranties*. All of the representations and warranties of the Company set forth in this Agreement and in any certificate delivered by or on behalf of the Company pursuant hereto shall be true and correct on and as of the date of this Agreement and on and as of the Closing Date as if made on the Closing Date, except for (i) those representations and warranties that address matters only as of a particular date (which representations and warranties shall have been accurate as of such date), and (ii) any failures to be true and correct that (without giving effect to any qualifications or limitations as to materiality or Material Adverse Effect), individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect on, or with respect to, the Company.

(b) *Agreements and Covenants*. The Company shall have performed in all material respects all of its obligations and complied in all material respects with all of its agreements and covenants under this Agreement to be performed or complied with by it on or prior to the Closing Date.

(c) *No Material Adverse Effect*. No Material Adverse Effect shall have occurred with respect to the Company since the date of this Agreement which is continuing and uncured.

(d) *Certain Ancillary Documents.* Each Non-Competition Agreement shall be in full force and effect in accordance with the terms thereof as of the Closing.

(e) Closing Deliveries.

(i) Officer Certificate. The Purchaser shall have received a certificate from the Company, dated as the Closing Date, signed by an executive officer of the Company in such capacity, certifying as to the satisfaction of the conditions specified in Sections 7.3(a), 7.3(b) and 7.3(c)

(ii) Secretary Certificate. The Company shall have delivered to the Purchaser a certificate executed by the Company's secretary certifying as to the validity and effectiveness of, and attaching, (A) copies of the Company's Organizational Documents as in effect as of the Closing Date (immediately prior to the Effective Time), (B) the requisite resolutions of the Company's board of directors authorizing and approving the execution, delivery and performance of this Agreement and each Ancillary Document to which the Company is or is required to be a party or bound, and the consummation of the Merger and the other transactions contemplated hereby and thereby, and recommending the approval and adoption of the same by the Company Stockholders, and (C) evidence that the Required Company Stockholder Approval has been obtained.

(iii) Good Standing. The Company shall have delivered to the Purchaser a good standing certificate for the Company certified as of a date no earlier than ten (10) days prior to the Closing Date from the proper Governmental Authority of the Company's jurisdiction of organization.

(iv) Certified Charter. The Company shall have delivered to the Purchaser a copy of the Company Charter, as in effect as of immediately prior to the Effective Time, certified by the Secretary of State of the State of Delaware as of a date no more than ten (10) Business Days prior to the Closing Date.

(v) Escrow Agreement. The Purchaser shall have received a copy of the Escrow Agreement, duly executed by the Seller Representative and the Escrow Agent.

(vi) Resignations. The Purchaser shall have received written resignations, effective as of the Closing, of each of the directors and officers of the Company identified on Schedule 7.3(e)(vi).

(vii) Termination of Certain Contracts. The Purchaser shall have received evidence reasonably acceptable to the Purchaser that the Contracts involving the Company and any Company Stockholders or other Related Persons set forth on Schedule 7.3(e)(vii) shall have been terminated with no further obligation or Liability of the Company thereunder.

7.4 Frustration of Conditions. Notwithstanding anything contained herein to the contrary, no Party may rely on the failure of any condition set forth in this Article VII to be satisfied if such failure was caused by the failure of such Party or its Affiliates (or with respect to the Company, any Company Stockholder) to comply with or perform any of its covenants or obligations set forth in this Agreement.

ARTICLE VIII
TERMINATION AND EXPENSES

8.1 Termination. This Agreement may be terminated and the transactions contemplated hereby may be abandoned at any time prior to the Closing as follows:

(a) by mutual written consent of the Purchaser and the Company;

(b) by written notice by the Purchaser or the Company if any of the conditions to the Closing set forth in Article VII have not been satisfied or waived by September 30, 2021 (the "***Outside Date***"); *provided*, *however*, the right to terminate this Agreement under this Section 8.1(b) shall not be available to a Party if the breach or violation by such Party or its Affiliates of any representation, warranty, covenant or obligation under this Agreement was the cause of, or resulted in, the failure of the Closing to occur on or before the Outside Date;

(c) by written notice by either the Purchaser or the Company if a Governmental Authority of competent jurisdiction shall have issued an Order or taken any other action permanently restraining, enjoining or otherwise prohibiting the transactions contemplated by this Agreement, and such Order or other action has become final and non-appealable; *provided, however,* that the right to terminate this Agreement pursuant to this Section 8.1(c) shall not be available to a Party if the failure by such Party or its Affiliates to comply with any provision of this Agreement has been a substantial cause of, or substantially resulted in, such action by such Governmental Authority;

(d) by written notice by the Company to Purchaser, if (i) there has been a breach by the Purchaser of any of its representations, warranties, covenants or agreements contained in this Agreement, or if any representation or warranty of the Purchaser shall have become untrue or inaccurate, in any case, which would result in a failure of a condition set forth in Section 7.2(a) or Section 7.2(b) to be satisfied, and (ii) the breach or inaccuracy is incapable of being cured or is not cured within the earlier of (A) twenty (20) days after written notice of such breach or inaccuracy is provided to the Purchaser or (B) the Outside Date; provided, that the Company shall not have the right to terminate this Agreement pursuant to this Section 8.1(d) if at such time the Company is in material uncured breach of this Agreement;

(e) by written notice by the Purchaser to the Company, if (i) there has been a breach by the Company of any of its representations, warranties, covenants or agreements contained in this Agreement, or if any representation or warranty of such Parties shall have become untrue or inaccurate, in any case, which would result in a failure of a condition set forth in Section 7.3(a) or Section 7.3(b) to be satisfied, and (ii) the breach or inaccuracy is incapable of being cured or is not cured within the earlier of (A) twenty (20) days after written notice of such breach or inaccuracy is provided to the Company or (B) the Outside Date; provided, that the Purchaser shall not have the right to terminate this Agreement pursuant to this Section 8.1(e) if at such time the Purchaser is in material uncured breach of this Agreement;

(f) by written notice by the Purchaser to the Company, if there shall have been a Material Adverse Effect on the Company following the date of this Agreement which is uncured and continuing;

(g) by written notice by the Company to the Purchaser, if there shall have been a Material Adverse Effect on the Purchaser following the date of this Agreement which is uncured and continuing; or

(h) by written notice by either the Purchaser or the Company to the other, if the Required Company Stockholder Approval is not obtained within two (2) Business Days after the date hereof.

8.2 Effect of Termination. This Agreement may only be terminated in the circumstances described in Section 8.1 and pursuant to a written notice delivered by the applicable Party to the other applicable Parties, which sets forth the basis for such termination, including the provision of Section 8.1 under which such termination is made. In the event of the valid termination of this Agreement pursuant to Section 8.1, this Agreement shall forthwith become void, and there shall be no Liability on the part of any Party or any of their respective Representatives, and all rights and obligations of each Party shall cease, except: (i) Sections 5.11, 5.12, 8.3, and this Section 8.2 shall survive the termination of this Agreement, and (ii) nothing herein shall relieve any Party from Liability for any willful breach of any representation, warranty, covenant or obligation under this Agreement or any Fraud Claim against such Party, in either case, prior to termination of this Agreement. Without limiting the foregoing, and except as provided in Sections 8.3 and this Section 8.2 and subject to the right to seek injunctions, specific performance or other equitable relief in accordance with Section 9.7, the Parties' sole right prior to the Closing with respect to any breach of any representation, warranty, covenant or other agreement contained in this Agreement by another Party or with respect to the transactions contemplated by this Agreement shall be the right, if applicable, to terminate this Agreement pursuant to Section 8.1.

8.3 Fees and Expenses. Subject to Section 9.14, and the obligations set forth in Exhibit G, all Expenses incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the Party incurring such expenses. As used in this Agreement, "***Expenses***" shall include all out-of-pocket expenses (including all fees and expenses of counsel, accountants, investment bankers, financial advisors, financing sources, experts and consultants to a Party hereto or any of its Affiliates) incurred by a Party or on its behalf in connection with or related to the authorization, preparation, negotiation, execution or performance of this Agreement or any Ancillary Document related hereto and all other matters related to the consummation of this Agreement.

ARTICLE IX
MISCELLANEOUS

9.1 Notices. All notices, consents, waivers and other communications hereunder shall be in writing and shall be deemed to have been duly given when delivered (i) in person, (ii) by facsimile or other electronic means (including email), with affirmative confirmation of receipt, (iii) one Business Day after being sent, if sent by reputable, nationally recognized overnight courier service or (iv) three (3) Business Days after being mailed, if sent by registered or certified mail, pre-paid and return receipt requested, in each case to the applicable Party at the following addresses (or at such other address for a Party as shall be specified by like notice); provided that any notices deliverable to the Seller Representative shall be delivered solely via email or facsimile:

If to the Purchaser or Merger Sub at or prior to the Closing, to:	*with a copy (which will not constitute notice) to:*
BioLife Solutions, Inc. 3303 Monte Villa Parkway, Suite 310 Attn: Roderick de Greef Telephone No.: (425)402-1400 Email: rdegreef@BioLifeSolutions.com	Ellenoff Grossman & Schole LLP 1345 Avenue of the Americas, 11th Floor New York, New York 10105 Attn: Barry I. Grossman, Esq. Facsimile No.: (212) 370-7889 Telephone No.: (212) 370-1300 Email: bigrossman@egsllp.com
If to the Company, to:	*with a copy (which will not constitute notice) to:*
Sexton Biotechnologies, Inc. 1102 Indiana Avenue, Indianapolis, IN 46202 Attn: Sean Werner Email: sean.werner@sextonbio.com	Faegre Drinker Biddle & Reath LLP 600 E. 96th Street, Suite 600 Indianapolis, Indiana 46240 Attn: Dan Boeglin Facsimile No.: (317) 569-4800 Telephone No.: (317) 569-4644 Email: dan.boeglin@faegredrinker.com
If to the Seller Representative to:	*with a copy (which will not constitute notice) to:*
Fortis Advisors LLC Attn: Notices Department Facsimile No.: (858) 408-1843 Telephone No.: (858(200-8688 Email: notices@fortisrep.com	Faegre Drinker Biddle & Reath LLP 600 E. 96th Street, Suite 600 Indianapolis, Indiana 46240 Attn: Dan Boeglin Facsimile No.: (317) 569-4800 Telephone No.: (317) 569-4644 Email: dan.boeglin@faegredrinker.com

9.2 Binding Effect; Assignment. This Agreement and all of the provisions hereof shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns. This Agreement shall not be assigned by operation of Law or otherwise without the prior written consent of the Purchaser and the Company (and after the Closing, the Purchaser and the Seller Representative), and any assignment without such consent shall be null and void; *provided* that no such assignment shall relieve the assigning Party of its obligations hereunder.

9.3 Third Parties. Nothing contained in this Agreement or in any instrument or document executed by any party in connection with the transactions contemplated hereby shall create any rights in, or be deemed to have been executed for the benefit of, any Person that is not a party hereto or thereto, except as set forth in Section 5.9, Section 5.15, Section 9.4 and Article VI or in respect of any rights provided to the Participating Holders hereunder or thereunder.

9.4 Waiver of Conflicts .

(a) The Parties acknowledge and agree that Faegre Drinker Biddle & Reath LLP has represented the Company in connection with the negotiation, preparation, execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby, and that the Company Stockholders, or certain of them, have a reasonable expectation that Faegre Drinker Biddle & Reath LLP may represent them in connection with any claim or Action involving any the Company Stockholders, on the one hand, and the Purchaser or its Affiliates, on the other hand, arising under this Agreement or the transactions contemplated hereby. The Purchaser hereby, on behalf of itself and its Affiliates and their respective successors and assigns, hereby irrevocably (a) agrees to any such representation in any such matter and (b) waives any actual or potential conflict arising from any such representation in the event of any adversity between the interests of any Company Stockholder, on the one hand, and the Purchaser, the Surviving Corporation or their Affiliates, on the other hand, in any such matter.

(b) The Parties to this Agreement agree that, immediately prior to the Closing, without the need for any further action (i) all right, title and interest of the Company in and to all Privileged Communications shall thereupon transfer to and be vested solely in the Company Stockholders and their successors in interest and (ii) any and all protections from disclosure, including attorney-client privileges and work product protections, associated with or arising from any such Privileged Communications that would have been exercisable by the Company shall thereupon be vested exclusively in the Company Stockholders.

(c) This Section 9.4 is for the benefit of the Company Stockholders and such Persons are intended third-party beneficiaries.

9.5 Governing Law; Jurisdiction. This Agreement shall be governed by, construed and enforced in accordance with the Laws of the State of Delaware without regard to the conflict of laws principles thereof. Subject to Section 1.13, all Actions arising out of or relating to this Agreement shall be heard and determined exclusively in any state or federal court located in Delaware (or in any appellate court thereof) (the "***Specified Courts***"). Subject to Section 1.13, each Party hereto and the Seller Representative hereby (a) submits to the exclusive jurisdiction of any Specified Court for the purpose of any Action arising out of or relating to this Agreement brought by any Party hereto or the Seller Representative and (b) irrevocably waives, and agrees not to assert by way of motion, defense or otherwise, in any such Action, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the Action is brought in an inconvenient forum, that the venue of the Action is improper, or that this Agreement or the transactions contemplated hereby may not be enforced in or by any Specified Court. Each Party and the Seller Representative agrees that a final judgment in any Action shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by Law. Each Party and the Seller Representative irrevocably consents to the service of the summons and complaint and any other process in any other Action relating to the transactions contemplated by this Agreement, on behalf of itself, or its property, by personal delivery of copies of such process to such Party at the applicable address set forth in Section 9.1. Nothing in this Section 9.5 shall affect the right of any Party or the Seller Representative to serve legal process in any other manner permitted by Law.

9.6 WAIVER OF JURY TRIAL. EACH PARTY HERETO AND THE SELLER REPRESENTATIVE HEREBY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. EACH PARTY HERETO AND THE SELLER REPRESENTATIVE (A) CERTIFIES THAT NO REPRESENTATIVE OF ANY OTHER PARTY HERETO OR THE SELLER REPRESENTATIVE HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF ANY ACTION, SEEK TO ENFORCE THAT FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO AND SELLER REPRESENTATIVE HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 9.6.

9.7 Specific Performance. Each Party acknowledges that the rights of each Party to consummate the transactions contemplated hereby are unique, recognizes and affirms that in the event of a breach of this Agreement by any Party, money damages may be inadequate and the non-breaching Parties may have not adequate remedy at law, and agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed by an applicable Party in accordance with their specific terms or were otherwise breached. Accordingly, each Party shall be entitled to seek an injunction or restraining order to prevent breaches of this Agreement and to seek to enforce specifically the terms and provisions hereof, without the requirement to post any bond or other security or to prove that money damages would be inadequate, this being in addition to any other right or remedy to which such Party may be entitled under this Agreement, at law or in equity.

9.8 Severability. In case any provision in this Agreement shall be held invalid, illegal or unenforceable in a jurisdiction, such provision shall be modified or deleted, as to the jurisdiction involved, only to the extent necessary to render the same valid, legal and enforceable, and the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby nor shall the validity, legality or enforceability of such provision be affected thereby in any other jurisdiction. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the Parties will substitute for any invalid, illegal or unenforceable provision a suitable and equitable provision that carries out, so far as may be valid, legal and enforceable, the intent and purpose of such invalid, illegal or unenforceable provision.

9.9 Amendment. This Agreement may be amended, supplemented or modified only by execution of a written instrument signed by the Purchaser, the Company, and the Seller Representative.

9.10 Waiver. The Purchaser on behalf of itself and its Affiliates, the Company on behalf of itself and its Affiliates, and the Seller Representative on behalf of itself and the Participating Holders, may in its sole discretion (i) extend the time for the performance of any obligation or other act of any other non-Affiliated Party hereto, (ii) waive any inaccuracy in the representations and warranties by such other non-Affiliated Party contained herein or in any document delivered pursuant hereto and (iii) waive compliance by such other non-Affiliated Party with any covenant or condition contained herein. Any such extension or waiver shall be valid only if set forth in an instrument in writing signed by the Party or Parties to be bound thereby (including by the Purchaser or the Seller Representative in lieu of such Party to the extent provided in this Agreement). Notwithstanding the foregoing, no failure or delay by a Party in exercising any right hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise of any other right hereunder.

9.11 Entire Agreement. This Agreement and the documents or instruments referred to herein, including any exhibits and schedules attached hereto, which exhibits and schedules are incorporated herein by reference, together with the Ancillary Documents, embody the entire agreement and understanding of the Parties hereto in respect of the subject matter contained herein. There are no restrictions, promises, representations, warranties, covenants or undertakings, other than those expressly set forth or referred to herein or the documents or instruments referred to herein, which collectively supersede all prior agreements and the understandings among the Parties with respect to the subject matter contained herein.

9.12 Interpretation. The table of contents and the Article and Section headings contained in this Agreement are solely for the purpose of reference, are not part of the agreement of the Parties and shall not in any way affect the meaning or interpretation of this Agreement. In this Agreement, unless the context otherwise requires: (a) any pronoun used shall include the corresponding masculine, feminine or neuter forms, and words in the singular, including any defined terms, include the plural and vice versa; (b) reference to any Person includes such Person's successors and assigns but, if applicable, only if such successors and assigns are permitted by this Agreement, and reference to a Person in a particular capacity excludes such Person in any other capacity; (c) any accounting term used and not otherwise defined in this Agreement or any Ancillary Document has the meaning assigned to such term in accordance with GAAP; (d) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding or succeeding such term and shall be deemed in each case to be followed by the words "without limitation"; (e) the words "herein," "hereto," and "hereby" and other words of similar import shall be deemed in each case to refer to this Agreement as a whole and not to any particular Section or other subdivision of this Agreement; (f) the word "if" and other words of similar import when used herein shall be deemed in each case to be followed by the phrase "and only if"; (g) the term "or" means "and/or"; (h) any reference to the term "ordinary course" or "ordinary course of business" shall be deemed in each case to be followed by the words "consistent with past practice"; (i) any agreement, instrument, insurance policy, Law or Order defined or referred to herein or in any agreement or instrument that is referred to herein means such agreement, instrument, insurance policy, Law or Order as from time to time amended, modified or supplemented, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes, regulations, rules or orders) by succession of comparable successor statutes, regulations, rules or orders and references to all attachments thereto and instruments incorporated therein; (j) except as otherwise indicated, all references in this Agreement to the words "Section," "Article", "Schedule" and "Exhibit" are intended to refer to Sections, Articles, Schedules and Exhibits to this Agreement; and (k) the term "Dollars" or "$" means United States dollars. Any reference in this Agreement to a Person's directors shall include any member of such Person's governing body and any reference in this Agreement to a Person's officers shall include any Person filling a substantially similar position for such Person. Any reference in this Agreement or any Ancillary Document to a Person's shareholders or stockholders shall include any applicable owners of the equity interests of such Person, in whatever form, including with respect to the Purchaser its stockholders under the DGCL, as then applicable, or its Organizational Documents. The Parties have participated jointly in the negotiation and drafting of this Agreement. Consequently, in the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties hereto, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any provision of this Agreement. To the extent that any Contract, document, certificate or instrument is represented and warranted to by the Company to be given, delivered, provided or made available by the Company, in order for such Contract, document, certificate or instrument to have been deemed to have been given, delivered, provided and made available to the Purchaser or its Representatives, such Contract, document, certificate or instrument shall have been posted to the electronic data site maintained on behalf of the Company for the benefit of the Purchaser and its Representatives and the Purchaser and its Representatives have been given access to the electronic folders containing such information.

9.13 Counterparts. This Agreement and each Ancillary Document may be executed and delivered (including by facsimile or other electronic transmission) in one or more counterparts, and by the different Parties hereto in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

9.14 Seller Representative.

(a) Each Participating Holder, by delivery of a Letter of Transmittal, on behalf of itself and its successors and assigns, hereby irrevocably, as of the Closing, constitutes and appoints Fortis Advisors LLC, in its capacity as the Seller Representative, as the true and lawful exclusive agent and attorney-in-fact of such Persons with full powers of substitution to act in the name, place and stead of thereof with respect to the performance on behalf of such Person under the terms and provisions of this Agreement, the Seller Representative Engagement Agreement, and the Ancillary Documents to which the Seller Representative is a party or otherwise has rights in such capacity (together with this Agreement, the "***Seller Representative Documents***"), as the same may be from time to time amended, and to do or refrain from doing all such further acts and things, and to execute all such documents on behalf of such Person, if any, as the Seller Representative will deem necessary or appropriate in connection with any of the transactions contemplated under the Seller Representative Documents, including: (i) managing, controlling, defending and settling on behalf of an Indemnifying Party any indemnification claims against any of them under Article VI, including controlling, defending, managing, settling and participating in any Third Party Claim; (ii) controlling and making any determinations with respect to the post-Closing Merger Consideration adjustments under Section 1.13; (iii) acting on behalf of such Person under the Escrow Agreement; (iv) terminating, amending or waiving on behalf of such Person any provision of any Seller Representative Document (other than the Seller Representative Engagement Agreement) (provided, that any such action, if material to the rights and obligations of the Participating Holders in the reasonable judgment of the Seller Representative, will be taken in the same manner with respect to all Participating Holders unless otherwise agreed by each Participating Holder who is subject to any disparate treatment of a potentially material and adverse nature); (v) signing on behalf of such Person any releases or other documents with respect to any dispute or remedy arising under any Seller Representative Document (other than the Seller Representative Engagement Agreement); (vi) employing and obtaining the advice of legal counsel, accountants and other professional advisors as the Seller Representative, in its reasonable discretion, deems necessary or advisable in the performance of its duties as the Seller Representative and to rely on their advice and counsel; (vii) incurring and paying reasonable Seller Representative Expenses incurred pursuant to the transactions contemplated hereby, and any other reasonable fees and expenses allocable or in any way relating to such transaction or any indemnification claim, whether incurred prior or subsequent to Closing; and (viii) otherwise enforcing the rights and obligations of any such Persons under any Seller Representative Document (other than the Seller Representative Engagement Agreement), including giving and receiving all notices and communications hereunder or thereunder on behalf of such Person. Notwithstanding the foregoing, the Seller Representative shall have no obligation to act on behalf of the Participating Holders, except as expressly provided herein, in the Escrow Agreement and in the Seller Representative Engagement Agreement, and for purposes of clarity, there are no obligations of the Seller Representative in any ancillary agreement, schedule, exhibit or the Company Disclosure Schedule other than the Seller Representative Documents. All decisions and actions by the Seller Representative, including any agreement between the Seller Representative and the Purchaser, the Purchaser or any Purchaser Indemnified Party relating to the defense or settlement of any claims for which an Indemnifying Party may be required to indemnify an Indemnified Party pursuant to Article VI, shall be binding upon each Participating Holder and their respective successors and assigns as if expressly confirmed and ratified in writing by such Participating Holder, and neither they nor any other Party shall have the right to object, dissent, protest or otherwise contest the same. The powers, immunities and rights to indemnification granted to the Seller Representative in this Section 9.14: (A) are irrevocable and shall survive the death, incompetence, bankruptcy or liquidation of any Participating Holder and shall be binding on any successor thereto and are coupled with an interest and (ii) shall survive the delivery of an assignment by any Participating Holder of the whole or any fraction of his, her or its interest in the Escrow Property. The Seller Representative hereby accepts its appointment and authorization as the Seller Representative under this Agreement.

(b) Any other Person, including the Purchaser, the Company and the Purchaser Indemnified Parties and the Purchaser Indemnifying Parties may conclusively and absolutely rely, without inquiry, upon any actions of the Seller Representative as the acts of the Participating Holders under any Seller Representative Documents (other than the Seller Representative Engagement Agreement). The Purchaser, the Company and each Indemnified Party and Indemnifying Party shall be entitled to rely conclusively on the instructions and decisions of the Seller Representative as to (i) the settlement of any indemnification claims by an Indemnified Party pursuant to Article VI, (ii) any payment instructions provided by the Seller Representative or (iii) any other actions required or permitted to be taken by the Seller Representative hereunder, and no Participating Holder nor any Indemnifying Party shall have any cause of action against the Purchaser, the Company or any other Indemnified Party for any action taken by any of them in reliance upon the instructions or decisions of the Seller Representative. The Seller Representative shall be entitled to: (i) rely upon the Allocation Schedule, (ii) rely upon any signature believed by it to be genuine, and (iii) reasonably assume that a signatory has proper authorization to sign on behalf of the applicable Participating Holder or other party. The Purchaser, the Company and the other Purchaser Indemnified Parties shall not have any Liability to any Participating Holder for any allocation or distribution among the Participating Holders of payments made at the direction of the Seller Representative. All notices or other communications required to be made or delivered to a Participating Holder under any Seller Representative Document (other than the Seller Representative Engagement Agreement) shall be made to the Seller Representative for the benefit of such Participating Holder, and any notices so made shall discharge in full all notice requirements of the other parties hereto or thereto to such Participating Holder with respect thereto. All notices or other communications required to be made or delivered by a Participating Holder shall be made by the Seller Representative (except for a notice under Section 9.14(d) of the replacement of the Seller Representative).

(c) Certain Company Stockholders have entered into an engagement agreement (the "***Seller Representative Engagement Agreement***") with the Seller Representative to provide direction to the Seller Representative in connection with its services under this Agreement, the Escrow Agreement and the Seller Representative Engagement Agreement (such Company Stockholders, including their individual representatives, collectively hereinafter referred to as the "***Advisory Group***"). The Seller Representative will act for the Participating Holders on all of the matters set forth in this Agreement in the manner the Seller Representative believes to be in the best interest of the Participating Holders. Neither the Seller Representative nor its members, managers, directors, officers, contractors, agents and employees nor any member of the Advisory Group (collectively, the "***Seller Representative Group***"), will be responsible or liable to the Participating Holders for any Losses that any Participating Holder or any Indemnifying Party may suffer by reason of the performance by the Seller Representative of the Seller Representative's duties under this Agreement or the Seller Representative Engagement Agreement, other than Losses arising from the bad faith, gross negligence or willful misconduct by the Seller Representative in the performance of its duties under this Agreement. From and after the Closing, the Participating Holders shall jointly and severally indemnify, defend and hold the Seller Representative Group harmless from and against any and all Losses (collectively, the "***Seller Representative Expenses***") reasonably incurred without gross negligence, bad faith or willful misconduct on the part of the Seller Representative (in its capacity as such) and arising out of or in connection with the acceptance or administration of the Seller Representative's duties under any Seller Representative Document, including the reasonable fees and expenses of any legal counsel retained by the Seller Representative. Such Seller Representative Expenses may be recovered first, from the Representative Reserve Fund, second, from any distribution of the Escrow Property otherwise distributable to the Participating Holders at the time of distribution, and third, directly from the Participating Holders. The Participating Holders acknowledge that the Seller Representative shall not be required to expend or risk its own funds or otherwise incur any financial liability in the exercise or performance of any of its powers, rights, duties or privileges or pursuant to this Agreement, the Escrow Agreement or the transactions contemplated hereby or thereby. Furthermore, the Seller Representative shall not be required to take any action unless the Seller Representative has been provided with funds, security or indemnities which, in its determination, are sufficient to protect the Seller Representative against the costs, expenses and liabilities which may be incurred by the Seller Representative in performing such actions. In no event shall the Seller Representative in such capacity be liable hereunder or in connection herewith for any indirect, punitive, special or consequential damages. The Seller Representative shall not be liable for any act done or omitted under any Seller Representative Document as the Seller Representative while acting in good faith and without willful misconduct or gross negligence, and any act done or omitted pursuant to the advice of counsel shall be conclusive evidence of such good faith. The Seller Representative shall be fully protected in relying upon any written notice, demand, certificate or document that it in good faith believes to be genuine, including facsimiles or copies thereof, and no Person shall have any Liability for relying on the Seller Representative in the foregoing manner. In connection with the performance of its rights and obligations hereunder, the Seller Representative shall have the right at any time and from time to time to select and engage, at the reasonable cost and expense of the Participating Holders, attorneys, accountants, investment bankers, advisors, consultants and clerical personnel and obtain such other professional and expert assistance, maintain such records and incur other reasonable out-of-pocket expenses, as the Seller Representative may reasonably deem necessary or appropriate from time to time. All of the indemnities, immunities, releases and powers granted to the Seller Representative under this Section 9.14 shall survive the Closing and continue indefinitely.

(d) If the Seller Representative shall die, become disabled, dissolve, resign or otherwise be unable or unwilling to fulfill its responsibilities as representative and agent of the Participating Holders, then the Participating Holders shall, within ten (10) days after such death, disability, dissolution, resignation or other event, appoint a successor Seller Representative (by vote or written consent of the Participating Holders holding in the aggregate a Pro Rata Share in excess of fifty percent (50%)), and promptly thereafter (but in any event within two (2) Business Days after such appointment) notify the Purchaser in writing of the identity of such successor. Any such successor so appointed shall become the "Seller Representative" for purposes of this Agreement. The immunities and rights to indemnification shall survive the resignation or removal of the Seller Representative or any member of the Advisory Group and the Closing or any termination of this Agreement and the Escrow Agreement.

(e) At the Closing, the Purchaser shall or shall cause the Company to pay to the Seller Representative, on behalf of the Participating Holders, cash to establish the Representative Reserve Fund. The Representative Reserve Fund Amount shall be held by the Seller Representative in a segregated client account and shall be used (i) for the purposes of paying directly or reimbursing the Seller Representative for any Seller Representative Expenses incurred pursuant to this Agreement, the Escrow Agreement or any Seller Representative Engagement Agreement, or (ii) as otherwise determined by the Advisory Group. The Seller Representative is not providing any investment supervision, recommendations or advice and shall have no responsibility or liability for any loss of principal of the Representative Reserve Fund other than as a result of its gross negligence or willful misconduct. The Seller Representative is not acting as a withholding agent or in any similar capacity in connection with the Representative Reserve Fund and has no tax reporting or income distribution obligations. The Participating Holders will not receive any interest on the Representative Reserve Fund and assign to the Seller Representative any such interest. Subject to Advisory Group approval, the Seller Representative may contribute funds to the Representative Reserve Fund from any consideration otherwise distributable to the Participating Holders. As soon as reasonably determined by the Seller Representative that the Representative Reserve Fund is no longer required to be withheld, the Seller Representative shall cause the remaining Representative Reserve Fund (if any) to be distributed to the Participating Holders, in accordance with their Pro Rata Shares.

9.15 Disclosure Schedules. The Purchaser Disclosure Schedule and the Company Disclosure Schedule have been prepared to correspond to and qualify specific numbered paragraphs of sections as set forth therein; *provided*, *however*, that any disclosure therein corresponding to and qualifying a specific numbered paragraph or section hereof shall be deemed to correspond to and qualify any other numbered paragraph or section to the extent the relevance of such disclosure to such other paragraph or section is reasonably apparent on the face of such disclosure without a need to review any underlying documents. Certain information set forth in the Purchaser Disclosure Schedule and the Company Disclosure Schedule is included solely for informational purposes, is not an admission of liability with respect to the matters covered by the information, and may not be required to be disclosed pursuant to this Agreement. The specification of any Dollar amount in the representations and warranties contained in this Agreement or the inclusion of any specific item in any schedule is not intended to imply that such amounts (or higher or lower amounts) are or are not material.

ARTICLE X
DEFINITIONS

10.1 Certain Definitions. For purpose of this Agreement, the following capitalized terms have the following meanings:

"Accounting Principles" means in accordance with GAAP as in effect at the date of the financial statement to which it refers or if there is no such financial statement, then as of the Closing Date, using and applying the same accounting principles, practices, procedures, policies and methods (with consistent classifications, judgments, elections, inclusions, exclusions and valuation and estimation methodologies) used and applied by the Company in the preparation of the latest annual Company Financials.

"Action" means any claim, demand, charge, action, suit, litigation, audit, settlement, complaint, stipulation, assessment or arbitration, or any inquiry, hearing, proceeding or investigation, by or before any Governmental Authority.

"Affiliate" means, with respect to any Person, any other Person directly or indirectly Controlling, Controlled by, or under common Control with such Person.

"Ancillary Documents" means each agreement, instrument or document attached hereto as an Exhibit, and the other agreements, certificates and instruments required to be executed or delivered by any of the Parties hereto in connection with or pursuant to this Agreement.

"Benefit Plans" of any Person means any and all deferred compensation, executive compensation, incentive compensation, equity purchase or other equity-based compensation plan, employment or consulting, severance or termination pay, holiday, vacation or other bonus plan or practice, hospitalization or other medical, life or other insurance, supplemental unemployment benefits, profit sharing, pension, or retirement plan, program, agreement, commitment or arrangement, and each other employee benefit plan, program, agreement or arrangement, including each "employee benefit plan" as such term is defined under Section 3(3) of ERISA, maintained or contributed to or required to be contributed to by a Person for the benefit of any employee or terminated employee of such Person, or with respect to which such Person has any Liability.

"Business Day" means any day other than a Saturday, Sunday or a legal holiday on which commercial banking institutions in New York, New York or Indianapolis, Indiana are authorized to close for business, excluding as a result of "stay at home", "shelter-in-place", "non-essential employee" or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems, including for wire transfers, of commercially banking institutions in New York, New York and Indianapolis, Indiana are generally open for use by customers on such day.

"Closing Company Cash" means, as of the Reference Time, the aggregate cash and cash equivalents of the Company on hand or in bank accounts, including deposits in transit, minus the aggregate amount of outstanding and unpaid checks issued by or on behalf of the Company as of such time. For the avoidance of doubt, no deduction shall be made to the Closing Company Cash in respect of any amounts paid by the Company to fund the Representative Reserve Fund in accordance with Section 1.10(b).

"Closing Net Debt" means, as of the Reference Time, (i) the aggregate amount of all Indebtedness of the Company, less (ii) the Closing Company Cash, in each case of clauses (i) and (ii), as determined in accordance with the Accounting Principles. For the avoidance of doubt, Closing Net Debt may be a positive or negative amount.

"Code" means the Internal Revenue Code of 1986, as amended, and any successor statute thereto, as amended. Reference to a specific section of the Code shall include such section and any valid treasury regulation promulgated thereunder.

"Company Charter" means the Certificate of Incorporation of the Company, as amended and effective under the DGCL, prior to the Effective Time.

"Company Common Stock" means the common stock, par value $0.001 per share, of the Company.

"Company Confidential Information" means all confidential, nonpublic or proprietary documents and information concerning the Company or any of its Representatives, furnished in connection with this Agreement or the transactions contemplated hereby; *provided*, *however*, that Company Confidential Information shall not include any information which, (i) at the time of disclosure by the Purchaser or its Representatives, is generally available publicly and was not disclosed in breach of this Agreement or (ii) at the time of the disclosure by the Company or its Representatives to the Purchaser or its Representatives was previously known by such receiving party without violation of Law or any confidentiality obligation of any Person

"Company Equity Plan" means the Sexton Biotechnologies, Inc. 2019 Equity Incentive Plan.

"Company IP" means the Company Owned IP and the Intellectual Property in-licensed by the Company.

"Company Option" means an option to purchase Company Stock that was granted pursuant to the Company Equity Plan.

"Company Owned IP" means the Intellectual Property owned by the Company.

"Company Preferred Stock" means the Preferred Stock, par value $0.001 per share of the Company.

"Company Securities" means, collectively, the Company Stock and the Company Options.

"Company Stock" means any shares of the Company Common Stock and the Company Preferred Stock.

"Company Stockholders" means, collectively, the holders of Company Stock, other than the Purchaser.

"Consent" means any consent, approval, waiver, authorization or Permit of, or notice to or declaration or filing with any Governmental Authority or any other Person.

"Contracts" means all binding contracts, agreements, arrangements, bonds, notes, indentures, mortgages, debt instruments, purchase orders, licenses (and all other contracts, agreements or arrangements concerning Intellectual Property), franchises, leases and other instruments or obligations of any kind, written or oral (including any amendments and other modifications thereto).

"Control" of a Person means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract, or otherwise. "Controlled", "Controlling" and "under common Control with" have correlative meanings. Without limiting the foregoing a Person (the "***Controlled Person***") shall be deemed Controlled by (a) any other Person (i) owning beneficially, as meant in Rule 13d-3 under the Exchange Act, securities entitling such Person to cast ten percent (10%) or more of the votes for election of directors or equivalent governing authority of the Controlled Person or (ii) entitled to be allocated or receive ten percent (10%) or more of the profits, losses, or distributions of the Controlled Person; (b) an officer, director, general partner, partner (other than a limited partner), manager, or member (other than a member having no management authority that is not a Person described in clause (a) above) of the Controlled Person; or (c) a spouse, parent, lineal descendant, sibling, aunt, uncle, niece, nephew, mother-in-law, father-in-law, sister-in-law, or brother-in-law of an Affiliate of the Controlled Person or a trust for the benefit of an Affiliate of the Controlled Person or of which an Affiliate of the Controlled Person is a trustee.

"Copyrights" means any works of authorship, mask works and all copyrights therein, including all renewals and extensions, copyright registrations and applications for registration and renewal, and non-registered copyrights.

"Environmental Law" means any Law regarding the protection, preservation or restoration of the environment and natural resources (including air, water vapor, surface water, groundwater, drinking water supply, surface land, subsurface land, plant and animal life or any other natural resource), or the exposure to, or the use, storage, recycling, treatment, generation, transportation, processing, handling, labeling, production, release or disposal of Hazardous Materials, including the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC. Section 9601 et. seq., the Resource Conservation and Recovery Act, 42 USC. Section 6901 et. seq., the Toxic Substances Control Act, 15 USC. Section 2601 et. seq., the Federal Water Pollution Control Act, 33 USC. Section 1151 et seq., the Clean Air Act, 42 USC. Section 7401 et seq., the Federal Insecticide, Fungicide and Rodenticide Act, 7 USC. Section 111 et. seq., Occupational Safety and Health Act, 29 USC. Section 651 et. seq. (to the extent it relates to exposure to Hazardous Substances), the Asbestos Hazard Emergency Response Act, 15 USC. Section 2601 et. seq., the Safe Drinking Water Act, 42 USC. Section 300f et. seq., the Oil Pollution Act of 1990 and analogous state acts.

"Environmental Liabilities" means, in respect of any Person, all Losses incurred as a result of any claim or demand by any other Person or in response to any violation of Environmental Law, whether known or unknown, accrued or contingent, whether based in contract, tort, implied or express warranty, strict liability, criminal or civil statute, to the extent based upon, related to, or arising under or pursuant to any Environmental Law, Environmental Permit, Order, or Contract with any Governmental Authority or other Person, that relates to any environmental, health or safety condition, violation of Environmental Law, or a Release of Hazardous Materials.

"ERISA" means the U.S. Employee Retirement Income Security Act of 1974, as amended.

"Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended.

"Fraud Claim" means any claim based in whole or in part upon actual fraud, an element of which is intent, in the making of any representation or warranty set forth in this Agreement.

"GAAP" means generally accepted accounting principles as in effect in the United States of America.

"Governmental Authority" means any federal, state, local, foreign or other governmental, quasi-governmental or administrative body, instrumentality, department or agency or any court, tribunal, administrative hearing body, arbitration panel, commission, or other similar dispute-resolving panel or body.

"Hazardous Material" means any waste, gas, liquid or other substance or material that is defined, listed or designated as a "hazardous substance", "pollutant", "contaminant", "hazardous waste", "regulated substance", "hazardous chemical", or "toxic chemical" (or by any similar term) under any Environmental Law, or any other material regulated under any Environmental Law, including petroleum and its by-products, asbestos, polychlorinated biphenyls, radon, mold, and urea formaldehyde insulation.

"Indebtedness" of any Person means, without duplication, (a) all indebtedness of such Person for borrowed money (including the outstanding principal and accrued but unpaid interest), (b) all obligations for the deferred purchase price of property or services (other than trade payables incurred in the ordinary course of business), (c) any other indebtedness of such Person that is evidenced by a note, bond, debenture, credit agreement or similar instrument, (d) all obligations of such Person under leases required to be classified as capital leases in accordance with GAAP, (e) all obligations of such Person for the reimbursement of any obligor on any line or letter of credit, banker's acceptance, guarantee or similar credit transaction, in each case, to the extent such has been drawn or claimed against, (f) the net obligations pursuant to all interest rate and currency swaps, caps, collars and similar agreements or hedging devices under which payments are obligated to be made by such Person, whether periodically or upon the happening of a contingency, (g) all obligations secured by an Lien on any property of such Person (other than any Permitted Lien), (h) any premiums, prepayment fees or other penalties, fees, costs or expenses associated with payment of any Indebtedness of such Person and (i) all obligation described in clauses (a) through (h) above of any other Person which is directly or indirectly guaranteed by such Person or which such Person has agreed (contingently or otherwise) to purchase or otherwise acquire or in respect of which it has otherwise assured a creditor against loss.

"Intellectual Property" means all of the following as they exist in any jurisdiction throughout the world: Patents, Trademarks, Copyrights, trade secrets, Internet Assets, Software, and all licenses, sublicenses and other agreements or permissions related to the preceding property.

"Internet Assets" means any and all domain name registrations, web sites and web addresses and related rights related thereto, and applications for registration therefor.

"IRS" means the U.S. Internal Revenue Service (or any successor Governmental Authority).

"Knowledge" means, with respect to (i) the Company, the actual knowledge of the executive officers of the Company, after reasonable inquiry or (ii) any other Party, (A) if an entity, the actual knowledge of its directors and executive officers, after reasonable inquiry, or (B) if a natural person, the actual knowledge of such Party after reasonable inquiry.

"Law" means any federal, state, local, municipal, foreign or other law, statute, legislation, principle of common law, ordinance, code, edict, treaty, rule, regulation, or Order that is or has been issued, enacted, adopted, passed, approved, promulgated, made, implemented or otherwise put into effect by or under the authority of any Governmental Authority.

"Liabilities" means any and all liabilities, Indebtedness, Actions or obligations of any nature (whether absolute, accrued, contingent or otherwise, whether known or unknown, whether direct or indirect, whether matured or unmatured, whether due or to become due and whether or not required to be recorded or reflected on a balance sheet under GAAP or other applicable accounting standards), including Tax liabilities.

"Lien" means any mortgage, pledge, security interest, attachment, right of first refusal, option, proxy, voting trust, encumbrance, lien or charge of any kind (including any conditional sale or other title retention agreement or lease in the nature thereof), restriction (whether on voting, sale, transfer, disposition or otherwise), any subordination arrangement in favor of another Person, or any filing or agreement to file a financing statement as debtor under the Uniform Commercial Code or any similar Law.

"Material Adverse Effect" means, with respect to any specified Person, any fact, event, occurrence, change or effect that has had, or would reasonably be expected to have, individually or in the aggregate, a material adverse effect upon (a) the business, assets, Liabilities, results of operations, or condition (financial or otherwise) of such Person and its Subsidiaries, taken as a whole, or (b) the ability of such Person or any of its Subsidiaries on a timely basis to consummate the transactions contemplated by this Agreement; *provided, however*, that for purposes of clause (a) above, any changes or effects directly or indirectly attributable to, resulting from, relating to or arising out of the following (by themselves or when aggregated with any other, changes or effects) shall not be deemed to be, constitute, or be taken into account when determining whether there has or may, would or could have occurred a Material Adverse Effect: (i) general changes in the financial or securities markets or general economic or political conditions in the country or region in which such Person or any of its Subsidiaries do business; (ii) changes, conditions or effects that generally affect the industries in which such Person or any of its Subsidiaries principally operate; (iii) changes in GAAP or other applicable accounting principles or mandatory changes in the regulatory accounting requirements applicable to any industry in which such Person and its Subsidiaries principally operate; (iv) conditions caused by acts of God, epidemic, pandemic, terrorism, war (whether or not declared) or natural disaster; (v) changes in applicable Law; (vi) the public announcement of this Agreement or the pendency of the transactions contemplated hereby; and (vi) any failure in and of itself by such Person and its Subsidiaries to meet any internal or published budgets, projections, forecasts or predictions of financial performance for any period (provided that the underlying cause of any such failure may be considered in determining whether a Material Adverse Effect has occurred or would reasonably be expected to occur to the extent not excluded by another exception herein); *provided further, however*, that any event, occurrence, fact, condition, or change referred to in clauses (i) - (v) immediately above shall be taken into account in determining whether a Material Adverse Effect has occurred or could reasonably be expected to occur to the extent that such event, occurrence, fact, condition, or change has a disproportionate effect on such Person or any of its Subsidiaries compared to other participants in the industries in which such Person or any of its Subsidiaries primarily conducts its businesses.

"Merger Sub Common Stock" means the shares of common stock, par value $0.001 per share, of Merger Sub.

"Nasdaq" means the Nasdaq Capital Market.

"Net Merger Consideration" means the Merger Consideration less any amounts that would be payable in respect of the Purchaser Shares were they not cancelled and instead were entitled to Preferred Stock Merger Consideration.

"Net Working Capital" means, as of the Reference Time, (i) all current assets of the Company (excluding Closing Company Cash), minus (ii) all current liabilities of the Company (excluding Indebtedness and unpaid Transaction Expenses), as determined in accordance with the Accounting Principles and the example calculation set forth on Exhibit D.

"Order" means any order, decree, ruling, judgment, injunction, writ, determination, binding decision, verdict or judicial award made, entered, rendered, or otherwise put into effect by or under the authority of any Governmental Authority.

"Organizational Documents" means, with respect to any Person that is an entity, its certificate of incorporation or formation, bylaws, operating agreement, memorandum and articles of association or similar organizational documents, in each case, as amended.

"Participating Holder" means a holder of Participating Shares.

"Participating Shares" means (a) shares of Company Stock that are outstanding immediately prior to the Effective Time other than Purchaser Shares and Dissenting Shares and (b) shares of Company Common Stock underlying Company Options that are outstanding immediately prior to the Effective Time.

"Patents" means any patents, patent applications and the inventions, designs and improvements described and claimed therein, patentable inventions, and other patent rights (including any divisionals, provisionals, continuations, continuations-in-part, substitutions, or reissues thereof, whether or not patents are issued on any such applications and whether or not any such applications are amended, modified, withdrawn, or refiled).

"Per Share Closing Merger Consideration" means the amount equal to the quotient of (a) (i) the Merger Consideration, plus (ii) the product of (A) the exercise price of each Company Option multiplied by (B) the number of shares of Company Common Stock underlying each Company Option immediately prior to the Effective Time (rounded up to the nearest whole cent), minus (iii) the aggregate Per Share Preferred Return in respect of all outstanding shares of Company Preferred Stock (including the Purchaser Shares), minus (iv) the Escrow Amount, minus (v) the Representative Reserve Fund Amount, divided by (b) the fully diluted number, as of immediately prior to the Effective Time, of outstanding shares of Company Common Stock, outstanding shares of Company Preferred Stock and Company Common Stock underlying outstanding Company Options (including the Purchaser Shares).

"Permits" means all federal, state, local or foreign or other permits, grants, consents, approvals, authorizations, exemptions, licenses, franchises, permissions, clearances, confirmations, endorsements, certifications, designations, ratings, registrations, qualifications or orders of any Governmental Authority.

"Permitted Liens" means (a) Liens for Taxes or assessments and similar governmental charges or levies, which either are (i) not delinquent or (ii) being contested in good faith and by appropriate proceedings, and adequate reserves have been established with respect thereto, (b) other Liens imposed by operation of Law arising in the ordinary course of business for amounts which are not due and payable, (c) Liens incurred or deposits made in the ordinary course of business in connection with social security, (d) Liens on goods in transit incurred pursuant to documentary letters of credit, in each case arising in the ordinary course of business, (e) Liens on real property that do not materially impair the use of the real property used by the Company as currently used by the Company, or (f) Liens arising under this Agreement or any Ancillary Document.

"Person" means an individual, corporation, partnership (including a general partnership, limited partnership or limited liability partnership), limited liability company, association, trust or other entity or organization, including a government, domestic or foreign, or political subdivision thereof, or an agency or instrumentality thereof.

"Personal Property" means any machinery, equipment, tools, vehicles, furniture, office equipment, plant, parts and other tangible personal property.

"Post-Closing Payment" means each release from the Representative Reserve Fund, any payment made to the Participating Holders pursuant to Section 1.13 and each release of any Escrow Property.

"Privileged Communications" means, at any time, any and all privileged communications in whatever form, that shall have occurred between or among any of the Company Stockholders, holders of Company Options, Company or any of their Representatives, on the one hand, and any legal counsel representing the Company Stockholders, holders of Company Options or the Company, or any of their respective Representatives, on the other hand, relating to or in connection with this Agreement, the negotiations leading to this Agreement, any of the transactions contemplated herein or any other potential sale or transfer of control transaction involving the Company.

"Pro Rata Share" means, when used in reference to a Participating Holder, a fraction expressed as a percentage equal to (i) the number of Participating Shares held by such Participating Holder, divided by (ii) the aggregate number of Participating Shares held by all Participating Holders.

"Purchaser Common Stock" means the shares of common stock, par value $0.001 per share, of the Purchaser.

"Purchaser Stock Price" means a price per share equal to the VWAP of Purchaser Common Stock listed by the principal exchange or securities market on which shares of Purchaser Common Stock are then traded (or any successor exchange or quotation system on which such shares are listed or quoted) for the ten (10) Trading Day period ending on the Trading Day immediately prior to the date of determination, which in the case of determining the Merger Consideration Shares and the Escrow Amount shall be the ten (10) Trading Day period ending immediately prior to the execution date of this Agreement (and, for the avoidance of doubt, not the Closing Date). Any determinations of the Purchaser Stock Price shall be appropriately adjusted for any stock dividend, stock split, stock combination, recapitalization or other similar transaction.

"Purchaser Confidential Information" means all confidential or proprietary documents and information concerning the Purchaser or any of its Representatives; *provided*, *however*, that Purchaser Confidential Information shall not include any information which, (i) at the time of disclosure by the Company, the Seller Representative or any of their respective Representatives, is generally available publicly and was not disclosed in breach of this Agreement or (ii) at the time of the disclosure by the Purchaser or its Representatives to the Company, the Seller Representative or any of their respective Representatives, was previously known by such receiving party without violation of Law or any confidentiality obligation by the Person receiving such Purchaser Confidential Information. For the avoidance of doubt, from and after the Closing, Purchaser Confidential Information will include the confidential or proprietary information of the Surviving Corporation.

"Reference Time" means 11:59 p.m. Eastern Standard Time on the Closing Date (but without giving effect to the transactions contemplated by this Agreement, including any payments by Purchaser hereunder to occur at the Closing, but treating any obligations in respect of Indebtedness, Transaction Expenses or other liabilities that are contingent upon the consummation of the Closing as currently due and owing without contingency as of the Reference Time).

"Release" means any release, spill, emission, leaking, pumping, injection, deposit, disposal, discharge, dispersal, or leaching into the indoor or outdoor environment, or into or out of any property.

"Remedial Action" means all actions to (i) clean up, remove or treat any Hazardous Material, (ii) prevent the Release of any Hazardous Material so it does not endanger or threaten to endanger public health or welfare or the indoor or outdoor environment, (iii) perform pre-remedial studies and investigations or post-remedial monitoring and care, or (iv) correct a condition of noncompliance with Environmental Laws.

"Representatives" means, as to any Person, such Person's Affiliates and the respective managers, directors, officers, employees, independent contractors, consultants, advisors (including financial advisors, counsel and accountants), agents and other legal representatives of such Person or its Affiliates.

"SEC" means the U.S. Securities and Exchange Commission (or any successor Governmental Authority).

"Securities Act" means the Securities Act of 1933, as amended.

"Software" means any computer software programs, including all source code, object code, and documentation related thereto and all software modules, tools and databases.

"SOX" means the U.S. Sarbanes-Oxley Act of 2002, as amended.

"Subsidiary" means, with respect to any Person, any corporation, partnership, association or other business entity of which (i) if a corporation, a majority of the total voting power of shares of stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees 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, or (ii) if a partnership, association or other business entity, a majority of the partnership or other similar ownership interests thereof is at the time owned or controlled, directly or indirectly, by any Person or one or more Subsidiaries of that Person or a combination thereof. For purposes hereof, a Person or Persons will be deemed to have a majority ownership interest in a partnership, association or other business entity if such Person or Persons will be allocated a majority of partnership, association or other business entity gains or losses or will be or control the managing director, managing member, general partner or other managing Person of such partnership, association or other business entity. A Subsidiary of a Person will also include any variable interest entity which is consolidated with such Person under applicable accounting rules.

"Target Net Working Capital Amount" means an amount equal to $1,982,706.

"Tax Return" means any return, declaration, report, claim for refund, information return or other documents (including any related or supporting schedules, statements or information) filed or required to be filed in connection with the determination, assessment or collection of any Taxes or the administration of any Laws or administrative requirements relating to any Taxes.

"Taxes" means (a) all direct or indirect federal, state, local, foreign and other net income, gross income, gross receipts, sales, use, value-added, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, social security and related contributions due in relation to the payment of compensation to employees, excise, severance, stamp, occupation, premium, property, windfall profits, alternative minimum, estimated, customs, duties or other taxes, fees, assessments or charges of any kind whatsoever, together with any interest and any penalties, additions to tax or additional amounts with respect thereto, (b) any Liability for payment of amounts described in clause (a) whether as a result of being a member of an affiliated, consolidated, combined or unitary group for any period or otherwise through operation of law and (c) any Liability for the payment of amounts described in clauses (a) or (b) as a result of any tax sharing, tax group, tax indemnity or tax allocation agreement with, or any other express or implied agreement to indemnify, any other Person.

"Trademarks" means any trademarks, service marks, trade dress, trade names, brand names, internet domain names, designs, logos, or corporate names (including, in each case, the goodwill associated therewith), whether registered or unregistered, and all registrations and applications for registration and renewal thereof.

"Trading Day" means any day on which shares of Purchaser Common Stock are actually traded on the principal securities exchange or securities market on which the Purchaser Common Stock are then traded.

"Transaction Expenses" means all fees and expenses of the Company incurred or payable as of the Closing and not paid prior to the Closing (i) in connection with the consummation of the transactions contemplated hereby, including any amounts payable to professionals (including investment bankers, brokers, finders, attorneys, accountants and other consultants and advisors) retained by or on behalf of the Company, (ii) any change in control bonus, transaction bonus, retention bonus, termination or severance payment, in any case, to be made to any current or former employee, independent contractor, director or officer of the Company at or after the Closing pursuant to any agreement to which the Company is a party prior to the Closing which become payable as a result of the execution of this Agreement or the consummation of the transactions contemplated hereby and (iii) any sales, use, real property transfer, stamp, stock transfer or other similar transfer Taxes imposed on Purchaser, Merger Sub or the Company in connection with the Merger or the other transactions contemplated by this Agreement.

"VWAP" means, as of any date, the dollar volume-weighted average price for Purchaser Common Stock on the principal securities exchange or securities market on which such shares are then traded during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg through its "HP" function (set to weighted average) or, if the foregoing does not apply, the dollar volume-weighted average price of Purchaser Common Stock in the over-the-counter market on the electronic bulletin board for Purchaser Common Stock during the period beginning at 9:30:01 a.m., New York time, and ending at 4:00:00 p.m., New York time, as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for Purchaser Common Stock as reported by NASDAQ; provided, that if the VWAP cannot be calculated for Purchaser Common Stock on such date on any of the foregoing bases, the VWAP of such security on such date shall be the fair market value as reasonably determined in good faith by Purchaser.

10.2 Section References. The following capitalized terms, as used in this Agreement, have the respective meanings given to them in the Section as set forth below adjacent to such terms:

Term	**Section**
Accounts Receivable	4.7(e)

Term	Section
Acquisition Proposal	5.3(a)
Adjustment Amount	1.13(d)
Advisory Group	9.14(c)
Agreement	Preamble
Allocation Schedule	1.12
Alternative Transaction	5.3(a)
Basket	6.4(a)
Certificate of Merger	1.2
CFO	1.13(a)
Claim Notice	6.5(b)
Closing	2.1
Closing Date	2.1
Closing Filing	5.11(b)
Closing Option Merger Consideration	1.9(e)
Closing Statement	1.13(a)
Closing Press Release	5.11(b)
Common Stock Merger Consideration	1.9(c)
Company	Preamble
Company Benefit Plan	4.19(a)
Company Certificates	1.10(a)
Company Disclosure Schedules	Article IV
Company Financials	4.7(a)
Company Indemnified Party	6.3
Company Indemnifying Party	6.2
Company IP	4.13(d)
Company IP Licenses	4.13(a)

Term	Section
Company Material Contracts	4.12(a)
Company Permits	4.10
Company Personal Property Leases	4.16
Company Real Property Leases	4.15
Company Registered IP	4.13(a)
DGCL	Recitals
Dissenting Shares	1.15
Dissenting Stockholder	1.15
Effective Time	1.2
Enforceability Exceptions	3.2
Environmental Permits	4.20(a)
Escrow Account	1.16(a)
Escrow Agent	1.16(a)
Escrow Agreement	1.16(a)
Escrow Amount	1.16(a)
Escrow Property	1.16(a)
Escrow Shares	1.16(a)
Estimated Closing Statement	1.12
Exchange Agent	1.10(a)
Expenses	8.3
Expiration Date	1.16(b)
Federal Securities Laws	5.4
Fundamental Representations	6.1

Term	Section
Indemnified Party	6.2
Indemnifying Party	6.2
Independent Expert	1.13(b)
Independent Expert Notice Date	1.13(b)
Interim Balance Sheet Date	4.7(a)
Interim Period	5.1(a)
Letter of Transmittal	1.10(a)
Loss	6.2
Lost Certificate Affidavit	Section 1.01(e)
Merger	Recitals
Merger Consideration	1.8
Merger Consideration Shares	1.8
Merger Sub	Preamble
Non-Competition Agreement	Recitals
Objection Statement	1.13(b)
OFAC	4.24(c)
Off-the-Shelf Software	4.13(a)
Option Merger Consideration	1.9(e)
Outbound IP License	4.13(c)
Outside Date	8.1(b)
Party(ies)	Preamble
Pending Claims	1.16(b)
Per Share Preferred Return	1.9(b)
Preferred Stock Merger Consideration	1.9(b)
Public Certifications	3.6(a)

Term	**Section**
Purchaser	Preamble
Purchaser Disclosure Schedules	Article III
Purchaser Financials	3.6(b)
Purchaser Indemnified Party	6.2
Purchaser Indemnifying Party	6.3
Purchaser Plans	5.14(c)
Purchaser Shares	1.9(a)
Registration Statement	5.9
Related Person	4.21
Representative Reserve Fund	Section 1.01(b)
Representative Reserve Fund Amount	Section 1.01(b)
Required Company Stockholder Approval	7.1(a)
Restricted Share	1.9(f)
Reviewed Company Financials	4.7(a)
SEC Reports	3.6(a)
Section 409A Plan	4.19(j)
Seller Representative	Preamble
Seller Representative Documents	9.14(a)
Seller Representative Engagement Agreement	9.14(c)
Seller Representative Expenses	9.14(c)
Seller Representative Group	9.14(c)
Signing Filing	5.11(b)
Signing Press Release	5.11(b)
Specified Courts	9.5
Surviving Corporation	1.1
Third Party Claim	6.5(c)
Top Customers	4.22(b)
Top Suppliers	4.22(b)
Transmittal Documents	Section 1.01(b)

{REMAINDER OF PAGE INTENTIONALLY LEFT BLANK; SIGNATURE PAGE FOLLOWS}

IN WITNESS WHEREOF, each Party hereto has caused this Agreement and Plan of Merger to be signed and delivered as of the date first written above.

The Purchaser:

BIOLIFE SOLUTIONS, INC.

By: /s/ Michael Rice
Name: Michael Rice
Title: CEO

Merger Sub:

BLFS MERGER SUB, INC.

By: /s/ Michael Rice
Name: Michael Rice
Title: CEO

The Company:

SEXTON BIOTECHNOLOGIES, INC.

By: /s/ Sean Werner
Name: Sean Werner
Title: President

The Seller Representative:

FORTIS ADVISORS LLC, solely in the capacity as the Seller Representative hereunder

By: /s/ Ryan Simkin
Name: Ryan Simkin
Title: Managing Director

[Signature Page to Merger Agreement]

Exhibit 10.15

SIXTH AMENDMENT TO LEASE

THIS SIXTH AMENDMENT TO LEASE (the "Amendment") dated this 3rd of March. 2017 amends that certain Lease dated July 24, 2007 and amended on November 4, 2008, March 2, 2012, June 15, 2012, November 26. 2012 and August 19, 2014 by and between BIOLIFE SOLUTIONS, INC. ("Tenant"') and MONTE VILLA FARMS LLC ("'Landlord") (the "Lease"') in the project known as "Monte Villa Farms" located in Bothell, Washington.

RECITALS

WHEREAS, Tenant and Landlord are desirous of reflecting the Lease Commencement Memorandum in an amendment on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the above recitals and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by each of the parties hereto, Landlord and Tenant agree to amend the Lease as follows:

I. Exhibit B.5 shall be replaced by Exhibit B. 6.

Other than set forth above, all terms and conditions of the lease remain in full force and effect. The parties hereby reaffirm and confirm such terms and conditions. This agreement may be executed in several counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument. Facsimile copies will be considered originals.

TENANT

BIOLIFE SOLUTIONS, INC.
a Delaware corporation

By: /s/ Roderick de Greef

Name: Roderick de Greef
Its: CFO

LANDLORD

MONTE VILLA FARMS LLC,
a Washington limited liability company

By Bothell Land Co., a Washington corporation

By: /s/ Robert E. Hibbs

Name: Robert E. Hibbs
Its: President

EXHIBITB. 6

BASIC ANNUAL RENT

25,864 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum/NNN	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Aug-14	31-Jan-15	$ 24.59	$ 635,995.76	$ 52,999.65
1-Feb-15	31-Jul-15	$ 22.28	$ 576,249.92	$ 48,020.83
1-Aug-15	31-Jul-16	$ 22.72	$ 587,630.08	$ 48,969.17
1-Aug-16	31-Jul-17	$ 23.18	$ 599,527.52	$ 49,960.63
1-Aug-17	31-Jul-18	$ 23.64	$ 611,424.96	$ 50,952.08
1-Aug-18	31-Jul-19	$ 24.11	$ 623,581.04	$ 51,965.09
1-Aug-19	31-Jul-20	$ 24.60	$ 636,254.40	$ 53,021.20
1-Aug-20	31-Jul-21	$ 25.09	$ 648,927.76	$ 54,077.31

4,493 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum/NNN	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
26-Dec-14	31-Dec-14	$ 18.00	$ 80,874.00	$ 6,739.50
1-Jan-15	31-Dec-15	$ 18.00	$ 80,874.00	$ 6,739.50
1-Jan-16	31-Dec-16	$ 18.45	$ 82,895.85	$ 6,907.99
1-Jan-17	31-Dec-17	$ 18.91	$ 84,968.25	$ 7,080.69
1-Jan-18	31-Dec-18	$ 19.38	$ 87,092.45	$ 7,257.70
1-Jan-19	31-Dec-19	$ 19.87	$ 89,269.76	$ 7,439.15
1-Jan-20	31-Dec-20	$ 20.37	$ 91,501.51	$ 7,625.13
1-Jan-21	31-Jul-21	$ 20.87	$ 93,789.05	$ 7,815.75

* In months 1, 6, 58 and 60 no base rent will be due

Landlord has the right to create up to 50,000 sq ft of additional space on the Property (the "Additional Space"). The creation of the Additional Space will reduce the Operating Expenses for the Premises (the '·Additional Space Expense Reduction"). Tenant agrees that should Landlord create the Additional Space then the Rent shall be increased (effective as of the date of the inclusion of the Additional Space) by the amount of any Additional Space Expense Reduction. Such a reduction shall be computed (within six months of the inclusion of Additional Space) by subtracting (i) the Tenant's Proportionate Share of the Operating Expenses and Taxes computed after the inclusion of the Additional Space in the square footage calculations from (ii) Tenant's Proportionate Share of the Operating Expenses and Taxes computed before the inclusion of the Additional Space in the square footage calculations. Landlord shall provide Tenant with such computations for Tenant's review.

Exhibit 10.16

SEVENTH AMENDMENT TO LEASE

THIS SEVENTH AMENDMENT TO LEASE (the "Amendment") dated this 4th of December, 2018 amends that certain Lease dated July 24, 2007 as amended on November 4, 2008, March 2, 2012, June 15, 2012, November 26, 2012, August 19, 2014 and March 3, 2017 by and between BIOLIFE SOLUTIONS, INC. ("Tenant") and MONTE VILLA FARMS LLC ("Landlord") (the "Lease") in the project known as "Monte Villa Farms" located in Bothell, Washington.

RECITALS

WHEREAS, Tenant Is desirous of leasing additional square footage, and Landlord is desirous of leasing additional square footage to Tenant on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the above recitals and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by each of the parties hereto, Landlord and Tenant agree to amend the Lease as follows:

1. Add Whereas paragraph:
   "WHEREAS, Tenant is desirous of leasing approximately 1,503 rentable square feet in Floor 2 ("the Floor") of the Production Building (3301) ("Cold Room Premises"), and Landlord is desirous of leasing additional space to Tenant on the terms and conditions set forth herein.

2. Paragraph 1.1(c) shall be added to read as follows:
   "The Commencement Date for the Cold Room Premises shall be January 1, 2019."

3. Paragraph 1.2, line 4, add "C.7" after "...C.6".

4. Paragraph 1.2 add to the end of the paragraph:
   "1,503 RSF in the Cold Room Premises (Exhibit C.7)"

5. The Office Expansion Premises, the Clean Room Premises, the Production Expansion Premises, the Cleanroom Support Premises, the Second Office Expansion Premises, and the Cold Room Premises shall forthwith be collectively known as the "Demised Premises". The revised total rentable square footage of leased space shall be measured according to BOMA standard.

6. Paragraph 2.6 (a) line 3, delete "30,357" and insert "31,860".

7. Paragraph 2.6(a) line 5, delete "10.94%" and insert "11.48%".

8. Tenant will be allowed early access from the date of signing this amendment through December 31, 2018 at no charge (for the space added to the Lease under this expansion) for the purpose of installing cabling, furniture or other tenant fixtures. Tenant shall not be required to pay for utility or elevator charges during its early access period. Tenant shall also be allowed to temporarily install refrigerators in an area mutually agreed upon by Landlord and Tenant on the Floor during this time.

9. Exhibit 8.5 shall be replaced by Exhibit B. 6.

10. Landlord shall secure the freight elevator to the floor with a card reader. Landlord shall also offer $20,000 to Tenant if it expands into a larger space on the Floor.

Other than set forth above, all terms and conditions of the lease remain in full force and effect. The parties hereby reaffirm and confirm such terms and conditions. This agreement may be executed in several counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument. Facsimile copies will be considered originals.

TENANT

BIOLIFE SOLUTIONS, INC.
a Delaware corporation

By: /s/ Roderick de Greef

Name: Roderick de Greef
Its: CFO

LANDLORD

MONTE VILLA FARMS LLC,
a Washington limited liability company

By Bothell Land Co. a Washington corporation

By: /s/ Robert E. Hibbs

Name: Robert E. Hibbs
Its: President

EXHIBIT B. 6

BASIC ANNUAL RENT

25,864 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Aug-18	31-Jul-19	$ 24.11	$ 623,581.04	$ 51,965.09
1-Aug-19	31-Jul-20	$ 24.60	$ 636,254.40	$ 53,021.20
1-Aug-20	31-Jul-21	$ 25.09	$ 648,927.76	$ 54,077.31

4,493 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Jan-18	31-Dec-18	$ 19.38	$ 87,092.45	$ 7,257.70
1-Jan-19	31-Dec-19	$ 19.87	$ 89,269.76	$ 7,439.15
1-Jan-20	31-Dec-20	$ 20.37	$ 91,501.51	$ 7,625.13
1-Jan-21	31-Jul-21	$ 20.87	$ 93,789.05	$ 7,815.75

*In months 1, 6, 58 and 60 no base rent will be due

1,503 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Jan-19	31-Jul-19	$ 20.00	$ 30,060.00	$ 2,505.00
1-Aug-19	31-Jul-20	$ 20.50	$ 30,811.50	$ 2,567.63
1-Aug-20	31-Jul-21	$ 21.01	$ 31,578.03	$ 2,631.50

Landlord has the right to create up to 50,000 SF of additional space on the Property (the "Additional Space"). The creation of the Additional Space will reduce the Operating Expenses for the Premises (the "Additional Space Expense Reduction"). Tenant agrees that should Landlord create the Additional Space then the Rent shall be increased (effective as of the date of the inclusion of the Additional Space) by the amount of any Additional Space Expense Reduction. Such a reduction shall be computed (within six months of the inclusion of Additional Space) by subtracting (i) the Tenant's Proportionate Share of the Operating Expenses and Taxes computed after the inclusion of the Additional Space in the square footage calculations from (ii) Tenant's Proportionate Share of the Operating Expenses and Taxes computed before the inclusion of the Additional Space in the square footage calculations. Landlord shall provide Tenant with such computations for Tenant's review.

EXHIBIT C.7

COLD ROOM PREMISES

Exhibit 10.17

EIGHTH AMENDMENT TO LEASE

THIS EIGHTH AMENDMENT TO LEASE (the "Amendment") dated this 1st of November 2019 amends that certain Lease dated July 24, 2007 as amended on November 4, 2008, March 2, 2012, June 15, 2012, November 26, 2012, August 19, 2014, March 3, 2017 and December 4, 2018 by and between BIOLIFE SOLUTIONS, INC. ("Tenant") and MONTE VILLA FARMS LLC ("Landlord") (the "Lease") in the project known as "Monte Villa Farms" located in Bothell, Washington.

RECITALS

WHEREAS, Tenant is desirous of leasing additional square footage, and Landlord is desirous of leasing additional square footage to Tenant on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the above recitals and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by each of the parties hereto, Landlord and Tenant agree to amend the Lease as follows:

1. Add Whereas paragraph:
   "WHEREAS, Tenant is desirous of leasing approximately 246 rentable square feet in Floor 3 ("the Floor") of the Administration Building (3303) ("Server Expansion Premises"), and Landlord is desirous of leasing additional space to Tenant on the terms and conditions set forth herein.

2. Paragraph 1.1(d) shall be added to read as follows:
   "The Commencement Date for the Server Expansion Premises shall be November 1, 2019.

3. Paragraph 1.1(e) shall be added to read as follows:
   "The Expiration Date for the Demised Premises shall be July 31, 2021."

4. Paragraph 1.2, line 4, add "C.8" after "... C.7".

5. Paragraph 1.2 add to the end of the paragraph:
   "246 RSF in the Server Expansion Premises (Exhibit C.8)"

6. The Office Expansion Premises, the Clean Room Premises, the Production Expansion Premises, the Cleanroom Support Premises, the Second Office Expansion Premises, the Cold Room Premises and the Server Expansion Premises shall forthwith be collectively known as the "Demised Premises". The revised total rentable square footage of leased space shall be measured according to BOMA standard.

7. Paragraph 2.6 (a) line 3, delete "31,860" and insert "32,106".

8. Paragraph 2.6(a) line 5, delete "11.48%" and insert "11.57%".

9. Exhibit 8.6 shall be replaced by Exhibit B. 7.

Other than set forth above, all terms and conditions of the lease remain in full force and effect. The parties hereby reaffirm and confirm such terms and conditions. This agreement may be executed in several counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument. Facsimile copies will be considered originals.

TENANT

BIOLIFE SOLUTIONS, INC.
a Delaware corporation

By: /s/ Roderick de Greef

Name: Roderick de Greef
Its: CFO

LANDLORD

MONTE VILLA FARMS LLC,
a Washington limited liability company

By Bothell Land Co. a Washington corporation

By: /s/ Robert E. Hibbs

Name: Robert E. Hibbs
Its: President

EXHIBIT B.7

BASIC ANNUAL RENT

25,864 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Aug-19	31-Jul-20	$ 24.60	$ 636,254.40	$ 53,021.20
1-Aug-20	31-Jul-21	$ 25.09	$ 648,927.76	$ 54,077.31

4,493 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Jan-19	31-Dec-19	$ 19.87	$ 89,269.76	$ 7,439.15
1-Jan-20	31-Dec-20	$ 20.37	$ 91,501.51	$ 7,625.13
1-Jan-21	31-Jul-21	$ 20.87	$ 93,789.05	$ 7,815.75

* In months 1, 6, 58 and 60 no base rent will be due

1,503 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Aug-19	31-Jul-20	$ 20.50	$ 30,811.50	$ 2,567.63
1-Aug-20	31-Jul-21	$ 21.01	$ 31,578.03	$ 2,631.50

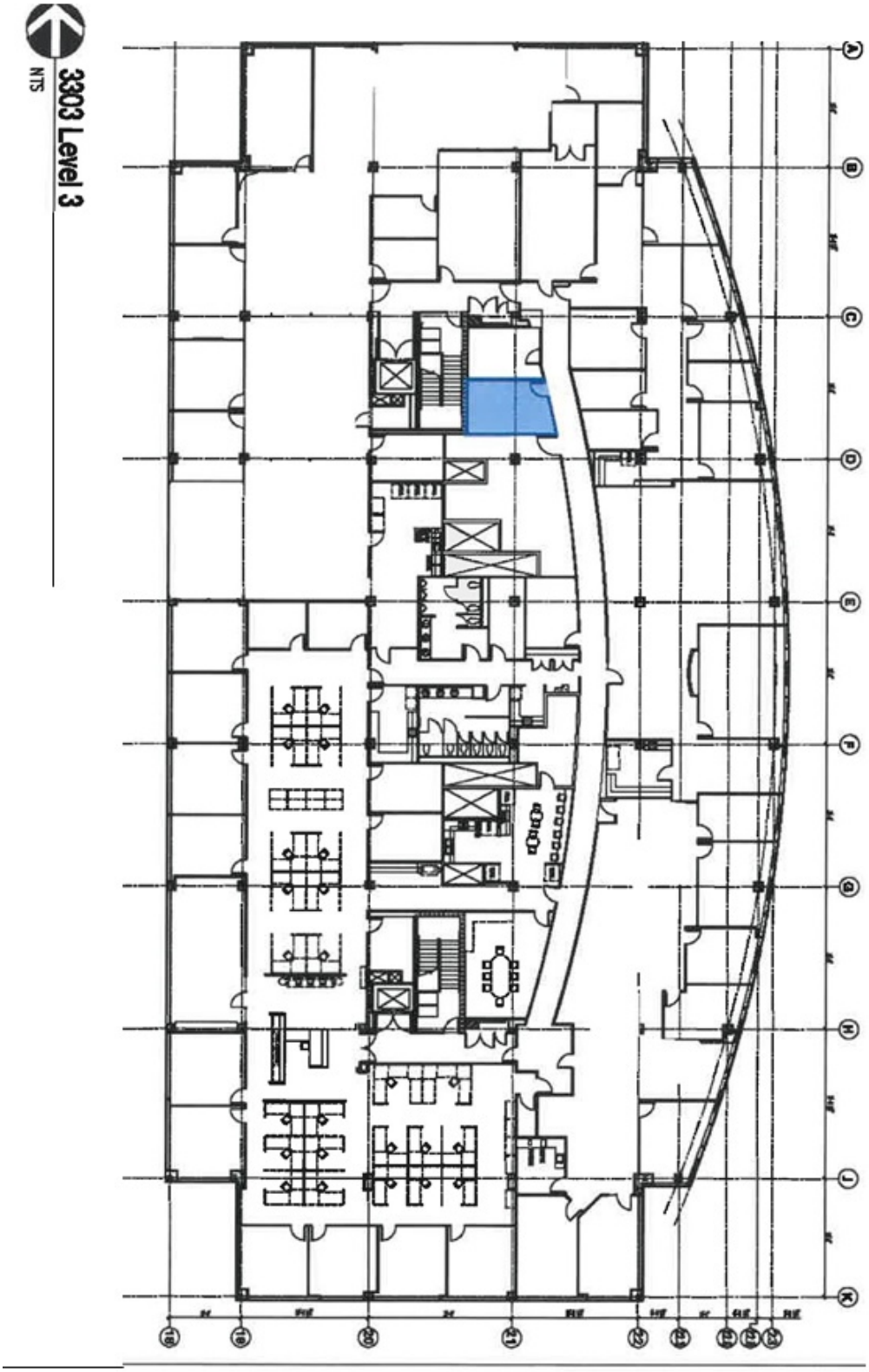
246 RSF

Applicable Portion of Lease Term		Rate Per Rentable Sq. Ft. / Annum	Annual Base Rent	Monthly Base Rent Installment (Annual + 12)
Beginning	Ending			
1-Jan-19	31-Dec-19	$ 19.87	$ 4,888.02	$ 407.34
1-Jan-20	31-Dec-20	$ 20.37	$ 5,011.02	$ 417.59
1-Jan-21	31-Jul-21	$ 20.87	$ 5,134.02	$ 427.84

Landlord has the right to create up to 50,000 SF of additional space on the Property (the "Additional Space"). The creation of the Additional Space will reduce the Operating Expenses for the Premises (the "Additional Space Expense Reduction"). Tenant agrees that should Landlord create the Additional Space then the Rent shall be increased (effective as of the date of the inclusion of the Additional Space) by the amount of any Additional Space Expense Reduction. Such a reduction shall be computed (within six months of the inclusion of Additional Space) by subtracting (i) the Tenant's Proportionate Share of the Operating Expenses and Taxes computed after the inclusion of the Additional Space in the square footage calculations from (ii) Tenant's Proportionate Share of the Operating Expenses and Taxes computed before the inclusion of the Additional Space in the square footage calculations. Landlord shall provide Tenant with such computations for Tenant's review.

EXHIBIT C.8

SERVER EXPANSION PREMISES



NINTH AMENDMENT TO LEASE

THIS NINTH AMENDMENT TO LEASE (the "**Amendment**"), effective as of November 12, 2020, is entered into by and between Monte Villa Farms LLC ("**Landlord**") and BioLife Solutions, Inc. ("**Tenant**").

RECITALS

A. Landlord and Tenant are parties to that certain Lease dated July 24, 2007, as the same has been amended by that certain First Amendment to Lease dated November 4, 2008, Second Amendment to Lease dated March 2, 2012 (the "**Second Amendment to Lease**"), Third Amendment to Lease dated June 15, 2012, Fourth Amendment to Lease dated November 26, 2012 (the "**Fourth Amendment to Lease**"), Fifth Amendment to Lease dated August 19, 2014, Sixth Amendment to Lease dated March 3, 2017, Seventh Amendment to Lease dated December 4, 2018, and Eighth Amendment to Lease dated November 1, 2019 (collectively, the "**Lease**"). Pursuant to the Lease, Tenant leases certain "**Demised Premises** containing approximately 32,106 rentable square feet of space in Buildings 3301 and 3303 Monte Villa Parkway, Bothell, Washington (the "**Project**").

B. Landlord and Tenant desire to amend the Lease as provided in this Amendment.

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. **Extension of Lease Term; Basic Annual Rent.** The Term of the Lease is hereby extended until July 31, 2031 (such extension period being the "**Ninth Amendment Renewal Term**"). Tenant shall continue paying Basic Annual Rent in accordance with the terms of the Lease through July 31, 2021. Commencing on August 1, 2021, Tenant shall pay Basic Annual Rent in the amount of $26.00 per rentable square foot of the Premises per year, payable in equal monthly installments, increasing by 3% on August 1, 2022 and each anniversary of such date thereafter.

2. **Extension Option**. Section 35 of the Lease is hereby amended and restated in its entirety as follows:

"(a) Extension Option. Tenant shall have two (2) renewal options for the Demised Premises for a period equal to five (5) years per option period, and otherwise on the terms specified in Section 35 of the Lease. A Renewal Term shall commence only if (i) Tenant shall have notified Landlord in writing at least nine (9) months prior to the expiration of the then existing Term, and (ii) immediately prior to the expiration of the Term, this Lease shall be in full force and effect and no Event of Default shall have occurred and be continuing. Time is of the essence with respect to the giving of the notice of Tenant's exercise of the renewal option. The Renewal Term shall be subject to all of the agreements, terms, covenants and conditions hereof binding upon Tenant and Landlord, except that the Basic Annual Rent shall be at the then fair market rent, escalating annually at the then market escalation rate, and the other economic terms of the Lease, including with respect operating expense reimbursements for repairs, replacements and related expenditures, shall be updated to market terms (collectively, "**Market Economic Terms**"). Without limitation, Market Economic Terms shall include any then current market concessions being granted in similar transaction, including without limitation abated rent, leasing commissions and tenant improvement allowances. Upon the commencement of the Renewal Term, (x) the Renewal Term shall be added to and become part of the Term (but shall not be considered part of the initial Term), (y) any reference to "this Lease", to the "Term", the "term of this Lease" or any similar expression shall be deemed to include the Renewal Term, and (z) the Expiration Date shall become the expiration of the Renewal Term.

(b) Arbitration Procedures.

(i) If Landlord and Tenant have not agreed upon the Market Economic Terms described in Section 35(a) above by the date that is 180 days prior to the expiration of the then Term, each party shall deliver to the other a proposal containing the Market Economic Terms that the submitting party believes to be correct ("**Renewal Proposal**"). If either party fails to timely submit a Renewal Proposal, the other party's submitted proposal shall determine the Market Economic Terms for the Renewal Term. If both parties submit Renewal Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Renewal Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Economic Terms. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall determine the Market Economic Terms for the Renewal Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.

(ii) The decision of the Arbitrator(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Economic Terms are not determined by the first day of the Renewal Term, then Tenant shall pay Landlord Basic Annual Rent in an amount equal to the Basic Annual Rent in effect immediately prior to the Renewal Term and increased by 3% until such determination is made. After the determination of the Market Economic Terms, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Economic Terms for the Renewal Term.

(iii) An "Arbitrator" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and: (i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech industrial real estate in Bothell, Washington, or (B) a licensed commercial real estate broker with not less than 15 years' experience representing landlords and/or tenants in the leasing of high tech or life sciences space in Bothell, Washington, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested."

The foregoing shall supersede all prior revisions to Section 35 of the Lease, or to the number and duration of Lease renewal options, including without limitation, Section 14 of the First Amendment to Lease, Section 12 of the Second Amendment to Lease, and Section 4 of the Fourth Amendment to Lease.

3. **Tenant Improvement Allowance**. Tenant shall have the right to construct fixed and permanent improvements in the Premises pursuant to plans approved by Landlord, which approval shall not be unreasonably withheld, conditioned or delayed (the "**Tenant Improvements**"), including, without limitation, with respect to HVAC components connecting to the cleanroom in the Premises, in accordance with the terms of the Lease including, without limitation, Section 9 thereof. So long as no Event of Default has occurred and remains uncured, Landlord will pay Tenant for Tenant's documented costs and expenses incurred in connection with Tenant's design, permitting and construction of the Tenant Improvements, not to exceed in the aggregate $2,568,480.00 (the "**TI Allowance**"). Tenant may apply for payments of the TI Allowance on a monthly draw basis. Each application for a payment out of the TI Allowance shall be accompanied by reasonable documentation that the application portion of the Tenant Improvements has been completed and shall include commercially reasonable, conditional lien releases. Landlord will pay the requested portion of the TI Allowance to Tenant (not to exceed $2,568,480.00) within thirty (30) days of receipt of invoice from Tenant. If Landlord both fails to timely pay any properly requested portion of the TI Allowance and fails to dispute all or any portion of the applicable disbursement request from Tenant, then Tenant may offset any undisputed portion of such amount against next owing installments of Rent. Tenant shall be responsible for any cost of the Tenant Improvements that exceeds the TI Allowance. Upon completion of the Tenant Improvements, Tenant shall provide Landlord as applicable with "as built" plans for the same. Upon the expiration of the Term or earlier termination of the Lease, the Tenant Improvements shall be and remain the property of Landlord and Tenant shall not remove same. Any portion of the TI Allowance which has not been properly requested by Tenant from Landlord on or before the date which is 36 months after the date on which this Amendment has been executed by Tenant shall be forfeited and shall not be available for use by Tenant.

The Tenant Improvements shall be competitively bid by Tenant and Landlord shall have the right to approve the general contractor engaged by Tenant to construct the Tenant Improvements, which approval shall not be unreasonably withheld, conditioned or delayed.

Prior to the commencement of construction of any Tenant Improvements, Tenant shall deliver a certificate of insurance naming Landlord, its officers, directors, employees, managers, agents, sub- agents, constituent entities and lease signators as an additional insured with respect to the insurance required to be carried by Tenant pursuant to Section 9 of the Lease.

4. **Signage**. Tenant shall have the non-exclusive right to display, at Tenant's cost and expense, a sign bearing Tenant's name and/or logo on the exterior of the building located at 3301 Monte Villa Parkway in a prominent location reasonably designated by Landlord ("**Tenant's Building Sign**"). Notwithstanding the foregoing, Tenant acknowledges and agrees that Tenant's Building Sign including, without limitation, the size, color and type, shall be subject to Landlord's prior written approval, which shall not be unreasonably withheld, conditioned or delayed and which shall be consistent with Landlord's signage program at the Property and applicable law, regulations, orders and covenants and restrictions affecting the Property. Subject to Landlord not being required to make any changes with respect to any existing signage on 3301 Monte Villa Parkway, the relative size of Tenant's Building Sign shall be proportionate to the amount of space leased by Tenant within 3301 Monte Villa Parkway (for example, if Tenant leased ½ of 3301 Monte Villa Parkway, Tenant would be entitled to at least ½ of the available exterior signage). Tenant shall be responsible, at Tenant's sole cost and expense, for the maintenance of Tenant's Building Sign, for the removal of Tenant's Building Sign at the expiration or earlier termination of this Lease and for the repair of all damage resulting from such removal. Landlord shall have the right to determine whether Landlord or Tenant shall install Tenant's Building Sign.

5. **Right of First Offer**. Landlord and Tenant hereby reaffirm Tenant's right of first offer set forth in Section 14 of the Second Amendment to Lease, provided that such right of first offer hereby is amended such that the right of first offer shall also apply (in addition to the areas referenced in Section 14 of the Second Amendment) to, subject to any existing rights granted to any other tenants, any space on the second (top) floor of the 3301 Building the first time that such space will become available for lease to a third party (i.e. a party other than the then current tenant).

6. **Amendment Execution as an Offer only open and valid until 5 pm PST on November 13, 2020**. If Tenant delivers an executed copy of this Amendment to Landlord and Landlord fails to return to Tenant a copy of this Amendment executed by Landlord (and properly notarized) by 5:00 p.m. pacific time on November 13, 2020 (time being of the essence), then notwithstanding anything to the contrary, this Amendment shall immediately and without any further action by Tenant become null and void and Tenant shall automatically be deemed to have retracted its offer to enter into this Amendment.

7. **OFAC**. Tenant and Landlord are currently (a) in compliance with and shall at all times during the Term of the Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the Term of the Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

8. **Brokers**. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with the transaction reflected in this Amendment and that no Broker brought about this transaction, other than Flinn Ferguson Cresa. Landlord and Tenant each hereby agrees to indemnify and hold the other harmless from and against any claims by any Broker, other than other than Flinn Ferguson Cresa, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Amendment. Landlord shall be responsible for all commissions due to Flinn Ferguson Cresa arising out of the execution of this Amendment in accordance with the terms of a separate written agreement between Landlord, on the one hand, and Flinn Ferguson Cresa, on the other hand.

9. **Miscellaneous**.

a. This Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This Amendment may be amended only by an agreement in writing, signed by the parties hereto.

b. This Amendment is binding upon and shall inure to the benefit of the parties hereto and their respective agents, successors and assigns.

c. This Amendment may be executed in 2 or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal ESIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

d. Except as amended and/or modified by this Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this Amendment. In the event of any conflict between the provisions of this Amendment and the provisions of the Lease, the provisions of this Amendment shall prevail. Whether or not specifically amended by this Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this Amendment.

[Signatures on following page]

In witness whereof, Landlord and Tenant have entered into this Amendment as of the date first written above.

BIOLIFE SOLUTIONS, INC.,
a Delaware corporation

By: /s/ Michael Rice
Name: Michael Rice
Title Chief Executive Officer

MONTE VILLA FARMS LLC,
a Washington limited liability company

By: Bothell Land Co,
a Washington corporation

By: /s/ Robert E Hibbs
Its: President

TENTH AMENDMENT TO LEASE

THIS TENTH AMENDMENT TO LEASE (this **"Tenth Amendment"**) is made as of October 8, 2021, by and between **ARE-SEATTLE NO. 38, LLC,** a Delaware limited liability company (**"Landlord"**), and **BIOLIFE SOLUTIONS, INC.,** a Delaware corporation (**"Tenant"**).

RECITALS

A. Landlord and Tenant are parties to that certain Lease dated as of July 24, 2007, as amended by that certain First Amendment to Lease dated November 4, 2008, Second Amendment to Lease dated March 2, 2012, Third Amendment to Lease dated June 15, 2012, Fourth Amendment to Lease dated November 26, 2012, Fifth Amendment to Lease dated August 19, 2014, Sixth Amendment to Lease dated March 3, 2017, Seventh Amendment to Lease dated December 4, 2018, Eighth Amendment to Lease dated November 1, 2019, and Ninth Amendment to Lease dated November 12, 2020 (collectively, the **"Lease"**) wherein Landlord leases to Tenant certain premises commonly known as Suites 105 and 305 in Building 3301 and Suite 310 in Building 3303, containing approximately 32,106 rentable square feet (collectively, the **"Existing Premises"**) located at 3301 and 3303 Monte Villa Parkway, Bothell, Washington, as more particularly described in the Lease. Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B. Landlord and Tenant desire, subject to the terms and conditions set forth below, to amend the Lease to, among other things, (i) expand the size of the Existing Premises to include certain space commonly known as Suite 360, containing approximately 8,342 rentable square feet, located on Level 3 of the building located at 3303 Monte Villa Parkway, Bothell, Washington (the **"3303 Building"**), as more particularly shown on **Exhibit A** attached hereto (the **"Expansion Premises"**) and (ii) temporarily lease to Tenant certain space commonly known as Suite 330, containing approximately 4,660 rentable square feet, located on Level 3 of the 3303 Building, as more particularly shown on **Exhibit B** attached hereto (the **"Temporary Premises"**).

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. **Expansion Premises.** In addition to the Existing Premises, commencing on the Expansion Premises Delivery Date (as defined below), Landlord leases to Tenant, and Tenant leases from Landlord, the Expansion Premises.

2. **Delivery.** The **"Expansion Premises Delivery Date"** shall be one (1) business day after the mutual execution of this Tenth Amendment by the parties. Landlord shall deliver the Expansion Premises to Tenant on the Expansion Premises Delivery Date. The **"Expansion Premises Commencement Date"** shall be the earlier of (i) April 1, 2022 and (ii) the date upon which the Premises Improvements (as defined in Section 3 below) are substantially completed. The **"Expansion Premises Rent Commencement Date"** shall be the date that is 6 months following the Expansion Premises Commencement Date.

Except as otherwise expressly set forth in this Tenth Amendment or the Lease: (i) Tenant shall accept the Expansion Premises in their condition as of the Expansion Premises Delivery Date; (ii) Landlord shall have no obligation for any defects in the Expansion Premises; and (iii) Tenant's taking possession of the Expansion Premises shall be conclusive evidence that Tenant accepts the Expansion Premises and that the Expansion Premises were in good condition at the time possession was taken.

For the period of 365 consecutive days after the Expansion Premises Delivery Date, Landlord shall, at its sole cost and expense (which shall not constitute an Operating Expense), be responsible for any repairs that are required to be made to the 3303 Building systems, unless Tenant or any of Tenant's Agents was responsible for the cause of such repair, in which case Tenant shall pay the cost. For the avoidance of doubt, Landlord's obligations under the prior sentence shall apply to such repairs which Tenant notifies Landlord of in writing during such 365 period, even if the repair then occurs after the expiration of such 365 day period.

Except as otherwise expressly set forth in this Tenth Amendment, Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Expansion Premises, and/or the suitability of the Expansion Premises for the conduct of Tenant's business, and Tenant waives any implied warranty that the Expansion Premises are suitable for the permitted use under the Lease.

3. **Tenant Improvement Allowance.** Landlord shall make available to Tenant a tenant improvement allowance in the amount of $50.00 per rentable square foot of the Expansion Premises (the "**Improvement Allowance**"), for the design and construction of fixed and permanent improvements desired by and performed by Tenant and reasonably acceptable to Landlord in the Demised Premises (the "**Premises Improvements**"), which Premises Improvements shall be constructed pursuant to a scope of work reasonably acceptable to Landlord and Tenant. The Improvement Allowance shall be available only for the design and construction of the Premises Improvements. Tenant acknowledges that upon the expiration of the Term of the Lease, the Premises Improvements shall become the property of Landlord and may not be removed by Tenant. Except for the Improvement Allowance, Tenant shall be solely responsible for all of the costs of the Premises Improvements. The Premises Improvements shall be treated as Alterations and shall be undertaken pursuant to Section 9.3 of the original Lease. The contractor for the Premises Improvements shall be selected by Tenant, subject to Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Prior to the commencement of the Premises Improvements, Tenant shall deliver to Landlord a copy of any contract with Tenant's contractors, and certificates of insurance from any contractor performing any part of the Premises Improvements evidencing industry standard commercial general liability, automotive liability, "builder's risk", and workers' compensation insurance. Tenant shall cause the general contractor to provide a certificate of insurance naming Landlord, Alexandria Real Estate Equities, Inc., and Landlord's lender (if any) as additional insureds for the general contractor's liability coverages required above.

During the course of design and construction of the Premises Improvements, Landlord shall disburse payments of the Improvement Allowance to Tenant once a month against a draw request on Landlord's standard form, containing evidence of payment of such work performed and such certifications, lien waivers (including a conditional lien release for each progress payment and unconditional lien releases for the prior month's progress payments), inspection reports and other matters as Landlord customarily obtains, to the extent of Landlord's approval thereof for payment, no later than 30 days following receipt of such draw request. Upon completion of the Premises Improvements (and prior to any final disbursement of the Improvement Allowance), Tenant shall deliver to Landlord the following items: (i) sworn statements setting forth the names of all contractors and subcontractors who did work and final, unconditional lien waivers from all such contractors and subcontractors, (ii) "as-built" plans for the Premises Improvements and (iii) a certification of substantial completion in Form AIA G704. Notwithstanding the foregoing, if the cost of the Premises Improvements exceeds the Improvement Allowance, Tenant shall be required to pay such excess in full prior to Landlord having any obligation to fund any remaining portion of the Improvement Allowance. The Improvement Allowance shall only be available for use by Tenant for the construction of the Premises Improvements commencing on the date of this Tenth Amendment through the date occurring twelve (12) months after the date of this Tenth Amendment (the "**Outside Improvement Allowance Date**"). Any portion of the Improvement Allowance which has not been properly requested by Tenant from Landlord on or before the Outside Improvement Allowance Date shall be forfeited and shall not be available for use by Tenant.

4. **Demised Premises.** As of the Expansion Premises Delivery Date, (i) the defined term **"Demised Premises"** shall mean the Office Expansion Premises, the Clean Room Premises, the Production Expansion Premises, the Cleanroom Support Premises, the Second Office Expansion Premises, the Cold Room Premises, the Server Expansion Premises and the Expansion Premises, and (ii) the total rentable area of the Demised Premises shall be 40,375 rentable square feet.

As of the Expansion Premises Delivery Date, **Exhibit C.9** shall be added to the Lease, which shall depict the Expansion Premises as shown on **Exhibit A** attached to this Tenth Amendment.

5. **Basic Annual Rent.** Commencing on the Expansion Premises Rent Commencement Date, Tenant shall pay Basic Annual Rent for the Expansion Premises as set forth on **Exhibit C** attached hereto. For the avoidance of doubt, Tenant shall commence paying Operating Expenses, Taxes and all other amounts due under the Lease with respect to the Expansion Premises on the Expansion Premises Commencement Date.

6. **Tenant's Proportionate Share.** Notwithstanding anything to the contrary in the Lease, commencing on the Expansion Premises Delivery Date, Tenant's Proportionate Share shall be 14.27%.

7. **Term.** The Term of the Lease with respect to the Expansion Premises shall expire concurrently with the expiration of the Term of the Lease with respect to the Existing Premises. The expiration of the Term of the Lease with respect to the Existing Premises is currently scheduled for July 31, 2031 (the **"Expiration Date"**).

8. **Parking.** In addition to the number of parking spaces Tenant is entitled to use under the Lease, as of the Expansion Premises Commencement Date, Tenant shall have the right to use an additional 13 number of parking spaces, subject to Section 1.3 of the original Lease, for a total of 61 parking spaces.

9. **Temporary Premises.** Commencing on the Expansion Premises Delivery Date and continuing until the earlier of (i) the date that Tenant surrenders the Temporary Premises to Landlord in accordance with surrender requirements and in the condition required with respect to the Existing Premises pursuant to the Lease (which shall be upon no less than 30 days' prior written notice to Landlord) or (ii) the date the Lease expires or is earlier terminated (**"Temporary Premises Term"**), Landlord shall lease to Tenant and Tenant shall lease from Landlord the Temporary Premises. Tenant acknowledges and agrees that all of the terms and conditions of the Lease shall apply to the leasing of the Temporary Premises as if the Temporary Premises were the Demised Premises, except that: (a) the term of this Lease with respect to the Temporary Premises shall be as set forth in the first sentence of this Section 9, (b) Tenant shall pay Basic Annual Rent with respect to the Temporary Premises in the amount of $28.00 per rentable square foot of the Temporary Premises per year, subject to annual increases of 3% upon each anniversary of the Expansion Premises Delivery Date, during the Temporary Premises Term, (c) Tenant shall pay Tenant's Proportionate Share with respect to the Temporary Premises (which shall be equal to 1.63%), (d) Landlord shall not be required to make any improvements to the Temporary Premises and Tenant shall accept the Temporary Premises in its "as is" condition, (e) Tenant shall have no right, nor shall Tenant be required, to make any Alterations or improvements to the Temporary Premises, (f) no additional Security Deposit shall be required for the Temporary Premises and (g) Tenant shall have the right, subject to the terms of Section 1.3 of the original Lease, to use its pro rata share of parking spaces with respect to the Temporary Premises (which as of the Expansion Premises Commencement Date shall be 7 spaces).

10. **Signage.** Landlord agrees that if, after the date of this Tenth Amendment, a third-party tenant leases space in the 3303 Building which is equal to or less than the rentable square footage of the Premises and such third-party tenant is granted the right to install exterior signage on the 3303 Building, then Tenant shall also be granted the option, at Tenant's cost, to install exterior signage on the 3303 Building of a size at least substantially equal to the signage provided to such other third-party tenant (the "**Building Sign**"). Notwithstanding the foregoing, Tenant acknowledges and agrees that any such Building Sign, including without limitation, the size, color, location and type, shall be subject to Landlord's prior written approval (which shall not be unreasonably withheld) and shall be consistent with Landlord's signage program at the Project and applicable Legal Requirements. Tenant shall be responsible, at Tenant's sole cost and expense, for the fabrication, installation and maintenance of any such Building Sign, for the removal of any such Building Sign at the expiration or earlier termination of the Lease and for the repair of all damage resulting from such removal.

11. **Brokers.** Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with the transaction reflected in this Tenth Amendment and that no Broker brought about this transaction other than Flinn Ferguson Cresa. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than other than Flinn Ferguson Cresa, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Tenth Amendment. Landlord shall be responsible for all commissions due to Flinn Ferguson Cresa arising out of the execution of this Tenth Amendment in accordance with the terms of a separate agreement between Landlord and Flinn Ferguson Cresa.

12. **OFAC.** Tenant and Landlord are currently (a) in compliance with and shall at all times during the Term of the Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the Term of the Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

13. **Miscellaneous.**

a. This Tenth Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. Reference to the Lease in this Tenth Amendment shall mean the Lease as amended by this Tenth Amendment. This Tenth Amendment may be amended only by an agreement in writing, signed by the parties hereto.

b. Once executed by both parties, this Tenth Amendment is binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

c. This Tenth Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal ESIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this Tenth Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

d. Except as amended and/or modified by this Tenth Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this Tenth Amendment. In the event of any conflict between the provisions of this Tenth Amendment and the provisions of the Lease, the provisions of this Tenth Amendment shall prevail. Whether or not specifically amended by this Tenth Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this Tenth Amendment.

[Signatures are on the next page]

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amendment as of the day and year first above written.

TENANT:

BIOLIFE SOLUTIONS, INC.,
a Delaware corporation

By: /s/ Michael P Rice
Its: MW

LANDLORD:

ARE-SEATTLE NO. 38, LLC,
a Delaware limited liability company

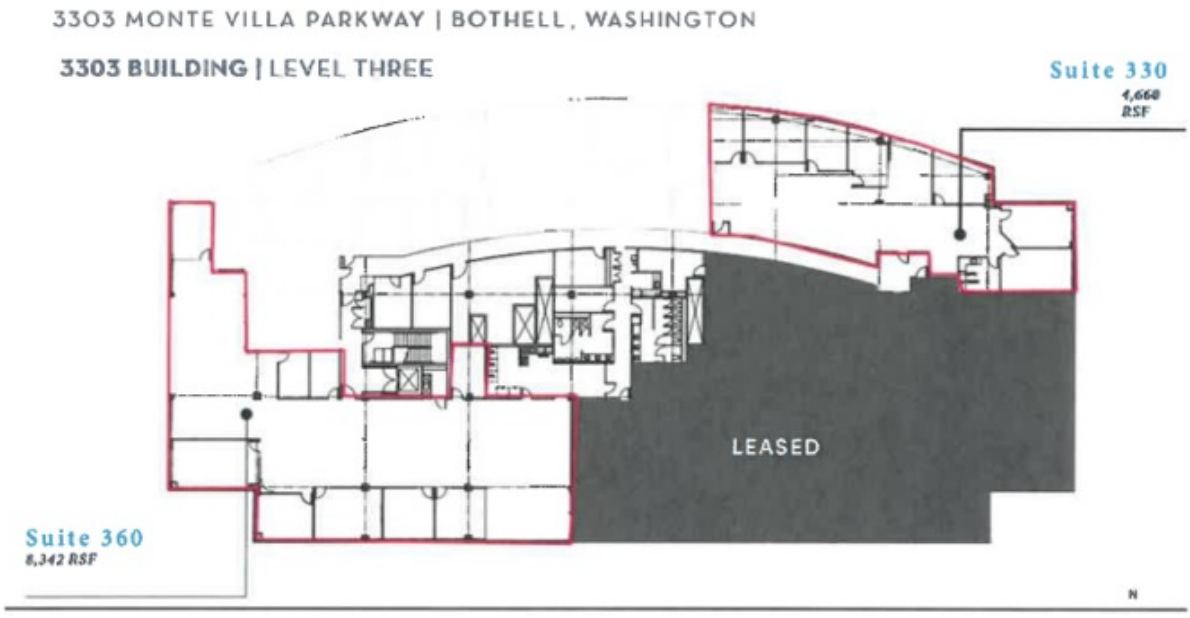
By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
its managing member

By: ARE-QRS CORP:,
a Maryland corporation
Its general partner

By: /s/ Gary Dean
Its: Executive VP Real Estate Legal Affairs

EXHIBIT A

EXPANSION PREMISES



EXHIBITS

TEMPORARY PREMISES

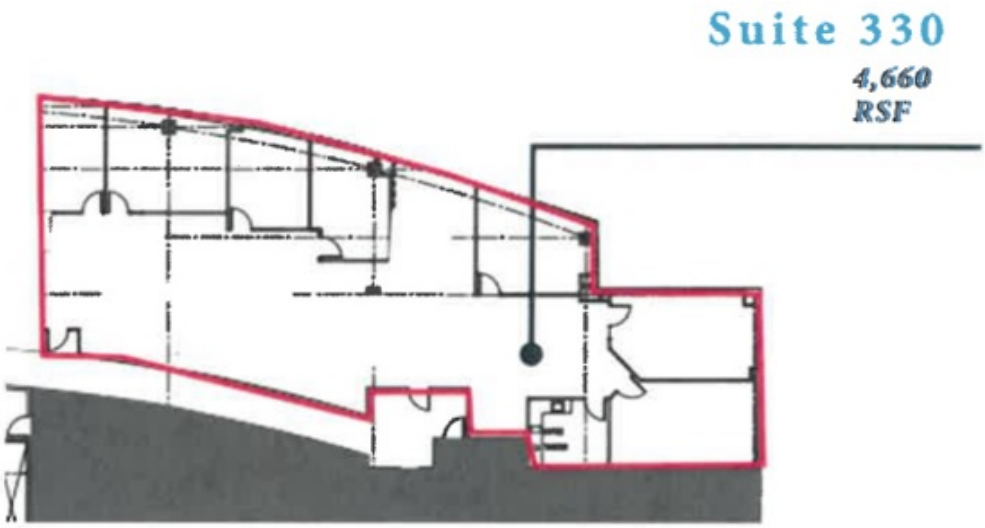


EXHIBIT C

RENT SCHEDULE

Date Range	Base Rent Excalation	RSF	Base Rent	Monthly Basic Annual Rent	Basic Annual Rent
Expansion Premises Commencement Date					
7/31/2022	**3%**	**8,342**	**$ 28.00**	**$ 19,464.67**	**$ 233,576.00**
8/01/2022-7/31/2023	**3%**	**8,342**	**$ 28.84**	**$ 20,048.61**	**$ 240,583.28**
8/01/2023-7/31/2024	**3%**	**8,342**	**$ 29.71**	**$ 20,650.06**	**$ 247,800.78**
8/0l/2024-7/31/2025	**3%**	**8,342**	**$ 30.60**	**$ 21,269.57**	**$ 255,234.80**
8/0l/2025-7/31/2026	**3%**	**8,342**	**$ 31.51**	**$ 21,907.65**	**$ 262,891.85**
8/0l/2026-7/31/2027	**3%**	**8,342**	**$ 32.46**	**$ 22,564.88**	**$ 270,778.60**
8/0l/2027-7/31/2028	**3%**	**8,342**	**$ 33.43**	**$ 23,241.83**	**$ 278,901.96**
8/01/2028-7/31/2029	**3%**	**8,342**	**$ 34.44**	**$ 23,939.08**	**$ 287,269.02**
8/01/2029-7/31/2030	**3%**	**8,342**	**$ 35.47**	**$ 24,657.26**	**$ 295,887.09**
8/01/2030-7/31/2031	**3%**	**8,342**	**$ 36.53**	**$ 25,396.98**	**$ 304,763.70**

**Note: Basic Annual Rent shall be abated for the first 6 months immediately following the Expansion Premises Commencement Date.

Exhibit 10.20

ELEVENTH AMENDMENT TO LEASE

THIS ELEVENTH AMENDMENT TO LEASE (this "**Eleventh Amendment**") is made as of February 22, 2022, by and between **ARE-SEATTLE NO. 38, LLC**, a Delaware limited liability company ("**Landlord**"), and **BIOLIFE SOLUTIONS, INC.,** a Delaware corporation ("**Tenant**").

RECITALS

A. Landlord and Tenant are parties to that certain Lease dated as of July 24, 2007 (the "**Original Lease**"), as amended by that certain First Amendment to Lease dated as of November 4, 2008, and as further amended by that certain Second Amendment to Lease dated as of March 2, 2012, that certain Third Amendment to Lease dated as of June 15, 2012, that certain Fourth Amendment to Lease dated as of November 26, 2012, that certain Fifth Amendment to Lease dated as of August 19, 2014, that certain Sixth Amendment to Lease dated as of March 3, 2017, that certain Seventh Amendment to Lease dated as of December 4, 2018, that certain Eighth Amendment to Lease dated as of November 1, 2019, that certain Ninth Amendment to Lease dated as of November 12, 2020, and that certain Tenth Amendment to Lease dated as of October 8, 2021 (as amended, the "**Lease**") wherein Landlord leases to Tenant certain premises in Bothell, Washington, commonly known as Suites 105 and 305 at 3301 Monte Villa Parkway, and Suites 310 and 360 at 3303 Monte Villa Parkway, containing approximately 40,375 rentable square feet (collectively, the "**Existing Premises**"), as more particularly described in the Lease. Landlord also leases to Tenant on a temporary basis certain premises commonly known as Suite 330, containing approximately 4,660 rentable square feet, located at 3303 Monte Villa Parkway, Bothell, Washington, as more particularly described in the Lease. Capitalized terms used herein without definition shall have the meanings defined for such terms in the Lease.

B. Landlord and Tenant desire, subject to the terms and conditions set forth below, to amend the Lease to, among other things, expand the size of the Existing Premises to include certain space commonly known as (i) Suite 350, containing approximately 214 rentable square feet, (ii) Suite 355, containing approximately 73 rentable square feet, and (iii) Suite 370, containing approximately 200 rentable square feet, all located on Level 3 of the building located at 3303 Monte Villa Parkway, Bothell, Washington, as more particularly shown on **Exhibit A** attached hereto (the "**Second Expansion Premises**").

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. **Second Expansion Premises**. In addition to the Existing Premises, commencing on the Second Expansion Premises Delivery Date (as defined below), Landlord leases to Tenant, and Tenant leases from Landlord, the Second Expansion Premises.

2. **Delivery**. The "**Second Expansion Premises Delivery Date**" shall be one (1) business day after the mutual execution of this Eleventh Amendment by the parties. Landlord shall deliver the Second Expansion Premises to Tenant on the Second Expansion Premises Delivery Date. The "**Second Expansion Premises Commencement Date**" shall be the earlier of (i) September 1, 2022 and (ii) the date upon which the Premises Improvements (as defined in Section 3 below) are substantially completed. The "**Second Expansion Premises Rent Commencement Date**" shall be the date that is 6 months following the Second Expansion Premises Commencement Date.

Except as otherwise expressly set forth in this Eleventh Amendment or the Lease: (i) Tenant shall accept the Second Expansion Premises in their condition as of the Second Expansion Premises Delivery Date; (ii) Landlord shall have no obligation for any defects in the Second Expansion Premises; and (iii) Tenant's taking possession of the Second Expansion Premises shall be conclusive evidence that Tenant accepts the Second Expansion Premises and that the Second Expansion Premises were in good condition at the time possession was taken.

Except as otherwise expressly set forth in this Eleventh Amendment, Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Second Expansion Premises, and/or the suitability of the Second Expansion Premises for the conduct of Tenant's business, and Tenant waives any implied warranty that the Second Expansion Premises are suitable for the permitted use under the Lease.

3. **Tenant Improvement Allowance**. Landlord shall make available to Tenant a tenant improvement allowance in the amount of $50.00 per rentable square foot of the Second Expansion Premises (the "**Improvement Allowance**"), for the design and construction of fixed and permanent improvements desired by and performed by Tenant and reasonably acceptable to Landlord in the Demised Premises (the "**Premises Improvements**"), which Premises Improvements shall be constructed pursuant to a scope of work reasonably acceptable to Landlord and Tenant. The Improvement Allowance shall be available only for the design and construction of the Premises Improvements. Tenant acknowledges that upon the expiration of the Term of the Lease, the Premises Improvements shall become the property of Landlord and may not be removed by Tenant. Except for the Improvement Allowance, Tenant shall be solely responsible for all of the costs of the Premises Improvements. The Premises Improvements shall be treated as Alterations and shall be undertaken pursuant to Section 9.3 of the Original Lease. The contractor for the Premises Improvements shall be selected by Tenant, subject to Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Prior to the commencement of the Premises Improvements, Tenant shall deliver to Landlord a copy of any contract with Tenant's contractors, and certificates of insurance from any contractor performing any part of the Premises Improvements evidencing industry standard commercial general liability, automotive liability, "builder's risk", and workers' compensation insurance. Tenant shall cause the general contractor to provide a certificate of insurance naming Landlord, Alexandria Real Estate Equities, Inc., ARE-Seattle No. 38 Holding, LLC, and Landlord's lender (if any) as additional insureds for the general contractor's liability coverages required above.

During the course of design and construction of the Premises Improvements, Landlord shall disburse payments of the Improvement Allowance to Tenant once a month against a draw request on Landlord's standard form, containing evidence of payment of such work performed and such certifications, lien waivers (including a conditional lien release for each progress payment and unconditional lien releases for the prior month's progress payments), inspection reports and other matters as Landlord customarily obtains, to the extent of Landlord's approval thereof for payment, no later than 30 days following receipt of such draw request. Upon completion of the Premises Improvements (and prior to any final disbursement of the Improvement Allowance), Tenant shall deliver to Landlord the following items: (i) sworn statements setting forth the names of all contractors and subcontractors who did work and final, unconditional lien waivers from all such contractors and subcontractors, (ii) "as-built" plans for the Premises Improvements and (iii) a certification of substantial completion in Form AIA G704. Notwithstanding the foregoing, if the cost of the Premises Improvements exceeds the Improvement Allowance, Tenant shall be required to pay such excess in full prior to Landlord having any obligation to fund any remaining portion of the Improvement Allowance. The Improvement Allowance shall only be available for use by Tenant for the construction of the Premises Improvements commencing on the date of this Eleventh Amendment through the date occurring twelve (12) months after the date of this Eleventh Amendment (the "**Outside Improvement Allowance Date**"). Any portion of the Improvement Allowance which has not been properly requested by Tenant from Landlord on or before the Outside Improvement Allowance Date shall be forfeited and shall not be available for use by Tenant.

4. **Demised Premises**. As of the Expansion Premises Delivery Date, (i) the defined term "**Demised Premises**" shall mean the Office Expansion Premises, the Clean Room Premises, the Production Expansion Premises, the Cleanroom Support Premises, the Second Office Expansion Premises, the Cold Room Premises, the Server Expansion Premises, the Expansion Premises and the Second Expansion Premises, and (ii) the total rentable area of the Demised Premises shall be 40,862 rentable square feet.

As of the Second Expansion Premises Delivery Date, **Exhibit C.10** shall be added to the Lease, which shall depict the Second Expansion Premises as shown on **Exhibit A** attached to this Eleventh Amendment.

5. **Basic Annual Rent.** Tenant shall continue to pay Basic Annual Rent in accordance with the terms of the Lease with respect to the Existing Premises through the Term. Beginning on the Second Expansion Premises Rent Commencement Date, Tenant shall commence paying Basic Annual Rent for the Second Expansion Premises at the rate of $28.00 per rentable square foot of the Second Expansion Premises per year. On each annual anniversary of the Second Expansion Premises Commencement Date, Basic Annual Rent for the Second Expansion Premises shall be automatically increased by multiplying the Basic Annual Rent payable immediately before such date by 3% and adding the resulting amount to the Basic Annual Rent payable immediately before such date.

For the avoidance of doubt, Tenant shall commence paying Operating Expenses, Taxes and all other amounts due under the Lease with respect to the Second Expansion Premises on the Second Expansion Premises Commencement Date.

6. **Tenant's Proportionate Share**. Notwithstanding anything to the contrary in the Lease, commencing on the Second Expansion Premises Delivery Date, Tenant's Proportionate Share shall be 14.79%.

7. **Term**. The Term of the Lease with respect to the Second Expansion Premises shall expire concurrently with the expiration of the Term of the Lease with respect to the Existing Premises. The expiration of the Term of the Lease with respect to the Existing Premises is currently scheduled for July 31, 2031.

8. **Brokers**. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "**Broker**") in connection with the transaction reflected in this Eleventh Amendment and that no Broker brought about this transaction other than Flinn Ferguson Cresa. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than other than Flinn Ferguson Cresa, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this Eleventh Amendment. Landlord shall be responsible for all commissions due to Flinn Ferguson Cresa arising out of the execution of this Eleventh Amendment in accordance with the terms of a separate agreement between Landlord and Flinn Ferguson Cresa.

9. **OFAC**. Tenant and Landlord are currently (a) in compliance with and shall at all times during the Term of the Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "**OFAC Rules**"), (b) not listed on, and shall not during the Term of the Lease be listed on, the Specially Designated Nationals and Blocked Persons List maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

10. **Miscellaneous**.

a. This Eleventh Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. Reference to the Lease in this Eleventh Amendment shall mean the Lease as amended by this Eleventh Amendment. This Eleventh Amendment may be amended only by an agreement in writing, signed by the parties hereto.

b. Once executed by both parties, this Eleventh Amendment is binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

c. This Eleventh Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal ESIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this Eleventh Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

d. Except as amended and/or modified by this Eleventh Amendment, the Lease is hereby ratified and confirmed and all other terms of the Lease shall remain in full force and effect, unaltered and unchanged by this Eleventh Amendment. In the event of any conflict between the provisions of this Eleventh Amendment and the provisions of the Lease, the provisions of this Eleventh Amendment shall prevail. Whether or not specifically amended by this Eleventh Amendment, all of the terms and provisions of the Lease are hereby amended to the extent necessary to give effect to the purpose and intent of this Eleventh Amendment.

[Signatures are on the next page]

IN WITNESS WHEREOF, the parties hereto have executed this Eleventh Amendment as of the day and year first above written.

TENANT:

BIOLIFE SOLUTIONS, INC.,
a Delaware corporation

By: /s/ Roderick de Greef
Its: President & COO

LANDLORD:

ARE-SEATTLE NO. 38, LLC,
a Delaware limited liability company

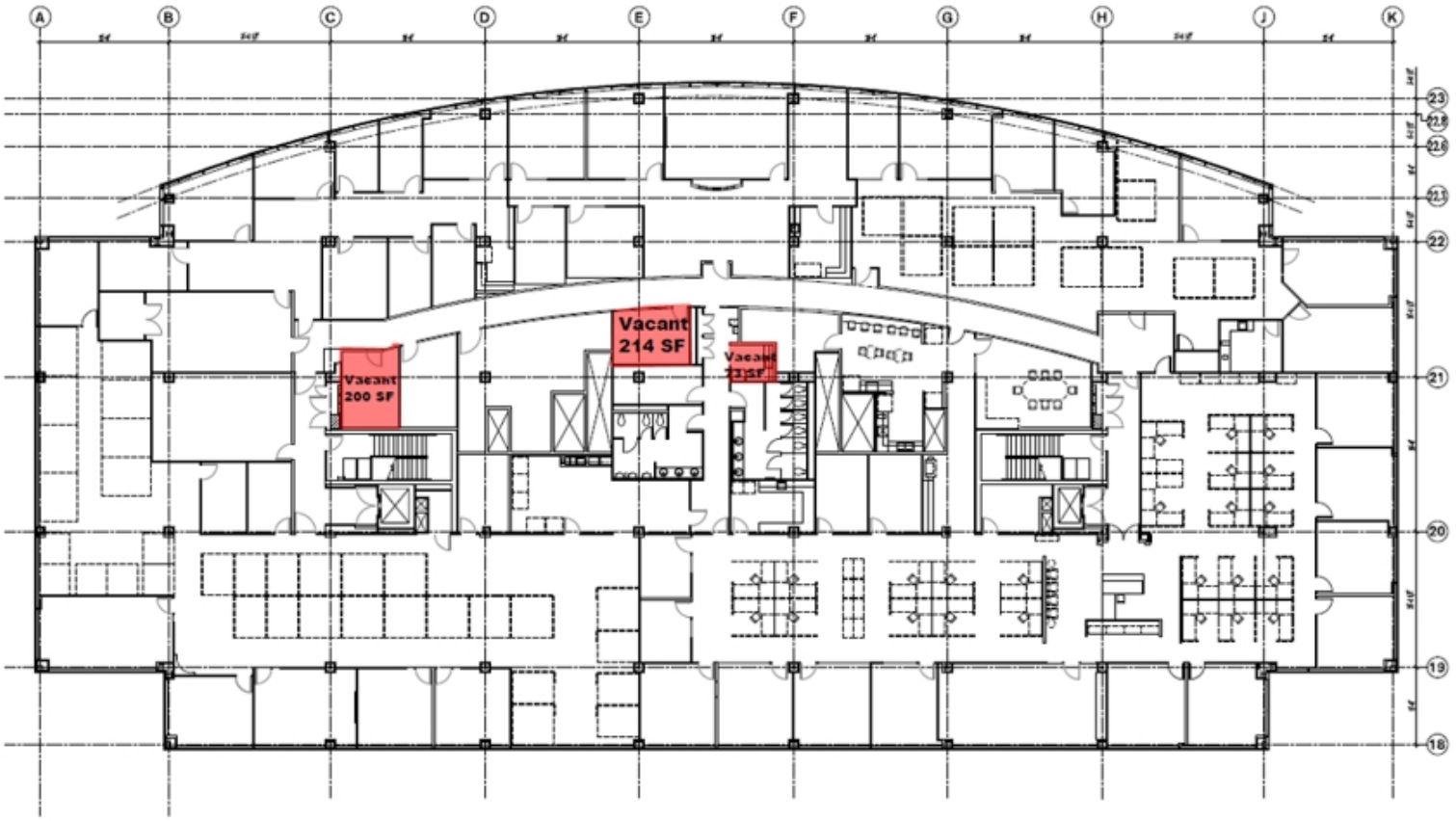
By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
its managing member

By: ARE-QRS CORP.,
a Maryland corporation,
its general partner

By: /s/ Jackie Clem
Its: General Counsel

EXHIBIT A

EXPANSION PREMISES
(to be attached as Exhibit C.10 to the Lease)



Admin Building Level-3
NTS
08/31/15

Exhibit 10.21

LEASE

301 Treble Cove Road Billerica, LLC,
a Massachusetts limited liability company, as

Landlord,

and

BioLife Solutions, Inc., a
Delaware corporation,

as Tenant

with respect to certain premises containing
approximately 26,800 square feet of space

at

301 Treble Cove Road in

Billerica, Massachusetts

TABLE OF CONTENTS

Article	Page
ARTICLE I: BASIC TERMS	1
ARTICLE II: LEASE OF PREMISES	4
ARTICLE III: DELIVERY OF PREMISES	6
ARTICLE IV: BASE RENT	7
ARTICLE V: ADDITIONAL RENT	7
ARTICLE VI: MAINTENANCE, USE, AND ALTERATIONS OF PREMISES	14
ARTICLE VII: INSURANCE AND INDEMNIFICATION	19
ARTICLE VIII: ASSIGNMENT AND SUBLETTING	23
ARTICLE IX: DEFAULT AND REMEDIES	25
ARTICLE X: CASUALTY AND CONDEMNATION	31
ARTICLE XI: PROTECTION OF LENDERS	32
ARTICLE XII: MISCELLANEOUS	34
ARTICLE XIII: LANDLORD’S WORK	39

ARTICLE I: BASIC TERMS

1.1. Reference Subjects. The following terms used in this Lease shall have the meanings set forth below.

Effective Date:	January 29, 2021
Landlord:	301 Treble Cove Road Billerica, LLC, a Massachusetts limited liability company
Tenant:	BioLife Solutions, Inc., a Delaware corporation
Land:	That certain parcel of land located in Billerica, Massachusetts owned by Landlord and more particularly described in Exhibit A-2 attached to and hereby made a part of this Lease.
Building:	That certain building to be constructed on the Land, as more particularly described as Landlord's Work in Exhibit C attached to and hereby made a part of this Lease.
Property:	The Land, the Building, and all other improvements (if any) located or to be located on the Land.
Premises:	That certain portion of the Building shown on Exhibit A-1 attached hereto, consisting of approximately 26,800 square feet, to be measured in accordance with the BOMA Industrial Standard of Measurement (ANSI Z65.2-2012) (the "BOMA Standard").
Tenant's Proportionate Share:	33%
Landlord's Work:	The construction of the Building to be made by Landlord in accordance with the terms and conditions of Article XIII of this Lease and Exhibit C.
Substantial Completion Target Date:	One hundred (100) days (subject to extension for Tenant Delay or Force Majeure) after the date on which the Building Permit (as defined in Section 3.2 hereof) for Landlord's Work is issued.
Commencement Date:	The earlier of (a) the date that Landlord's Work is Substantially Complete as provided in Article XIII below and Landlord delivers a certificate of occupancy or temporary certificate of occupancy (in either case, a "Certificate of Occupancy") to Tenant (or the date on which the same would have occurred if not for Tenant Delay) and (b) June 1, 2021.

Rent Commencement Date: The date that is one hundred fifty (150) days following the Commencement Date.

Expiration Date: The last day of calendar month in which the date this is ten (10) years and five (5) months after the Commencement Date occurs.

Original Term: Ten (10) years and five (5) months commencing on the Commencement Date and ending on the Expiration Date

Extended Terms: Two (2) option period of five (5) years each, as more particularly described in Section 2.3 hereof

Lease Term: The Original Term, together with any Extended Term(s) that may become effective in accordance with Section 2.3 hereof

Lease Year: Each period beginning on the Commencement Date or an anniversary thereof and ending on the day immediately preceding the subsequent anniversary of the Commencement Date.

If the Commencement Date does not occur on the first (1st) day of a calendar month, then the "anniversary of the Commencement Date," whenever used in this Lease, will be deemed to occur on the anniversary of the first (1st) day of the first (1st) full calendar month of the Lease Term.

Permitted Uses: Office, light assembly, and warehouse. To the extent all required governmental and quasi-governmental approvals, consents, and the like are granted in connection with the same, the following may be deemed added to the list of Permitted Uses: temperature control storage of pharmaceuticals and related compounds and products.

Security Deposit: $57,562.12, as required to be delivered by Tenant to Landlord pursuant to the terms and conditions of Section 9.10 hereof, in the form of an unconditional, irrevocable letter of credit in form reasonably satisfactory to Landlord.

Base Rent:

Period of Time During Lease Term	**Annual Amount**	**Monthly Payment**
*Lease Year 1	$321,600.00	$26,800.00
Lease Year 2	$329,640.00	$27,470.00
Lease Year 3	$337,948.00	$28,162.33
Lease Year 4	$346,524.00	$28,877.00
Lease Year 5	$355,100.00	$29,591.67
Lease Year 6	$363,944.00	$30,328.67
Lease Year 7	$373,056.00	$31,088.00
Lease Year 8	$382,436.00	$31,869.67
Lease Year 9	$392,084.00	$32,673.67
Lease Year 10	$402,000.00	$33,500.00
Lease Year 11	$412,184.00	$34,348.67

*If the Commencement Date does not occur on the first (1st) day of a calendar month, then the partial calendar month beginning on the Commencement date will be considered part of Lease Year 1. Lease Year 2 will commence on the first anniversary of the Commencement Date. Base Rent for any partial month will be prorated, with one- thirtieth (1/30) of the monthly Base Rent payment due for each day of such partial month.

Broker(s):	Landlord's Broker:	CBRE, Inc. 33 Arch Street, 28th Floor Boston, MA 02110 Attn: Robert Gibson, Jr.
	Tenant's Broker:	JLL One Post Office Square Boston, MA 02109 Attn: Brian Morrissey

Address for Rent Payments: **301 Treble Cove Road Billerica, LLC c/o Calare Properties, Inc.**
30 Speen Street
Framingham, MA 02111

Exhibits:	A-1:	Plan of the Premises
	A-2:	Legal Description of the Land
	B:	Rules and Regulations
	C:	Work Letter
	D:	Form of Commencement Date Confirmation Agreement

ARTICLE II: LEASE OF PREMISES

2.1. Premises. Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord for the Lease Term, subject to and with the benefit of the terms, covenants and conditions of this Lease, and of rights, agreements, easements and restrictions of record applicable to the Property, all of which Tenant shall perform and observe insofar as the same are applicable to the Premises. Tenant shall have access to the premises twenty-four (24) hours per day, seven (7) days per week during the Lease Term, subject to the terms and conditions of this Lease. Tenant shall have the right to the non-exclusive use of all exterior portions of the Property that are designated by Landlord from time to time for the common use of Tenant, Landlord, and all other tenants of the Building at and above grade level, but Tenant shall not have any right of access, control over, or other ability to use any portion of the Property below grade level, all of which is hereby reserved to Landlord. Notwithstanding anything set forth elsewhere in this Lease to the contrary, Tenant shall not have the right to use the roof of the Building or any portion thereof except with the prior written consent of Landlord (which prior written consent of Landlord may be withheld by Landlord in its sole and absolute discretion). Notwithstanding the foregoing, Landlord shall construct an approximate 16' x 35' concrete pad (the "Generator Pad") close to the building, and Tenant shall have the right to install thereon generator(s), compressor(s) and such other equipment as Tenant may desire, subject to Landlord's prior written consent, which consent shall not be unreasonably withheld or delayed. Notwithstanding anything to the contrary set forth elsewhere in this Lease, Landlord shall have the right to use (a) the roof of the Building and any and all portions thereof at any time or times during the Lease Term for the installation and/or operation of solar equipment, antennae and other communication equipment, water collection facilities, and/or such other equipment as Landlord shall deem necessary or appropriate and (b) the Land and any and all portions thereof at any time or times during the Lease Term for the installation and/or operation of solar panels, wind turbines, communication equipment, billboards, and/or such other ground-based equipment as Landlord shall deem necessary or appropriate, and in each case Landlord will use commercially reasonable efforts not to materially interfere with Tenant's use of the Premises or increase Tenant's costs. Tenant shall have the right to use the roof of the Building (or such other portion of the Property as Landlord shall reasonably determine) in common with the Landlord for the installation of HVAC and other equipment and apparatuses as Tenant may desire, subject to Landlord's prior written consent in each individual case, which consent may be granted or withheld in Landlord's sole and absolute discretion; provided that Tenant shall remove any such HVAC equipment upon the expiration or earlier termination of the Lease Term.

2.2. Lease Term. The Lease Term shall begin on the Commencement Date and shall end on the Expiration Date. At Landlord's option, promptly following the occurrence of the Commencement Date, Tenant shall execute a Commencement Date Confirmation Agreement substantially in the form attached to and hereby made a part of this Lease as Exhibit D.

2.3. Options to Extend Term.

(a) Provided that (i) there is no uncured Event of Default hereunder by Tenant at the time of Tenant's Extension Notice (as defined below), (ii) there is no circumstance which with the giving of notice or passage of time shall constitute an Event of Default, and (iii) Tenant has not been in default of any of its obligations under this Lease (other than the payment of Rent) on two (2) or more occasions during the Lease Term (collectively, the "Extended Term Exercise Conditions"), Tenant shall have two (2) options (each an "Extension Option") to extend the Lease Term for an additional term of five (5) years (each an "Extended Term"), commencing upon the Expiration Date of the Original Term or the first Extended Term, as the case may be, and terminating sixty (60) months thereafter, provided that Tenant proceeds strictly in accordance with the provisions of this Section 2.3.

(b) To effectively exercise an Extension Option, Tenant shall, not more than eighteen (18) months nor less than twelve (12) months prior to the Expiration Date of the Original Term or the first Extended Term, whichever is then current, provide written notice to Landlord ("Tenant's Extension Notice") that Tenant wishes to extend the Lease Term for the first or second Extended Term, as applicable. If at the time Landlord receives Tenant's Extension Notice the Extended Term Conditions are satisfied, then Landlord shall, within thirty (30) days of Landlord's receipt of Tenant's Extension Notice, provide written notice to Tenant ("Landlord's Extension Notice Response") of the Base Rent that will be due for the Extended Term (the "Extended Term Base Rent"). The Extended Term Base Rent specified by Landlord shall be that which Landlord reasonably projects will be the fair market rent as of the commencement of the Extended Term based upon what would be offered in the market for lease renewals of comparable space in a comparable building in the suburban Boston market, and in no event shall the Extended Term Base Rent be less than the rental rate in effect during the final year of the Original Term or the first Extended Term, whichever is then current. Tenant shall, within thirty (30) days of Tenant's receipt of Landlord's Extension Notice Response, provide written notice to Landlord ("Tenant's Extended Term Base Rent Response") indicating whether or not Tenant agrees to pay such Extended Term Base Rent.

(i) If Tenant, in Tenant's Extended Term Base Rent Response, agrees to pay the Extended Term Base Rent quoted in Landlord's Extension Notice Response, and if upon the commencement date of the Extended Term, the Extended Term Conditions are satisfied, then this Lease shall be extended for the Extended Term without the requirement of any additional documentation, and each and every term and condition of this Lease shall apply during the Extended Term, except that the Base Rent shall be the Extended Term Base Rent.

(ii) If Tenant, in Tenant's Extended Term Base Rent Response, does not agree to pay the Extended Term Base Rent quoted in Landlord's Extension Notice Response and elects to proceed to arbitration with respect to the Extended Term Base Rent, then Landlord and Tenant shall proceed as follows:

Each of Landlord and Tenant shall at its own cost and expense retain a real estate broker, who must have ten (10) years' experience in commercial leasing in the suburban Boston market, to determine the fair market rent for the Premises as of the commencement date of the Extended Term, which appraisals must be completed and submitted within thirty (30) days of the commencement of the appraisal process by Tenant's notice. If the two appraisals are within five percent (5%) of each other, the average of the two amounts shall constitute the Extended Term Base Rent. If the two appraisals are not within five percent (5%) of each other, the two brokers shall select a third real estate broker (who must also possess the minimum qualifications described above), who within the next thirty (30) days shall select which of the two initial amounts shall constitute the Extended Term Base Rent. Landlord and Tenant shall each bear one-half of the cost of said third broker. The appraisal process shall be binding upon both Landlord and Tenant, and once the process is initiated, Tenant may not withdraw Tenant's Extension Notice.

iii. If Tenant, in Tenant's Extended Term Base Rent Response, does not agree to pay the Extended Term Base Rent quoted in Landlord's Extension Notice Response and does not elect to proceed to arbitration with respect to the Extended Term Base Rent, then the Lease Term shall expire as set forth in Section 2.2 hereof and Tenant shall have no further right to extend the Lease Term.

(c) If Tenant does not deliver Tenant's Extension Notice to Landlord on or before the date three hundred sixty-five (365) days prior to the Expiration Date of the Original Term or the first Extended Term, whichever is then current, then the Lease Term shall expire as set forth in Section 2.2 hereof and Tenant shall have no further right to extend the Lease Term.

ARTICLE III: DELIVERY OF PREMISES

3.1. Delivery of Premises. The Premises are demised and leased subject to the existing state of title as of the Commencement Date. Landlord represents that it holds title to the Property in fee simple.

3.2. Existing Conditions. Tenant hereby acknowledges that it has inspected the Premises and, subject to the completion of Landlord's Work, accepts the same in the condition they are in on the Commencement Date, it being expressly agreed that neither Landlord nor any person acting under Landlord has made or implied any representations or warranties concerning this Lease, the Premises, or their condition or suitability for Tenant's use. To the extent permitted by applicable law, Tenant waives any right or remedy otherwise accruing to Tenant on account of the condition or suitability of the Premises, or title to the Premises, and Tenant agrees that, subject to the completion of Landlord's Work, Tenant takes the Premises "as-is," with all faults and without any such representation or warranty, including any implied warranties. Notwithstanding anything to the contrary set forth elsewhere in this Lease, Tenant hereby acknowledges and agrees that Tenant shall be responsible, at Tenant's sole cost and expense, for obtaining and/or maintaining at any time on or before the Lease Term all federal, state, and/or local approvals, consents, and licenses of any kind whatsoever that shall be necessary or required, or which Tenant may desire, in connection with Tenant's use and occupancy of the Premises pursuant to this Lease, including, without limitation, for the obtaining of any and all required certificates of use and/or occupancy, and that Landlord shall have no obligation of any kind whatsoever in connection therewith other than with respect to the obtaining, at Landlord's sole cost and expense, of any building permit that may be necessary to be obtained in connection with the construction and/or installation of Landlord's Work (any "Building Permit"), and a Certificate of Occupancy for the base building.

ARTICLE IV: BASE RENT

4.1. Base Rent. Commencing on the Rent Commencement Date and on the first (1st) day of each subsequent calendar month during Lease Term, Tenant shall pay to Landlord the Base Rent set forth in Section 1.1 hereof in lawful money of the United States, in advance and without offset, deduction, prior notice, or prior demand, except that the first full monthly payment of Base Rent and estimated Operating Expenses shall be paid upon execution and delivery of this Lease by Tenant. If the Lease Term includes a partial calendar month at its beginning or end, the monthly installment of Base Rent and estimated Operating Expenses for such partial month shall be prorated at the rate of 1/30 of the monthly installment for each day in such partial month within the Lease Term and shall be payable in advance on the first day of such partial month occurring within the Lease Term. The Base Rent shall be payable at the address of Landlord set forth in Section 1.1 hereof or at such other place or to such other person as Landlord may designate in writing from time to time.

ARTICLE V: ADDITIONAL RENT

5.1. Additional Rent. All sums payable by Tenant under this Lease other than Base Rent shall be deemed "Additional Rent." For purposes of this Lease, "Rent" means, collectively, the Base Rent and the Additional Rent. Unless this Lease provides otherwise, Tenant shall pay all Additional Rent then due with the next monthly installment of Base Rent. Tenant's responsibility for any payments of Additional Rent due under this Lease shall commence as of the Commencement Date.

5.2. Operating Expenses.

(a) In addition to Base Rent, Tenant agrees to pay to Landlord Tenant's Proportionate Share of Operating Expenses for the Premises, as hereinafter defined. Commencing on the Commencement Date, Tenant shall pay Tenant's Proportionate Share of Operating Expenses in monthly payments, each in an amount equal to one-twelfth (1/12th) of Tenant's Proportionate Share of Operating Expenses as estimated by Landlord for the applicable calendar year. Within ninety (90) days, or such later date as is reasonably practical, after the end of each calendar year within the Lease Term, Landlord shall determine the actual amount of Tenant's Proportionate Share of Operating Expenses for the expired calendar year and deliver to Tenant a written statement of such amount (each an "Operating Expenses Statement"). If Tenant's total payments of estimated Operating Expenses for any calendar year are less than actual Operating Expenses for such calendar year, then Tenant shall pay the difference to Landlord within thirty (30) days after demand, and if Tenant's total payments of estimated Operating Expenses for any calendar year are more than actual Operating Expenses for such calendar year, then Landlord shall retain such excess and credit it against Tenant's next occurring payments on account of Operating Expenses, or if in the last year of the Lease Term, Landlord shall refund to Tenant such excess within thirty (30) days of the expiration or earlier termination of this lease. For purposes of calculating Tenant's payment of Tenant's Proportionate Share of Operating Expenses, a year shall mean a calendar year, except the last year, which shall end on the expiration or termination of this Lease. At any time, Landlord may adjust the amount of the estimated Tenant's Proportionate Share of Operating Expenses to reflect Landlord's estimate of Tenant's Proportionate Share of Operating Expenses for the year and, commencing on that date which is thirty (30) days after the date of such notice, Tenant shall begin to make payments to Landlord in accordance with the adjusted amounts designated by Landlord.

(b) Each Operating Expenses Statement delivered to Tenant shall constitute an account stated between Landlord and Tenant and shall be conclusively binding upon Tenant, unless Tenant (i) pays to Landlord when due the amount set forth in such Operating Expenses Statement, without prejudice to Tenant's right to dispute such Operating Expenses Statement, and (ii) within thirty (30) days after such Operating Expenses Statement is delivered, sends a written notice to Landlord objecting to such Operating Expenses Statement and specifying the reasons therefor, in which event, upon request, Tenant may, at its sole cost and expense, audit the books and records pertaining to the Operating Expenses for the applicable calendar year. Said audit shall be (a) performed, at Landlord's option, either (i) at a mutually satisfactory time at Landlord's offices in Framingham, Massachusetts, or (ii) after physical or electronic delivery to Tenant of the relevant documents and (b) completed no later than ninety (90) days after receiving the applicable statement of Operating Expenses. Such audit may be made only by Tenant, a nationally or regionally recognized independent certified public accounting firm, or a qualified leasing consultant professional. In no event may Tenant employ, in connection with any such audit or any dispute under this Lease, any person or entity who is to be compensated in whole or in part, on a contingency fee basis. In connection with any such audit, Tenant, and all accountants, consultants and agents of Tenant, shall keep all information confidential and shall execute and deliver to Landlord a commercially reasonable confidentiality agreement, whereby such parties agree not to disclose to any third party any of the information obtained in connection with such audit. Tenant shall pay the fees and expenses relating to such audit, unless it is conclusively determined that Landlord overstated Operating Expenses by more than five percent (5%) for such year, in which event Landlord shall reimburse Tenant for the reasonable out-of-pocket costs incurred by Tenant in such audit.

(c) For purposes of this Lease, "Taxes" shall mean all taxes, assessments, betterments, excises, user fees and all other governmental charges and fees of any kind or nature, or impositions or agreed payments in lieu thereof or voluntary payments made in connection with the provision of governmental services or improvements of benefit to the Building or the Property (including any so-called linkage, impact or voluntary betterment payments), and all penalties and interest thereon, assessed or imposed or accrue against the Property or any part thereof (including, without limitation, any personal property taxes levied on such property or on fixtures or equipment used in connection therewith), or upon Landlord by virtue of its ownership thereof, other than a federal or state income tax of general application, during the Lease Term. If during the Lease Term the present system of ad valorem taxation of property shall be changed so that, in lieu of or in addition to the whole or any part of such ad valorem tax, there shall be assessed, levied or imposed on the Property or any part thereof or on Landlord any kind or nature of federal, state, county, municipal or other governmental capital levy, income, sales, franchise, excise or similar tax, assessment, levy, charge or fee (as distinct from the federal and state income tax in effect on the Commencement Date) measured by or based in whole or in part upon the Building valuation, mortgage valuation, rents or any other incidents, benefits or measures of real property or real property operations and imposed on owners of real estate generally, then any and all of such taxes, assessments, levies, charges and fees shall be included within the term "Taxes", but only to the extent the same are applicable to the Property and the rents hereunder.

(d) If Landlord shall receive a refund of any Taxes paid by Tenant, provided that Tenant is not then in default under this Lease (and provided that if Tenant is in default, but not beyond any applicable notice or cure period, Tenant shall have the opportunity to cure such default in accordance with the terms of this Lease), Landlord shall reimburse Tenant the amount of Tenant's Proportionate Share of Taxes paid by Tenant from said refund after deducting therefrom the out of pocket costs and expenses incurred by or on behalf of Landlord to obtain such refund.

(e) For purposes of this Lease, "Operating Expenses" shall mean all sums expended or obligations incurred by Landlord with respect to the ownership, management, operation, maintenance, repair, and/or replacement of the Premises, the Building or the Property, whether or not now foreseen, determined on an accrual basis (including reasonably foreseeable expenditures not occurring annually), including, but not limited to: (i) all Taxes; (ii) all personal property taxes relating to the Property; (iii) all costs of maintenance, security, and/or property management services; (iv) all costs of insurance (including premiums for coverage on the Building, the common areas and/or the Property obtained in accordance with Section 7.1(d) hereof); (v) all license, permit, inspection and other fees paid to governmental agencies; (vi) all fees and assessments imposed by any covenants or owners' association; (vii) all costs of materials and supplies, including, but not limited to, charges for telephone, postage and supplies related exclusively to the Building and the Property (or if not exclusively relating, then apportioned to the extent relating to the Building and/or the Property); (viii) all costs of repairs, maintenance and/or replacements respecting the Building and/or the Property (including with respect to the foundation, exterior walls, structural walls and the roof of the Building, the mechanical systems serving the Building or the Premises), as well as the exterior portions of the Building and the Property such as the driveways and parking areas, exterior lighting, curbs, drainage stops and sewer lines); (ix) all expenses incurred by Landlord or Landlord's agents which shall be directly related to employment of personnel (except as set forth in Section 5.2(g) below), including amounts incurred for wages, salaries and other compensation for services, payroll, social security, unemployment and similar taxes, workmen's compensation insurance, disability benefits, pensions, hospitalization, retirement plans and group insurance, uniforms and working clothes and the cleaning thereof, and expenses imposed on Landlord or Landlord's agents pursuant to any collective bargaining agreement for the services of employees of Landlord or Landlord's agents; (x) management fees (not to exceed five percent (5%) of the rent received by Landlord from the Building); (xi) all costs relating to Title Documents (as defined below), security services, and any and all other reasonable and customary expenses related to the exterior areas located in or on the Property; (xii) any expenses incurred as a result of Landlord's compliance with any of its obligations under this Lease; (xiii) snow and ice removal, the cleaning of sidewalks, lawn maintenance, replanting of landscaped areas, exterior lighting and signage for the Premises, the Building and/or the Property; (xiv) waste removal charges; (xv) costs incurred in connection with the operation, maintenance, repair, replacement, inspection and servicing (including maintenance contracts) of electrical, plumbing, heating, air conditioning, ventilating, fire and life safety, and all other mechanical equipment or systems of the Building and the cost of materials used in connection therewith; (xvi) cost of services including heat, air conditioning, electricity, gas, water and sewer, storm water discharge, and other utilities not separately metered to the Premises (including, without limitation, water and sewer) or not separately billed directly by Landlord to any tenants at the Building; and (xvii) Capital Expenditures, to the extent set forth in Section 5.2(f) hereof. As used herein, "Title Documents" means any and all easements, covenants, conditions, and restrictions, industrial park association agreements, and other agreements, encumbrances, and restrictions of record affecting all or part of the Property, as the same may now exist, or as the same may hereafter be created or amended, but excluding any mortgage.

(f) The cost of any Permitted Capital Expenditure (as hereinafter defined) shall be amortized over the useful life of such Capital Expenditure (as determined in accordance with generally accepted accounting principles, consistently applied ("GAAP")) and only the amortized portion thereof (the "Annual Capital Expenditure Charge-Off") shall be included in Operating Expenses with interest at the "prime rate" as announced to be in effect from time to time, as published as the average rate in The Wall Street Journal, plus one hundred fifty (150) basis points. As used herein, the term "Capital Expenditure" means any cost or expense that (i) is treated as a capital expenditure under GAAP and (ii) exceeds $15,000, and "Permitted Capital Expenditure" means a Capital Expenditure that (x) is required by law first enacted or adopted after the date of this Lease, or (x) is reasonably projected to reduce Operating Expenses.

(g) In no event shall "Operating Expenses" include any of the following:

(i) Capital Expenditures (other than Permitted Capital Expenditures), depreciation, and amortization, except as otherwise expressly set forth in this Section 5.2;

(ii) Fixed or percentage rent under any ground lease;

(iii) Costs of renovating or otherwise improving, decorating, painting or redecorating space for tenants or other occupants of the Building;

(iv) Leasing fees or commissions, advertising and promotional expenses, legal fees, the cost of tenant improvements, build out allowances, moving expenses, assumption of rent under existing leases and other concessions incurred in connection with leasing space in the Building;

(v) Expenses incurred in leasing or obtaining new tenants or retaining existing tenants, such as, but not limited to, leasing commissions, advertising or promotion;

(vi) Interest, amortization or other costs associated with any mortgages, loans or any refinancing of the Building or Property, bad debt loss, rent loss or reserves for either of them;

(vii) Costs incurred by Landlord in connection with the correction of latent defects in the construction or design of the Building or the Property which are discovered on or before the date three (3) years after the obtaining of the Certificate of Occupancy for the Building;

(viii) salaries for individuals above the level of Property Manager, and Landlord's general overhead expenses not related to the Building (Tenant hereby acknowledging that Operating Expenses shall include a management fee); or

(ix) costs incurred in the removal or abatement of Hazardous Materials (as hereinafter defined) present in the Building or on the Property.

(h) In determining the amount of Operating Expenses for any calendar year or portion thereof falling within the Lease Term, if less than one-hundred percent (100%) of the rentable area of the Building shall have been occupied by tenants at any time during the period in question, then, at Landlord's election, Operating Expenses for such period shall be adjusted to equal the amount Operating Expenses would have been for such period had occupancy been one- hundred percent (100%) throughout such period. Only those components of Operating Expenses that are affected by variation in occupancy levels shall be "grossed up" under the immediately preceding sentence.

(i) For purposes of computing Tenant's Proportionate Share of Operating Expenses, the Controllable Expenses (hereinafter defined) to be included in Operating Expenses in any calendar year shall not exceed the Controllable Expense Cap, as hereinafter defined. The "Controllable Expense Cap" for the second full calendar year during the Lease Term shall be one hundred three percent (103%) of the Controllable Expenses for the first full calendar year during the Lease Term. Thereafter, the Controllable Expense Cap for each succeeding calendar year shall be one hundred three percent (103%) of the Controllable Expense Cap for the preceding calendar year. By way of illustration, if the Commencement Date occurs on December 1, 2020, and actual Controllable Expenses were $10.00 per rentable square foot for calendar year 2021, then the Controllable Expense Cap for calendar year 2022 shall be $10.30 per rentable square foot, and the Controllable Expense Cap for calendar year 2023 shall be $10.61 per rentable square foot. "Controllable Expenses" shall mean all Operating Expenses, the cost of which are within the reasonable control of Landlord. Controllable Expenses shall exclude, without limitation: the cost of insurance, utilities, snow removal, taxes, the Annual Capital Expenditure Charge-Off, and union labor (or labor costs tied to union labor rates).

5.3. Utilities.

(a) To the extent gas, water, sewer, electricity, telecommunications, and other energy, utilities and services used or consumed on the Premises during the Lease Term are separately metered, Tenant agrees that it shall pay all charges and deposits directly to the applicable utility provider. To the extent the Premises are not separately metered for any such utilities and/or services, then Tenant shall pay to Landlord not later than ten (10) days after written demand is made by Landlord such amount(s) as may be reasonably estimated by Landlord from time to time for the costs of utilities and/or services serving the Premises. Landlord reserves the right (at Landlord's expense) to separately meter any utilities used or consumed on the Premises at any time to the extent such utilities are not now so separately metered. For those utilities that are separately metered as of the Commencement Date or become separately metered during the Lease Term as aforesaid, Tenant shall make arrangements with appropriate utility or service companies, and Tenant shall promptly pay all costs with respect to same, such payments to be made, to the extent possible, directly to the utility or service provider or to the appropriate party charged with collecting the same. It is understood and agreed that Landlord (i) shall be under no obligation whatsoever to furnish any such utilities or services to the Premises and (ii) shall not be liable for (nor suffer any reduction in any rent on account of) any interruption or failure in the supply of the same.

(b) Upon written request from time to time, Tenant shall provide Landlord with evidence that all utilities are paid current. Tenant may, with the express prior written consent of Landlord (which consent shall not be unreasonably withheld, conditioned, or delayed), bring utilities or services that are not currently at the Building to the Premises, subject to all applicable Laws and approvals.

(c) Landlord shall have no responsibilities, obligations, or liabilities for any failure or interruption of any of the services described in this Section 5.3, or for any failure or inability to make any repairs or replacements, if such failure, interruption or inability arises out of or results from Force Majeure or any other causes beyond the reasonable control of Landlord. Without limiting the foregoing, in no event shall Landlord ever be liable to Tenant for any lost profits, or for any indirect or consequential damages. No failure or omission on the part of Landlord to furnish any of the services described in this Section 5.3 shall be construed as an eviction of Tenant, actual or constructive, nor entitle Tenant to an abatement or reduction of, or offset against, Rent (except as expressly set forth in this Section 5.3, nor render the Landlord liable in damages, nor release Tenant from prompt fulfillment of any of its obligations and covenants under this Lease.

(d) Notwithstanding anything to the contrary contained in this Lease, if the Premises shall lack any service which Landlord is required to provide hereunder, which lack of service renders the Premises or a portion thereof untenantable (a "Service Interruption"), such that the continued operation in the ordinary course of Tenant's business is materially adversely affected for and beyond the Landlord Service Interruption Cure Period (as hereinafter defined), and if Tenant ceases to use the affected portion of the Premises during such period of untenantability (the "Service Interruption Period") as the direct result of such lack of service, then, provided neither such Service Interruption nor Landlord's inability to cure such Service Interruption is caused by the fault or neglect of Tenant or Tenant's agents, employees or contractors, then provided that Tenant makes written demand therefor within ninety (90) days following the end of the Service Interruption, Base Rent and Additional Rent shall be abated for the Service Interruption Period in proportion to such untenantability until such condition is cured sufficiently to allow Tenant to occupy the affected portion of the Premises. For the purposes hereof, the "Landlord Service Interruption Cure Period" shall be defined as five (5) consecutive business days after Landlord's receipt of written notice from Tenant of the condition causing the Service Interruption, provided, however, that the Landlord Service Interruption Cure Period shall be ten (10) consecutive business days after Landlord's receipt of written notice from Tenant of any such condition causing a Service Interruption if the condition was caused by causes beyond Landlord's control or if Landlord is unable to cure such condition as the result of causes beyond Landlord's control. The provisions of this Section 5.3(d) shall not apply in the event of untenantability caused by fire or other casualty, or taking. The remedies set forth in this Section 5.3(d) shall be Tenant's sole remedies in the event of a Service Interruption.

5.4. Personal Property Taxes. Tenant shall pay when due, directly to the relevant taxing authority, all taxes charged against trade fixtures, furnishings, equipment, inventory, or any other personal property belonging to Tenant. Tenant shall use its best efforts to have its personal property taxed separately from the Property. If any of Tenant's personal property shall be taxed with the Property, Tenant shall pay Landlord the taxes for such personal property within thirty (30) days after Tenant receives a written statement from Landlord for such personal property taxes.

5.5. Method of Payment. Tenant agrees to pay Base Rent to Landlord in advance in equal monthly installments by the first (1st) day of each calendar month during the Lease Term commencing on the Rent Commencement Date. Tenant shall make a ratable payment of Base Rent and Additional Rent (to the extent applicable) for any period of less than a calendar month at the beginning or end of the Lease Term. All payments of Base Rent, and all payments of Additional Rent and other sums due and payable to Landlord, shall be paid in current U.S. exchange by check drawn on a clearinghouse bank at the address of Landlord set forth in Section 1.1 hereof or such other place as Landlord may from time to time direct (or if requested by Landlord, by electronic fund transfer), without demand, set-off or other deduction.

5.6. Net Lease; Rent Payments. This Lease is an absolutely net lease to Landlord. It is the intent of the parties hereto that the Base Rent payable under this Lease shall be an absolute net return to Landlord and that Tenant shall pay all costs and expenses relating to the Premises except as otherwise expressly set forth in this Lease. Any amount or obligation herein relating to the Premises that is not expressly declared to be that of Landlord shall be deemed to be an obligation of Tenant to be performed by Tenant at Tenant's expense, and Tenant's liability for the payment of any of the same shall survive the expiration or earlier termination of the Lease Term. All Base Rent, Additional Rent, and other sums payable hereunder by Tenant, shall be paid without notice or demand and without set off, counterclaim, recoupment, abatement, suspension, deduction, or defense (other than payment) whatsoever, so that this Lease shall yield net to Landlord the Base Rent under all circumstances and conditions whether now or hereinafter existing and whether or not within the contemplation of Landlord and Tenant. Except as otherwise expressly set forth in this Lease with respect to certain events of casualty or condemnation, Tenant shall in no event have any right to terminate this Lease. It is the intention of Landlord and Tenant that the obligations of Tenant hereunder shall be separate and independent covenants and agreements and that the Base Rent, the Additional Rent, and all other sums payable by Tenant hereunder shall continue to be payable in all events, and that the obligations of Tenant hereunder shall continue unaffected, unless the requirement to pay or perform the same shall have been terminated pursuant to an express provision of this Lease or by appropriate governmental authority.

5.7. True Lease. Landlord and Tenant agree that the parties intend this Lease to constitute a lease and not a financing arrangement. Landlord and Tenant shall reflect the transaction represented hereby in all applicable books, records and reports (including income tax filings) in a manner consistent with "true lease" treatment rather than "financing" treatment, subject to future modifications of accounting or tax rules or guidelines and subject to contrary determinations or positions by governmental agencies or the like.

5.8. Late Payment. If any payment of Base Rent, Additional Rent, or other payment due from Tenant to Landlord is not paid within five (5) days of when due, then Landlord may, at its option, in addition to all other remedies hereunder, impose a late charge on Tenant equal to five percent (5%) of the amount in question, which late charge will be due upon demand as Additional Rent. In addition to the late charge payable by Tenant pursuant to the preceding sentence of this paragraph, any such delinquent payment of Base Rent, Additional Rent, or other payment shall bear interest from the date due at that rate (the "Default Rate") that is the greater of (A) one and one-half percent (1.5%) for each month (or ratable portion thereof) the same remains unpaid, or (B) three percent (3%) per annum (or ratable portion thereof) above the so-called prime rate of interest published in The Wall Street Journal from time to time on ninety (90) day loans to its most credit-worthy borrowers; provided that interest shall never exceed the maximum rate permitted under applicable law.

ARTICLE VI: MAINTENANCE, USE, AND ALTERATIONS OF PREMISES

6.1. Landlord's Repair Obligations. Subject to reimbursement pursuant to Section 5.2 hereof, Landlord shall maintain, repair and replace the foundation, the exterior walls, the structural walls, and the structural elements of the roof of the Building and the mechanical systems serving the Building (but excluding any mechanical systems that are located within and exclusively serve the Premises), as well as the exterior portions of the Building and the Property. Any maintenance, repair, or replacement of mechanical systems exclusively serving the Premises performed by Landlord or its contractors, employees, or agents shall be performed at Tenant's expense, and Tenant shall pay to Landlord any and all amounts incurred in connection therewith within five (5) business days of Landlord's request for any such payment (in addition to, rather than as a part of, Operating Expenses). Except as expressly set forth in the immediately preceding sentence and in Sections 10.1 and 10.2 hereof, Landlord shall have no obligation to repair or maintain the Building, the Property, or the Premises. Tenant hereby waives (to the extent waivable under applicable Laws) the benefit of any present or future Laws that provide Tenant the right to repair the Building or the Premises at Landlord's expense or to terminate this Lease because of the condition of the Building or the Premises. Notwithstanding anything to the contrary in this paragraph, Tenant shall be solely responsible for the cost of (a) any repair or capital replacement arising from an overburdening of any component or system of the Building or any other act or omission of Tenant or any of the employees, agents, contractors, or invitees of Tenant or from a failure by Tenant to perform its maintenance and repair obligations under this Lease, and (b) any Alterations (as defined in Section 6.7 hereof) that are performed by or on behalf of Tenant.

6.2. Tenant's Repair and Maintenance Obligations. Except to the extent being an obligation of Landlord pursuant to Sections 10.1 or 10.2 hereof, Tenant shall clean, maintain, repair, replace, and secure the Premises, all improvements and appurtenances thereto, all access areas thereof, and all utilities, facilities, installations and equipment used in connection therewith, and shall pay all costs and expenses of so doing, keeping the Premises in good order, repair and condition, reasonable wear and tear, and damage by casualty and taking (to the extent provided in Article X of this Lease only) excepted. Without limiting the generality of the foregoing, Tenant shall keep all interior walls, floor surfaces (including all floor slabs) and coverings, glass, windows, doors, and partitions, all fixtures and equipment, all utilities, pipes and drains and other above-ground level installations used in connection with the Premises (including, without limitation, the heating, ventilation, air conditioning, plumbing, electrical, utility, and fire and life safety systems) in good order, repair and condition, shall provide all cleaning, painting and floor covering to the Premises, and shall remove all refuse from and provide its own janitorial services for the Premises. Tenant shall keep in good order, condition and repair all Building systems (including the heating, ventilation, air conditioning, plumbing, electrical, utility, and fire and life safety systems) located completely within the Premises and/or servicing the Premises exclusively. If any portion of the Premises or any system or equipment in the Premises that Tenant shall be obligated to repair cannot be fully repaired or restored, Tenant shall promptly replace such portion of the Premises or system or equipment. At Tenant's sole cost and expense, Tenant shall enter into and maintain a preventive maintenance contract providing for the regular inspection and maintenance for the heating and air conditioning system serving the Premises by a licensed, reputable, properly insured heating and air conditioning contractor, such contract and such contractor to be approved by Landlord, such approval not to be unreasonably withheld or delayed. Landlord shall have the right, upon five (5) business days prior notice to Tenant, to perform the maintenance of the heating and air conditioning system serving the Premises at Tenant's sole cost and expense to be paid by Tenant upon demand as Additional Rent, unless Tenant commences such maintenance within such period.

6.3. Use and Compliance with Law; Rules and Regulations. Tenant shall use the Premises only for the Permitted Uses and only as permitted under applicable federal, state and local laws, ordinances, rules, regulations, orders and directives in effect from time to time, including without limitation municipal by-laws, land use and zoning laws, environmental laws and regulations (including all laws and regulations regulating the production, use, and disposal of any Hazardous Materials (as defined in Section 6.4 hereof)), and occupational health and safety laws (collectively, "Laws")). Tenant shall procure all approvals, licenses and permits necessary therefor, in each case giving Landlord true and complete copies of the same and all applications therefor. Tenant shall promptly comply with all present and future Laws applicable to the Building and Premises and Tenant's use thereof or Tenant's signs thereon, foreseen or unforeseen, and whether or not the same necessitate structural or other extraordinary changes or improvements to the Premises or interfere with Tenant's use and enjoyment of the Premises. Tenant shall comply with all applicable requirements of insurance inspection or rating bureaus having jurisdiction over the Premises and Tenant's use thereof. If Tenant's use of the Premises results in any increase in the premium for any insurance carried by Landlord, then upon Landlord's notice to Tenant of such increase Tenant shall pay the same to Landlord upon demand as Additional Rent. From and after the Commencement Date, Tenant shall bear the sole risk of all present or future Laws affecting the Premises or appurtenances thereto, and Landlord shall not be liable for (nor suffer any reduction in any rent on account of) any interruption, impairment or prohibition affecting the Premises or Tenant's use thereof resulting from the enforcement of Laws. Tenant shall comply with the rules and regulations for the Property set forth on Exhibit B attached to and hereby made a part of this Lease, as the same may be reasonably amended from time to time by Landlord for the operation, care and use of the Property and appurtenant improvements and areas in which Tenant is granted rights of use by the terms of this Lease. Tenant shall be given a copy of any changes to the rules and regulations at least five (5) days before they become effective.

6.4. Nuisance; Hazardous Materials.

(a) Tenant shall not injure, overload, deface, damage or otherwise harm the Property, the Premises or any part or component thereof; commit any nuisance; permit the emission of any Hazardous Materials; allow the release or other escape of any Hazardous Materials so as to impair or in any manner affect, even temporarily, any element or part of the Property or the Premises, or allow the storage or use of Hazardous Materials in any manner not sanctioned by Law or by the highest standards prevailing in the industry for the storage and use of such substances or materials; nor shall Tenant bring onto the Premises any Hazardous Materials except to use in the ordinary course of Tenant's business, and then only in strict compliance with applicable Laws; permit the occurrence of objectionable noise or odors; or make, allow or suffer any waste whatsoever to the Property or the Premises. As used herein, the term "Hazardous Materials" shall mean all substances described or regulated in any federal, state, local or administrative agency Law or requirement relating to environmental conditions, human health or hazardous substances, including the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. §9601 et seq.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. §6901 et seq.), the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), the Clean Air Act (42 U.S.C. §7401 et seq.), the Emergency Planning and Community Right-To- Know Act (42 U.S.C. §1101 et seq.), The Endangered Species Act (16 U.S.C. §1531 et seq.), the Toxic Substances Control Act (15 U.S.C. §2601 et seq.), the Occupational Safety and Health Act (29 U.S.C. §651 et seq.) and the Hazardous Materials Transportation Act (49 U.S.C. §1801 et seq.), and the regulations promulgated pursuant to such Laws, all as amended from time to time, and all other Laws governing similar matters as they may be amended from time to time (collectively, "Environmental Laws"). In addition, Tenant shall execute affidavits, representations and the like from time to time at Landlord's request regarding the presence or absence of Hazardous Materials on the Premises. In all events, Tenant shall indemnify, defend, and hold harmless Landlord and its mortgagees as provided in this Lease from any claims resulting from any release of Hazardous Materials on the Premises first occurring during the Lease Term, except to the extent caused by Landlord or its agents or contractors or caused by a migration onto or under the Land from adjacent property at the request of Landlord, Tenant will from time to time confirm such indemnity to mortgagees directly with such mortgagees). In all events, subject to Section 7.1(d) hereof, Landlord shall indemnify, defend, and hold harmless Tenant from any claims resulting from any release of Hazardous Materials outside the Premises, arising in the event that Landlord, Landlord's agents, employees or contractors release Hazardous Materials onto the Property.

(b) The indemnities under Section 6.4(a) hereof shall survive any termination of the Lease.

(c) Tenant's lawful use in the Premises of cleaning supplies, copying fluids, other office and maintenance supplies, and other substances normally and customarily used by tenants of space similar to the Premises, in amounts not in violation of any Environmental Laws, shall not be deemed to violate any of the provisions of this Lease.

(d) Landlord represents that Landlord has not received any written notices from any governmental authority that the Building or the Premises are in violation of any Environmental Laws, the subject of which notice remains uncorrected.

6.5. Landlord's Right to Enter. Landlord and its agents or employees may, upon reasonable prior notice, enter the Premises during business hours (and in case of emergency at any time and without notice) for the purpose of determining the need for and performing repairs or replacements, or exercising any of the rights reserved to Landlord herein, or securing or protecting Landlord's property or the Premises, or removing any Alterations not consented to by Landlord, and similarly upon reasonable notice may show the Premises to prospective purchasers and lenders, and during the last twelve (12) months of the Lease Term to prospective tenants, and may keep affixed in suitable places notices for letting (during the last twelve (12) months of the Lease Term) and selling. Except in case of emergency, Landlord shall be subject in entering the Premises to reasonable security conditions, if any, set forth by Tenant in writing to Landlord. If Tenant so desires, a representative of Tenant may accompany Landlord or its agents in any entry onto the Premises under this Lease. In exercising any rights of entry to the Premises, Landlord shall use commercially reasonable efforts not to materially interfere with or materially disrupt the normal operation of Tenant's business.

6.6. Parking. At no time during the Lease Term shall Tenant or any of the agents, employees, contractors, licensees, invitees, or customers of Tenant use or occupy more than Tenant's Proportionate Share of the striped parking spaces for automobiles located in parking areas on the Property that are from time to time designed by Landlord to be used by Tenant, Landlord and all other tenants of the Building on a non-reserved, non-exclusive basis. Notwithstanding the foregoing, (a) Tenant shall have the right to use three (3) reserved parking spaces, the initial location of which shall be as shown on Exhibit A-1 attached hereto, which location shall be subject to change by Landlord from time to time (Tenant acknowledges that Landlord reserves the right to change such designated area in the event of a change to the parking lot in general), and (b) Tenant shall not park or store any trucks, trailers or similar vehicles on the Property at any time (provided that in the event that a delivery vehicle arrives at the Property for the purpose of delivering materials to Tenant after the close of Tenant's normal business hours, such vehicle may remain on the Property until the following morning for the sole purpose of completing its delivery (no more than two (2) such vehicles may so remain at the Property overnight at any given time, and such vehicles shall remain parked at the loading docks at the Property during such overnight parking)). Handicapped spaces shall only be used by those legally permitted to use them. Except to the extent set forth elsewhere in this Lease, all parking rights granted by Landlord to Tenant pursuant to this Lease shall be without charge but, in all cases, subject to Landlord's reasonable rules and regulations in regard thereto that are promulgated by Landlord from time to time.

6.7. Alterations, Additions, and Improvements. Tenant shall not make any installations, alterations, additions, or improvements in or to the Premises (collectively, "Alterations"), including, without limitation, any apertures in the walls, partitions, ceilings or floors, without on each occasion obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed with respect to Alterations that do not affect the structure or mechanical, electrical, or other systems of the Building (and may otherwise be withheld or granted in Landlord's sole and absolute discretion), except that only prior notice and a description of and plans for the work (but no approval) shall be required for any interior Alterations costing less than $25,000 in the aggregate during any twelve (12) month period that are not visible from outside the Premises and do not affect the structure or mechanical, electrical, or other systems of the Building. Any such Alterations so approved by Landlord shall be performed only in accordance with plans and specifications therefor approved by Landlord. Tenant shall not perform any Alterations in or to the Premises that would in Landlord's reasonable judgment (i) in any manner affect any structural component of the Building (including, without limitation, exterior walls, exterior windows, core walls, columns, roofs, or floor slabs), (ii) in any respect be incompatible with the electrical or mechanical components or systems of the Building, (iii) affect space or areas around the Building (including the exterior of the Building), (iv) diminish the value of the Premises for the Permitted Uses, (v) require any unusual expense to re-adapt the Premises for the Permitted Uses, or (vi) adversely affect the character of the Premises, the Building, or the Property. Tenant shall procure at Tenant's sole expense all necessary permits and licenses before undertaking any Alterations on the Premises and shall perform all such Alterations in a good and workmanlike manner employing materials of good quality and so as to conform with all applicable Laws and with all applicable insurance requirements. Tenant shall employ for such work only contractors reasonably approved by Landlord and shall require all contractors employed by Tenant to carry insurance in types and amounts reasonably approved by Landlord (including without limitation worker's compensation insurance in accordance with statutory requirements, employer's liability in an amount not less than $1,000,000 per coverage section, automobile liability in an amount not less than $1,000,000 combined single limit for all owned, hired and non-owned automobiles, and commercial general liability insurance covering such contractors on or about the Premises with a combined single limit in an amount not less than $3,000,000 per occurrence and in the aggregate, which can be satisfied in conjunction with an excess/umbrella liability policy) and shall submit certificates evidencing such coverage to Landlord prior to the commencement of such work, subject to Articles VII and X of this Lease in the case of casualty. All contractors and subcontractors shall name Tenant, Landlord, and its subsidiaries, Lender and any other entity Landlord reasonably requests as additional insured on their commercial general liability, automobile liability and excess/umbrella liability policies on a primary and noncontributory basis without any privity of contract requirement. Additional insured status shall include ongoing and completed operations and include a waiver of subrogation in favor of additional insureds. Coverage provided contractors shall not contain any restrictions or exclusions for work contemplated within their agreement. Tenant shall indemnify and hold harmless Landlord from all injury, loss, claims or damage to any person or property occasioned by or arising out of the performance of any Alterations. Landlord may inspect the work of Tenant at reasonable times in accordance with Section 6.5 hereof and give notice of observed defects. Upon completion of any Alterations, Tenant shall provide Landlord with "as built" plans, copies of all construction contracts and proof of payment for all labor and materials. Except for items constituting Tenant's Property or Required Removal Alterations (as hereinafter defined), all Alterations and appurtenances attached to or built into the Premises at the commencement of or during the Term, whether or not at the expense of Tenant, and whether or not Landlord's consent or approval is required (collectively "Fixtures"), shall be and remain a part of the Premises, shall be deemed the property of Landlord as of the date such Fixtures are completed, attached to or built into the Premises and shall not be removed by Tenant. Fixtures shall include electrical, plumbing, heating and sprinkling equipment, fixtures, outlets, venetian blinds, partitions, gates, doors, vaults, paneling, molding, shelving, radiator enclosures, cork, rubber, linoleum and composition floors, ventilating, silencing, air conditioning and cooling equipment, and all fixtures, equipment and appurtenances of a similar nature or purpose. Any Alterations which shall involve the removal of any Fixtures shall be promptly replaced, at Tenant's expense and free of superior title, liens, security interests and claims, with like property, of at least equal quality and value. Landlord shall, at the time of its approval of any Alterations, provide in writing which Alterations or portions thereof must be removed by Tenant at the expiration or earlier termination of this Lease ("Required Removal Alterations"). All Required Removal Alterations which are installed in and to the Premises shall be removed by Tenant at the expiration or sooner termination of this Lease and all damage caused by such removal shall be repaired by Tenant, at Tenant's expense. As used herein, "Tenant's Property" shall mean Tenant's movable fixtures, telephone and other equipment, computer systems, trade fixtures, furniture, furnishings, and other items of personal property which are removable without material damage to the Property.

6.8. Liens and Encumbrances. Tenant shall not create or suffer, shall keep the Property, the Premises and Tenant's leasehold free of, and shall promptly remove and discharge, any lien, notice of contract, charge, security interest, mortgage or other encumbrance which arises for any reason, voluntarily or involuntarily, as a result of any act or omission by Tenant or persons claiming by, through or under Tenant, or any of their agents, employees or independent contractors, including, without limitation, liens which arise by reason of labor or materials furnished or claimed to have been furnished to Tenant or for the Premises. If Tenant shall fail to discharge any such lien or other encumbrance, Landlord may, at its option, discharge such lien and treat the cost thereof (including attorneys' fees incurred in connection therewith) as Additional Rent payable upon demand, it being expressly agreed that such discharge by Landlord shall not be deemed to waive or release the Event of Default in not discharging such lien. If any notice of contract or lien is placed on the Property (including the Premises) arising from work performed by or for Tenant, Tenant shall thereafter furnish to Landlord prior to commencement of any such work a bond or other security acceptable to Landlord assuring that any work by Tenant will be completed in accordance with the approved plans and specifications and that all subcontractors will be paid.

6.9. Condition Upon Termination. At the expiration or earlier termination of this Lease, Tenant (and all persons claiming by, through or under Tenant) shall, without the necessity of any notice, surrender the Premises (including any Alterations and all replacements thereof, except such Alterations constructed after the Commencement Date as Landlord may direct to be removed at the time of Landlord's approval thereof, which shall be removed by Tenant and the Premises restored to their pre-existing condition) and all keys to the Premises, remove all of Tenant's Property, all Required Removal Alterations, all of Tenant's trade fixtures and personal property not bolted or otherwise attached to the Premises (and such trade fixtures and other property bolted or attached to the Premises as Landlord may direct, or, except as set forth below, as Tenant may desire), all Tenant's signs wherever located, and any other furniture, fixtures, and equipment Tenant is required to remove upon termination or earlier termination of the Lease Term pursuant to the terms of this Lease, in each case repairing damage to the Premises which results in the course of such removal and restoring the Premises to a fully functional and tenantable condition (including the filling of all floor holes, the removal of all disconnected wiring back to junction boxes and the replacement of all damaged or stained ceiling tiles). Tenant shall yield up the Premises broom-clean and in good order, repair and condition, reasonable wear and tear and damage by casualty and taking (to the extent provided in Article X of this Lease only) excepted. Any property not so removed within thirty (30) days after the expiration or termination of the Lease shall be deemed abandoned and may be removed and disposed of by Landlord in such manner as Landlord shall determine, and Tenant shall pay to Landlord the reasonable cost and expense incurred by Landlord in effecting such removal and disposition and in making any required repairs to the Premises. In no event, however, shall Tenant remove any of the following materials or equipment (which shall be deemed Landlord's property), without Landlord's prior written consent: (a) power wiring or wiring panels; (b) lighting or lighting fixtures; (c) doors, windows, or wall coverings; (d) drapes, blinds or other window coverings; (e) installed carpets or other installed floor coverings; (f) built-in or hard-wired heating or air conditioning equipment; (g) fencing or security gates; or (h) other, similar operating equipment of the Building.

6.10. Tenant's Expense. Tenant shall perform all of Tenant's obligations under this Article VI at Tenant's sole expense, failing which Landlord may, upon thirty (30) days' prior notice to Tenant (except that no notice shall be required in the case of an emergency), enter the Premises in accordance with Section 6.5 hereof and perform such obligations of Tenant, including, without limitation any necessary maintenance, repair or replacement, on behalf of Tenant. In such case, Tenant shall reimburse Landlord for all costs reasonably incurred in performing such obligations, together with an administrative charge of five percent (5%), as Additional Rent, immediately upon demand.

6.11. Interruptions. Landlord shall not be liable to Tenant in damages or by reduction of rent or otherwise by reason of inconvenience or for loss of business arising from Landlord or its agents or employees entering the Premises for any of the purposes permitted by this Lease or for repairing, altering or improving the Building in a manner reasonable in light of the then-current circumstances. In case Landlord is prevented or delayed from making any repairs or replacements or furnishing any services or performing any other covenant or duty to be performed on Landlord's part by reason of any cause reasonably beyond Landlord's control, Landlord shall not be liable to Tenant therefor, nor shall the same give rise to a claim in Tenant's favor that such failure constitutes actual or constructive, total or partial, eviction from the Premises. Landlord reserves the right to stop any service or utility system, when necessary by reason of accident or emergency, or until necessary repairs have been completed; provided, however, that in each instance of stoppage, Landlord shall give Tenant such notice as is practicable under the circumstances of the expected duration of such stoppage and will exercise reasonable diligence to eliminate the cause thereof. Except in case of emergency repairs Landlord will give Tenant reasonable advance notice of any contemplated stoppage and will use reasonable efforts to avoid unnecessary inconvenience to Tenant by reason thereof.

ARTICLE VII: INSURANCE AND INDEMNIFICATION

7.1. Insurance.

(a) Tenant shall purchase and maintain, at its sole cost and expense, insurance during the entire Term and any period Tenant (or any party claiming by, through or under Tenant) occupies any portion of the Premises, for the benefit of Tenant and Landlord (as their interests may appear) with terms and coverages reasonably satisfactory to Landlord, and with insurers having a minimum A.M. Best's rating of at least A-/X, and with such increases in limits as Landlord may from time to time reasonably request, but initially Tenant shall maintain the following coverages in the following amounts:

(i) Commercial General Liability Insurance on an occurrence form naming Landlord, Landlord's management, leasing and development agents and Landlord's mortgagee(s) from time to time as additional insureds on a primary and non-contributory bases, with coverage for premises/operations, personal and advertising injury, products/completed operations and contractual liability with combined single limits of liability of not less than $1,000,000 for bodily injury and property damage per occurrence and not less than $2,000,000 in the aggregate and excess liability insurance with a limit not less than $2,000,000 per occurrence and aggregate.

(ii) Property insurance covering property damage to the entire Premises. Covered property shall include the Building and Improvements (excepting, Tenant Owned improvements) Such insurance shall name Tenant as the insured, Landlord as an additional named insured and loss payee and Landlord's mortgagee(s) from time to time as additional loss payee(s) as their interests may appear. Such insurance shall be written on special form basis including but not limited to the perils of fire, extended coverage, windstorm, vandalism, malicious mischief, terrorism (certified and uncertified), sprinkler leakage, water damage, flood, windstorm and earthquake, for the full replacement cost value of the covered items without any coinsurance or deductions for depreciation, ordinance or law coverage with the building value applying to the undamaged portion of the building and a minimum limit of 15% of the building value apply separately to demolition coverage and the increased cost of contraction element of coverage, respectively, and other endorsements as Landlord shall reasonably request from time to time and in amounts that meet the full replacement cost value of the policies of insurance with a deductible amount not to exceed $10,000. Such insurance shall include rent continuation coverage of no less than eighteen (18) months.

(iii) Boiler and machinery coverage in an amount for full replacement cost of the building and include coverage for water damage, hazardous substance, ammonia contamination, data recovery, spoilage and other standard extended coverages in an amount not less than $100,000. Policy should include ordinance or law coverage and loss of rents that mimic the limits on the property policy.

(iv) Workers' Compensation Insurance with statutory limits and Employers Liability Insurance with a limit of at least $1,000,000 per coverage section.

(v) Automobile Liability Insurance in an amount not less than $1,000,000 combined single limit covering all owned, hired and non-owned automobiles.

(vi) Umbrella/Excess Liability Insurance in an amount not less than $10,000,000 providing excess liability coverage and following form of the underlying commercial general liability, automobile liability and employer's liability policies. Coverage shall be follow form and no more restrictive than underlying coverages.

(vii) Tenant, at its cost, either by separate policy or by endorsement to a policy already carried, shall maintain business interruption insurance and insurance coverage on all of Tenant Owned Improvements, personal property, machinery, equipment, office furniture, trade fixtures, office equipment, products, molds, and all other personal property owned by Tenant on the Premises. Such insurance shall be the full replacement cost coverage with a deductible not to exceed $10,000 per occurrence. Notwithstanding anything herein to the contrary, the proceeds of such insurance shall be payable to Tenant and used by Tenant for losses from business interruption, the replacement of personal property, or the restoration of Tenant Owned Improvements, in the sole discretion of Tenant.

All liability policies required of Tenant to maintain, include the commercial general liability, automobile liability and umbrella/excess liability policies shall name Landlord, Landlord's management, leasing and development agents and Landlord's mortgagee(s) designated by Landlord as additional insureds on a primary and noncontributory basis without any privity of contract restriction. All Tenant's insurance policies required herein shall contain a waiver of subrogation in favor of Landlord. Prior to the commencement of the Lease Term and no later than ten (10) days prior to each anniversary of the Commencement Date and/or renewal date thereof, Tenant shall furnish to Landlord certificate(s) (ACCORD 28 (2003/10) evidencing such coverage, which certificate(s) shall state that such insurance coverage may not be changed or canceled without at least thirty (30) days' prior written notice to Landlord and Tenant. The insurance maintained by Tenant shall be deemed to be primary insurance and any insurance maintained by Landlord (acknowledging that Landlord has no obligation to maintain any such insurance) shall be deemed secondary thereto. All insurance proceeds payable under the terms and conditions of any property insurance policy for the Building only required to be obtained or maintained by Tenant pursuant to this Lease resulting from physical damage to the Premises shall be promptly paid to and become the property of Landlord irrespective of any termination of this Lease or the cause of such damage, and Tenant shall pay to Landlord, if, as, and to the extent applicable in connection with any claim made under such property insurance policy, the amount of any deductible. Tenant shall cooperate, fully and in all respects and at Tenant's sole cost and expense, with Landlord in connection with any efforts of Landlord to receive prompt payment of any proceeds required to be paid to Landlord pursuant to the terms and conditions of this Lease in regard to insurance policies covering the Premises.

(b) Tenant shall comply with all applicable Laws, all orders and decrees of court and all requirements of other governmental authorities, and shall not, directly or indirectly, make any use of the Premises which may thereby be prohibited or be dangerous to person or property or which may jeopardize any insurance coverage or may increase the cost of insurance or require additional insurance coverage. If Tenant fails to comply with the provisions of this Section 7.1(b) and (i) any insurance coverage is jeopardized and Tenant fails to correct such dangerous or prohibited use following ten (10) days' notice, or (ii) insurance premiums are increased and Tenant fails, following ten (10) days' notice, to cease such use, then in each event such failure shall constitute an Event of Default by Tenant under this Lease, without any further notice or cure right, and Landlord shall have all of its remedies as set forth in the Lease.

(c) Landlord shall purchase and maintain during the Term: (i) Commercial General Liability Insurance with combined single limits of liability of not less than $1,000,000 for bodily injury and property damage per occurrence and not less than $2,000,000 in the aggregate, (ii) Workers' Compensation Insurance with statutory limits and Employers Liability Insurance with a limit of at least $1,000,000 per coverage section, (iii) Automobile Liability Insurance in an amount not less than $1,000,000 combined single limit covering all owned, hired and non-owned automobiles, Umbrella/Excess Liability Insurance in an amount not less than $10,000,000, and (iv) special form property insurance and builder's risk coverage covering the full replacement cost of the Building and other improvements on the Property.

(d) Notwithstanding anything herein to the contrary, Landlord and Tenant each hereby waives any and all rights of recovery, claim, action, or cause of action against the other, its agents, employees, licensees, or invitees for any loss or damage to or at the Building or the Premises or any Alterations, personal property of such party therein or thereon by reason of fire, the elements, or any other cause which is covered by the insurance coverages actually maintained by Landlord and Tenant, respectively, or such greater amount required to be maintained by Landlord and Tenant, respectively, under this Lease, regardless of cause or origin, including omission of the other party hereto, its agents, employees, licensees, or invitees. Landlord and Tenant covenant that no insurer shall hold any right of subrogation against either of such parties with respect thereto. The parties hereto agree that any and all such insurance policies required to be carried by either shall be endorsed with a subrogation clause that shall provide that such party's insurer waives any right of recovery against the other party in connection with any such loss or damage.

7.2. Waiver of Claim – Indemnification.

(a) Without limiting any other provisions of this Lease, but subject to the provisions of Section 7.1(d) hereof, Tenant agrees to defend, protect, indemnify and save Landlord and its partners, affiliates, members, officers, agents, servants and employees and Landlord's management, leasing and development agents and Landlord's mortgagee(s) from time to time from and against all liability to third parties arising (a) from any accident, injury or damage whatsoever to any person, or to the property of any person, occurring in or about the Premises; (b) from the omission, fault, willful act, negligence or other misconduct of Tenant or Tenant's agents, employees, contractors, licensees or invitees, (c) in connection with Tenant's use of the Premises or any business conducted therein or any work done or condition created in the Premises by Tenant, its agent, employees or contractors, or anyone claiming by, through or under Tenant, or (d) the failure of Tenant to perform and discharge its covenants and obligations under this Lease. To the extent not prohibited by Laws and subject to the waiver of subrogation contained in Section 7.1(d) hereof, Landlord and its partners, affiliates, officers, agents, servants and employees shall not be liable for any damage either to person, property or business resulting from the loss of the use thereof sustained by Tenant or by other persons due to the Building, or any parts thereof or any appurtenances thereto becoming out of repair, or due to the happening of any accident or event in or about the Property (including the Premises), or due to any act or neglect of any tenant or occupant of the Property or of any other person, unless and then only to the extent caused by the gross negligence or willful misconduct of Landlord or its agents, employees or contractors. This provision shall apply particularly, but not exclusively, to damage caused by gas, electricity, snow, ice, frost, steam, sewage, sewer gas or odors, fire, water or by the bursting or leaking of pipes, faucets, sprinklers, plumbing fixtures and windows, and except as provided above, shall apply without distinction as to the person whose act or negligence was responsible for the damage and shall apply whether the damage was due to any of the causes specifically enumerated above or to some other cause of an entirely different kind. Tenant further agrees that all personal property at the Property (including without limitation the Premises, any loading docks, recovering and holding areas, or any freight elevators of the Building), shall be at the risk of Tenant only, and that Landlord shall not be liable for any loss or damage thereto or theft thereof. The provisions of Articles VII and X of this Lease shall survive the expiration or earlier termination of this Lease.

(b) Landlord shall defend, indemnify and save harmless the Tenant and its subsidiaries, if any, and their respective officers, directors, shareholder and partners, against all claims, liabilities, losses, fines, penalties, damages, costs and expenses (including reasonable attorneys' fees and other costs of litigation) because of injury, including death, to any person, or damage or loss of any kind to any property caused by any action or omission of Landlord, or its employees, contractors, agents or representatives, or any failure on the part of Landlord, to perform its obligations under this Lease, except to the extent caused by the negligence or willful misconduct of Tenant, or its employees, contractors, agents or representatives, and subject to the limitations on Landlord's liability contained elsewhere in this Lease.

(c) The provisions of Articles VII and X of this Lease shall survive the expiration or earlier termination of this Lease, and shall not derogate from the abatement and termination rights set forth in Section 6.11 hereof.

ARTICLE VIII: ASSIGNMENT AND SUBLETTING

8.1. Landlord's Consent Required. Tenant shall not assign this Lease, or sublet or license the Premises or any portion thereof, or advertise the Premises for assignment or subletting or permit the occupancy of all or any portion of the Premises by any person or party other than Tenant (each of the foregoing actions is referred to as a "Transfer") without obtaining, on each occasion, the prior consent of Landlord, subject to and in accordance with this Article VIII. A Transfer shall include, without limitation, any transfer of Tenant's interest in this Lease by operation of law, merger or consolidation of Tenant into any other firm or corporation, the transfer or sale of a controlling interest in Tenant whether by sale of its capital stock or otherwise or any liquidation of Tenant or a substantial part of Tenant's assets.

Notwithstanding the foregoing, any Transfer to an entity controlling Tenant, directly or indirectly controlled and beneficially owned by Tenant, or under common control with Tenant (an "Excluded Transfer"; for purposes of this paragraph, control shall mean possession of more than fifty percent (50%) ownership of the shares of beneficial interest of the entity in question together with the power to control and manage the affairs thereof either directly or by election of directors and/or officers) shall not require the consent of Landlord provided that (x) Landlord shall receive prior notice thereof plus reasonable evidence prior to closing that the transaction is in fact an Excluded Transfer, and (y) the successor to Tenant has a net worth, computed in accordance with generally accepted accounting principles consistently applied at least equal to the greater of the tangible net worth of Tenant either (1) as of the Effective Date or (2) immediately prior to such Transfer, and proof satisfactory to Landlord of the tangible net worth of both the transferee and Tenant shall have been delivered to Landlord at least ten (10) days prior to the effective date of any such transaction, and (z) the proposed Transfer complies with all other provisions of this Lease, including, without limitation, this Article VIII, does not alter Landlord's rights under the Lease, and does not impose any additional obligation on Landlord.

8.2. Terms. Tenant shall not offer to make a Transfer to any party which would be of such type, character or condition as to be inappropriate as a tenant for a building comparable to the Building. Tenant shall not offer to transfer any portion of the Premises (other than for Excluded Transfers) unless the aggregate rent payable to Tenant under such transfer equals or exceeds the then prevailing market rate rent and other charges payable for space comparable to the Premises.

8.3. Right of Termination or Recapture. Notwithstanding anything herein to the contrary, in addition to withholding or granting consent with respect to any proposed Transfer, Landlord shall have the right, to be exercised by written notice to Tenant (a "Recapture Notice") within thirty (30) days after receipt of a Transfer Request (as defined in Section 8.4 below), to terminate this Lease (in the event of a proposed assignment) or recapture that portion of the Premises to be subleased (in the event of a proposed sublease of more than 25% of the Premises, or that would cause the aggregate amount of subleased space at the Premises to exceed 25% of the Premises). Tenant may, within five (5) business days of receipt of any Recapture Notice, rescind the applicable Transfer Request by written notice thereof to Landlord. If Landlord exercises its rights under this Section 8.3 and Tenant does not so rescind its Transfer Request, then (a) in the case of a proposed assignment, this Lease shall terminate as of the date (the "Recapture Date") which is the later of (i) sixty (60) days after the date of Landlord's Recapture Notice, and (ii) the proposed effective date of such Transfer, as if such date were the last day of the Lease Term, and (b) in the case of a proposed sublease, this Lease shall be deemed amended to eliminate the proposed sublease premises from the Premises as of the Recapture Date, and thereafter all Base Rent and Additional Rent shall be appropriately prorated to reflect the reduction of the Premises as of the Recapture Date.

8.4. Landlord's Consent. Tenant's request for consent (Tenant's "Transfer Request") under Article VIII of this Lease (and Tenant's notice of any transfer not requiring Landlord's consent under Section 8.1 hereof) shall set forth the details of the proposed Transfer, including: (i) the name, business and financial condition of the prospective transferee; (ii) a true and complete fully executed copy of the proposed instrument containing all of the terms and conditions of such Transfer; (iii) a written agreement of the assignee, subtenant or licensee, in recordable form reasonably approved by Landlord, agreeing with Landlord to perform and observe all of the terms, covenants, and conditions of this Lease; and (iv) any other information Landlord reasonably requested by Landlord prior to or in response to such notice. Except in connection with an Excluded Transfer, Landlord shall have the right to withhold consent, reasonably exercised as to any proposed sublease, or to grant consent, based on the following factors: (w) the business of the proposed assignee or subtenant and the proposed use of the Premises (if other than the Permitted Uses); (x) the net worth, business reputation, character, and financial condition of the proposed assignee or subtenant; (y) Tenant's compliance with all of its obligations under this Lease within applicable notice and cure periods; and (z) such other factors as Landlord may reasonably deem relevant. Tenant shall pay to Landlord, as Additional Rent, Landlord's reasonable attorneys' fees in reviewing any Transfer proposed by Tenant, whether or not Landlord consents to the same.

8.5. Profits. If Tenant does transfer with Landlord's consent, and if the consideration, rent, or other charges payable to Tenant under such transfer exceed the Rent and other charges to be paid hereunder (pro-rated based on floor area in the case of a subletting, license or other occupancy of less than the entire floor area of the Premises), then Tenant shall pay to Landlord, as Additional Rent, after deducting all reasonable out-of-pocket expenses incurred in connection with such Transfer (including without limitation, brokerage commissions, tenant improvement costs, and legal fees), fifty percent (50%) of the amount of such excess when and as received. Without limiting the generality of the foregoing, any lump-sum payment or series of payments due (including for the purchase of so-called leasehold improvements) on account of any Transfer shall be deemed to be in excess of rent and other charges in its or their entirety.

8.6. No Release. Notwithstanding any Transfer of this Lease or any interest therein, Tenant's (and any guarantor's) liability to Landlord shall in all events remain direct and primary. Any transferee of all or a substantial part of Tenant's interest in the Premises shall be deemed to have agreed directly with Landlord to be jointly and severally liable with Tenant for the performance of all of Tenant's covenants under this Lease; and such transferee shall upon request execute and deliver such instruments as Landlord reasonably requests in confirmation thereof (and agrees that its failure to do so shall be subject to the default provisions). Landlord may collect rent and other charges from such transferee (and upon notice such transferee shall pay directly to Landlord) and shall apply the net amount collected to the Rent and other charges herein reserved, but no Transfer shall be deemed a waiver of the provisions of this Section 8.6, or the acceptance of the transferee as a tenant, or a release of Tenant or any guarantor from direct and primary liability for the performance of all of the covenants of this Lease. The consent by Landlord to any Transfer shall not relieve Tenant from the obligation of obtaining the express consent of Landlord to any modification of such transfer or a further assignment, subletting, license or occupancy, to the extent required under Section 8.1 hereof; nor shall Landlord's consent alter in any manner whatsoever the terms of this Lease, to which any Transfer at all times shall be subject and subordinate. The breach by Tenant of any restriction on transfer in this Section 8.6 shall be an Event of Default for which there is no cure period.

ARTICLE IX: DEFAULT AND REMEDIES

9.1. Events of Default. Each of the following shall be an "Event of Default" under this Lease: (a) if Tenant fails to pay Base Rent or any Additional Rent or other sum or charge hereunder when due and such failure continues for longer than five (5) days after notice from Landlord that the same is due (provided that no such notice need be given and no such default in the payment of money shall be curable if on two (2) prior occasions there had been a default in the payment of money which had been cured after notice thereof had been given by Landlord to Tenant as herein provided); (b) if Tenant shall abandon the Premises; (c) if any assignment shall be made by Tenant (or any assignee, sublessee or guarantor of Tenant) for the benefit of creditors; (d) if Tenant's leasehold interest shall be taken on execution or by other process of law; (e) if a petition is filed by Tenant (or any assignee, sublessee or guarantor of Tenant) for adjudication as a bankrupt, or for reorganization or an arrangement under any provision of any bankruptcy act then in force and effect; (f) if an involuntary petition under the provisions of any bankruptcy act is filed against Tenant (or any assignee, sublessee or guarantor of Tenant) and such involuntary petition is not dismissed within sixty (60) days thereafter; (g) if Tenant (or any assignee, sublessee or guarantor of Tenant) shall be declared bankrupt or insolvent according to law; (h) if a receiver, trustee or assignee shall be petitioned for and not contested by Tenant for the whole or any part of Tenant's (or such assignee's, sublessee's or guarantor's) property, or if a receiver, trustee or assignee shall be appointed over Tenant's (or such other person's) objection and not be removed within sixty (60) days thereafter; (i) if any representation or warranty made by Tenant shall be untrue in any material respect; (j) any default of Tenant with respect to any obligations of Tenant set forth in this Lease with respect to any letters of credit to be issued to Landlord hereunder; (k) any default of Tenant with respect to any obligations of Tenant set forth in this Lease (including, without limitation, in Article VII of this Lease) with respect to insurance pertaining to the Building, the Property or the Premises; (l) any default of Tenant with respect to any obligations of Tenant set forth in Article VIII of this Lease; (m) any default by any guarantor with respect to any guaranty of Tenant's obligations under this Lease; or (n) any default of Tenant with respect to any obligations of Tenant set forth in this Lease (other than those defaults identified in the preceding provisions of this Section 9.1) which default continues for thirty (30) days after notice from Landlord to Tenant (provided, however, that such thirty (30) day period shall be reasonably extended for up to an additional sixty (60) days if the matter complained of can be cured, but the cure cannot be completed within such thirty (30) day period and Tenant begins promptly to cure within such period and thereafter diligently completes the cure), provided, however, that no notice of the opportunity to cure a default need be given, and no grace period whatsoever shall be allowed to Tenant, (i) if such matters cannot be cured or (ii) if the covenant or condition the breach of which gave rise to default had, by reason of a breach on a prior occasion, been the subject of a notice hereunder to cure such default. Upon the occurrence of an Event of Default, Landlord and its agents and employees lawfully may, in addition to and not in derogation of any remedies for any preceding breach, immediately or at any time thereafter, without demand or notice and with or without process of law, enter into and upon the Premises or any part thereof in the name of the whole, or mail or deliver a notice of termination of the Lease Term addressed to Tenant at the Premises or at any other address herein provided, and thereby terminate this Lease and repossess the same as of Landlord's former estate. Upon such entry or mailing or delivery, as the case may be, the Lease Term shall terminate, all executory rights of Tenant and all obligations of Landlord under this Lease shall immediately cease, and Landlord may expel Tenant and all persons claiming by, through or under Tenant and remove all of the effects of Tenant and all such persons (forcibly if necessary) without being deemed guilty of any manner of trespass and without prejudice to any remedies which might otherwise be used for arrears of rent or prior breach of covenants; and Tenant hereby waives all statutory and equitable rights to its leasehold (including without limitation rights in the nature of further cure or of redemption, if any). Landlord may, without notice, store Tenant's effects (and those of any person claiming by, through or under Tenant) at the expense and risk of Tenant and, if Landlord so elects, may sell such effects at public auction or auctions or at private sale or sales after seven (7) days' notice to Tenant (which notice Tenant agrees is reasonable) and apply the net proceeds to the payment of all sums due to Landlord from Tenant, if any, and pay over the balance, if any, to Tenant. Notwithstanding anything to the contrary in this Lease, Tenant shall have the right to vacate or abandon the Premises without it being a default, provided that Tenant shall continue to perform all of its obligations under this Lease, including without limitation the payment of Rent.

9.2. Remedies for Default.

(a) Reletting Expenses Damages. If this Lease is terminated due to an Event of Default, then Tenant covenants, as an additional cumulative obligation after such termination, to pay all of Landlord's costs and expenses related thereto or in collecting amounts due hereunder, including reasonable attorneys' fees, and all of Landlord's expenses in connection with such reletting, including without limitation, tenant inducements, brokerage commissions, fees for legal services, expenses of preparing the Premises for reletting and the like ("Reletting Expenses"). It is agreed by Tenant that Landlord may (i) relet the Premises or any part or parts thereof for a term or terms which may at Landlord's option be equal to or less than or exceed the period which would otherwise have constituted the balance of the Lease Term, and may grant such tenant inducements as Landlord in its sole judgment considers advisable, and (ii) make such alterations, repairs and decorations in the Premises as Landlord in its sole discretion considers advisable, and no action of Landlord in accordance with the foregoing nor any failure to relet or to collect rent under any reletting shall operate or be construed to release or reduce Tenant's liability. Any obligation to relet the Premises imposed upon Landlord by law shall be subject to Landlord's reasonable objectives of developing its property in a harmonious manner with appropriate mixes of tenants, uses, floor areas, terms, etc. All Reletting Expenses, together with all sums otherwise provided for in this Lease, whether incurred prior to or after such termination, shall be due and payable immediately from time to time upon notice from Landlord.

(b) Termination Damages. If this Lease is terminated due to an Event of Default, then unless and until Landlord elects lump sum liquidated damages described in Section 9.2(c) below, Tenant covenants, as an additional cumulative obligation after any such termination, to pay punctually to Landlord all the sums and perform all the obligations which Tenant covenants in this Lease to pay and to perform in the same manner and to the same extent and at the same time as if this Lease had not been terminated. In calculating the amounts to be paid by Tenant pursuant to the preceding sentence Tenant shall be credited with the net proceeds of any Rent then actually received by Landlord from a reletting of the Premises after deducting all Reletting Expenses and all sums provided for in this Lease to be paid by Tenant and not then paid.

(c) Lump Sum Liquidated Damages. If this Lease is terminated due to an Event of Default, then Tenant covenants, as an additional cumulative obligation after termination, to pay forthwith to Landlord at Landlord's election made by notice to Tenant at any time after termination, as liquidated damages a single lump sum payment equal to the sum of (i) all sums provided for in this Lease to be paid by Tenant and not then paid at the time of such election, plus either (ii) the present value (calculated at the Federal Reserve discount rate or equivalent) of the excess of all of the Rent reserved for the remainder of the Lease Term over all of the fair market rent reasonably projected by Landlord to be received on account of the Premises during such period, which Rent from reletting shall be reduced by reasonable projections of vacancies and by Landlord's Reletting Expenses described above to the extent not theretofore paid to Landlord, or (iii) an amount equal to the sum of all of the Rent and other sums due hereunder and payable with respect to the twelve (12) month period next following the date of termination. Because Landlord's damages resulting from Tenant's default and subsequent termination are difficult to ascertain as of the Date of this Lease, the parties agree that the foregoing agreed-to sum represents a reasonable forecast of Landlord's expected damages as a result of Tenant's breach and early termination.

9.3. Remedies Cumulative. Any and all rights and remedies Landlord may have under this Lease, and at law and equity, shall be cumulative and shall not be deemed inconsistent with each other, and any of such rights and remedies may be exercised at the same time insofar as permitted by law. Nothing contained in this Lease shall, however, limit or prejudice the right of Landlord to prove and obtain in proceedings for bankruptcy or insolvency by reason of the termination of this Lease an amount equal to the maximum allowed by any statute or rule of law in effect at the time when and governing the proceedings in which the damages are to be proved, whether such amount be greater, equal to, or less than the amount of the loss or damages referred to in Section 9.2 hereof.

9.4. Effect of Waivers of Default. Any consent or permission by Landlord to any act or omission which otherwise would be a breach of any covenant or condition, or any waiver by Landlord of the breach of any covenant or condition, shall not in any way be held or construed to operate so as to impair the continuing obligation of such covenant or condition, or otherwise operate to permit other similar acts or omissions. No breach shall be deemed to have been waived unless and until such waiver be in writing and signed by Landlord. The failure of Landlord to seek redress for violation of or insist upon the strict performance of any covenant or condition of this Lease, or the receipt by Landlord of Rent with knowledge of any violation, shall not be deemed a consent to or waiver of such violation, nor shall it prevent a subsequent act, which would otherwise constitute a violation, from in fact being a violation.

9.5. No Accord and Satisfaction; No Surrender. No acceptance by Landlord of a lesser sum than the Base Rent, Additional Rent or any other sum or charge then due shall be deemed to be other than on account of the earliest installment of such Rent, sum or charge due; nor shall any endorsement or statement on any check or in any letter accompanying any check or payment be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or pursue any other right or remedy available to it. The delivery of keys (or any similar act) to Landlord or any agent or employee of Landlord shall not operate as a termination of this Lease or an acceptance of a surrender of the Premises. No receipt for monies by Landlord from Tenant after the termination of this Lease shall in any way alter the length of the Lease Term or of Tenant's right to possession hereunder or after the finding of any notice shall reinstate, continue or extend the Lease Term or affect any notice given Tenant prior to the receipt of such monies, it being agreed that after the service of notice or the commencement of a suit or after final judgment for possession of the Premises, Landlord may receive and collect any Base Rent and additional rent due, and the payment of said Base Rent and additional rent shall not waive or affect said notice, suit or judgment.

9.6. WAIVER OF JURY TRIAL. IN ANY ACTION OR PROCEEDING ARISING HEREFROM, LANDLORD AND TENANT HEREBY CONSENT TO (I) THE JURISDICTION OF ANY COMPETENT COURT WITHIN THE STATE WHERE THE BUILDING IS LOCATED, (II) SERVICE OF PROCESS BY ANY MEANS AUTHORIZED BY THE LAW OF THE STATE WHERE THE BUILDING IS LOCATED, AND (III) IN THE INTEREST OF SAVING TIME AND EXPENSE, TRIAL WITHOUT A JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER OF THE PARTIES HERETO AGAINST THE OTHER OR THEIR SUCCESSORS IN RESPECT OF ANY MATTER ARISING OUT OF OR IN CONNECTION WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE OR OCCUPANCY OF THE PREMISES, AND/OR ANY CLAIM FOR INJURY OR DAMAGE, OR ANY EMERGENCY OR STATUTORY REMEDY. IN THE EVENT LANDLORD COMMENCES ANY SUMMARY PROCEEDINGS OR ACTION FOR NONPAYMENT OF RENT, TENANT SHALL NOT INTERPOSE ANY COUNTERCLAIM OF ANY NATURE OR DESCRIPTION (UNLESS SUCH COUNTERCLAIM SHALL BE MANDATORY) IN ANY SUCH PROCEEDING OR ACTION, BUT SHALL BE RELEGATED TO AN INDEPENDENT ACTION AT LAW.

9.7. Landlord's Curing and Enforcement. If Tenant shall neglect or fail to perform or observe any covenant or condition of this Lease and shall not cure such default or Event of Default within the applicable cure period, Landlord may, at its option, without waiving any claim for breach, at any time thereafter cure such default or Event of Default for the account of Tenant, and any amount paid or any liability incurred by Landlord in so doing shall be deemed paid or incurred for the account of Tenant, and Tenant shall reimburse Landlord therefor, together with an administrative charge of fifteen percent (15%) of the amount thereof, on demand as Additional Rent; and Tenant shall further indemnify and save Landlord harmless in the manner elsewhere provided in this Lease in connection with all of Landlord's actions in effecting any such cure. Notwithstanding any other provision herein concerning cure periods, Landlord may cure any default or Event of Default for the account of Tenant after such notice to Tenant, if any, as is reasonable under the circumstances (including telephone notice) if the curing of such default or Event of Default prior to the expiration of the applicable cure period is reasonably necessary to prevent likely damage to the Premises or other improvements or possible injury to persons, or to protect Landlord's interest in its property or the Premises. Tenant shall pay to Landlord on demand as Additional Rent all of the costs and expenses of Landlord, including such administrative charge and reasonable attorneys' fees, incurred in enforcing any covenant or condition of this Lease. Without limiting any of its other rights or remedies, any sum due hereunder shall, in addition, bear interest from the date due at the Default Rate.

In the event Tenant breaches any covenant or fails to observe any condition set forth in Article VII of this Lease with respect to the insurance required to be maintained by Tenant, then and without limiting any other right or remedy, and notwithstanding any other provision herein concerning notice and cure of defaults or Events of Default, Landlord may immediately and without notice to Tenant obtain such insurance, and Tenant shall pay the cost thereof and Landlord's expenses related thereto upon demand as Additional Rent.

9.8. Landlord's Default. In no event shall Landlord be in default unless notice thereof has been given to Landlord (and all mortgagees of which Tenant has notice) and Landlord (or any such mortgagee at its sole discretion) fails to perform within forty-five (45) days ("Landlord's Cure Period"; provided, however, that such forty-five (45) day period shall be reasonably extended if such performance begins within such period and thereafter is diligently pursued, or if such mortgagee notifies Tenant within such period that it intends to cure on behalf of Landlord and thereafter begins curing within such period, or if later within forty-five (45) days after acquiring possession of the Property if the cure requires the mortgagee to obtain possession of the Property, and diligently pursues curing with reasonable promptness). In the event that the Premises are rendered untenantable as a result of Landlord's default, then commencing on the day immediately following the expiration of Landlord's Cure Period, Tenant shall have the right to cure the condition that is the cause of such default (provided that such right shall be limited to the Premises and systems exclusively serving the Premises, and in no event shall Tenant be permitted to perform any work on or affecting the structural components or base building systems of the Building) and Landlord shall, within thirty (30) days of demand, reimburse Tenant for any reasonable, actual out-of-pocket costs incurred by Tenant in effecting such cure. Notwithstanding any provision contained herein, in no event shall Landlord ever be liable to Tenant, or any person claiming by, through or under Tenant, for any special, indirect, incidental or consequential damages, or for any lost profits. Tenant shall have no right to terminate this Lease as a result of any breach or default by Landlord hereunder, except in the case of a partial or total wrongful eviction (constructive or actual) of the Tenant from the Premises by Landlord. In addition, Tenant shall have no right, as a result of any such breach or default, to offset or counterclaim against any Rent due hereunder. Subject to the provisions of Section 41 hereof, Tenant shall be entitled to seek monetary damages from Landlord for such breach or default, as well as all other remedies available to Tenant at law or in equity, as limited by the foregoing. Any mortgagee notice and cure periods set forth in any subordination, nondisturbance and attornment agreement then in effect under Section 11.1 hereof shall control to the extent the same differs from the foregoing.

9.9. Vacancy During Last Ninety (90) Days. If Tenant vacates substantially all of the Premises (or substantially all of major portions of the Premises) at any time within the last ninety (90) days of the Lease Term, Landlord may enter the Premises (or such portions) and commence demolition work or construction of leasehold improvements for future tenants. The exercise of such right by Landlord will not affect Tenant's obligations to pay Base Rent or Additional Rent with respect to the Premises (or such portions), which obligations shall continue without abatement until the end of the Lease Term.

9.10. Security Deposit; Letter of Credit.

(a) Letter of Credit. Concurrent with Tenant's execution and delivery of this Lease, Tenant shall deliver to Landlord an irrevocable and unconditional standby letter of credit (the "Original Letter of Credit") which shall be: (i) in form reasonably satisfactory to Landlord, (ii) issued by a bank reasonably satisfactory to Landlord upon which presentment may be made in the Commonwealth of Massachusetts, (iii) in an amount equal to the Security Deposit amount set forth in Section 1.1 hereof, (iv) for a term of not less than one (1) year, (v) permit multiple drawings, (vi) be freely and fully transferable by Landlord without payment of any fees or charges by Landlord, and (vii) otherwise in form and content satisfactory to Landlord. The Original Letter of Credit, any Additional Letters(s) of Credit (as defined in Section 9.10(c) hereof), and any Substitute Letter(s) of Credit are referred to herein collectively as the "Letter of Credit." The Letter of Credit shall be held by Landlord as security for the performance by Tenant of its obligations under this Lease. The Letter of Credit is not an advance payment of Rent or a limitation upon the liability of Tenant hereunder.

(b) Renewal of Letter of Credit. Each Letter of Credit shall be automatically renewable for consecutive periods of one (1) year; provided, however, that if the issuer of such Letter of Credit gives notice of its election not to renew such Letter of Credit, then Tenant shall deliver to Landlord a new letter of credit (a "Substitute Letter of Credit") satisfying the requirements of the Original Letter of Credit under Section 9.10(a) hereof on or before the date thirty (30) days prior to the expiration of the term of the Letter of Credit then in effect. If Tenant fails timely to deliver to Landlord a Substitute Letter of Credit in accordance with the foregoing provisions, then Landlord shall have the right, at any time thereafter, without giving any further notice to Tenant, to draw down the Letter of Credit and to hold the proceeds thereof in a segregated account in the name of Landlord, which proceeds may be withdrawn and applied by Landlord under the same circumstances and for the same purposes as if such proceeds were a Letter of Credit. Upon any such application of such proceeds by Landlord, Tenant shall, within thirty (30) days of written demand therefor, deliver to Landlord an Additional Letter of Credit in the amount of proceeds so applied.

(c) Draws to Cure Defaults. If Tenant breaches or defaults in any of its obligations under this Lease beyond the expiration of any applicable grace period, then without prejudice to or limiting any other rights or remedies of Landlord, Landlord shall have the right, at any time thereafter, to draw down from the Letter of Credit the amount necessary to cure such default. In the event of any such draw by the Landlord, within thirty (30) days of written demand therefor, Tenant shall deliver to Landlord an additional Letter of Credit ("Additional Letter of Credit") satisfying the requirements for the Original Letter of Credit set forth in Section 9.10(a) hereof, except that the amount of such Additional Letter of Credit shall be the amount of such draw.

(d) Draws to Pay Damages. In addition, if (i) this Lease has been terminated as a result of Tenant's default under this Lease beyond the expiration of any applicable cure period, and/or (ii) this Lease has been rejected in a bankruptcy or other similar proceeding, then Landlord shall have the right at any time thereafter to draw down from the Letter of Credit an amount sufficient to pay any and all damages payable by Tenant on account of such termination or rejection, as the case may be, pursuant to this Article IX.

(e) Return of Letter of Credit at End of Term. Within thirty (30) days after the expiration of the Term, to the extent Landlord has not previously drawn upon any Letter of Credit held by Landlord, Landlord shall return the same to Tenant provided that Tenant is not then in default of any of its obligations under this Lease.

ARTICLE X: CASUALTY AND CONDEMNATION

10.1. Fire or Casualty

(a) If the Premises or the Building (including machinery or equipment used in its operation) is damaged by fire or other casualty and if such damage does not cause a termination of this Lease as described in the following sentences, then Landlord shall repair and restore the damage with reasonable promptness, subject to reasonable delays for insurance adjustments and delays caused by matters beyond Landlord's reasonable control, but Landlord shall not be obligated to expend for repairing or restoring the damage an amount in excess of the proceeds of insurance actually received by Landlord for application to the repair of such damage. If in Landlord's estimation the Premises cannot be restored within two hundred seventy (270) days from the date of such fire or casualty, then Landlord shall give notice to Tenant of such estimate within sixty (60) days after such fire or casualty. Tenant may elect by notice given to Landlord within thirty (30) days following the date of such notice from Landlord (time being of the essence) to terminate this Lease effective as of the date of Tenant's notice. If any such damage (i) renders twenty-five percent (25%) or more of the Building untenantable or (ii) renders general Building systems inoperable and such systems cannot be repaired in Landlord's reasonable estimate within one hundred eighty (180) days from the date of such damage or (iii) occurs within the last twenty- four (24) months of the Lease Term, Landlord shall have the right to terminate this Lease as of the date of such damage upon notice given to Tenant at any time within one hundred twenty (120) days after the date of such damage. Landlord shall have no liability to Tenant, and Tenant shall not be entitled to terminate this Lease, by virtue of any delays in completion of such repairs and restoration provided that Tenant shall have the right to terminate the Lease if such repairs are not completed within such two hundred seventy (270) day period or such longer period as originally estimated by Landlord, subject to extension for delays caused by reasons outside of Landlord's control, by notice given within thirty (30) days after such repair period expires, which notice shall be deemed withdrawn if the restoration is completed within thirty (30) days after such notice is delivered to Landlord. Base Rent and Additional Rent, however, shall abate on those portions of the Premises as are, from time to time, untenantable and, in fact, unoccupied by Tenant as a result of such damage until such time as Landlord has substantially completed Landlord's restoration obligations under this Section 10.1.

(b) Notwithstanding anything to the contrary herein set forth, Landlord shall have no duty pursuant to this Section 10.1 to repair or restore any portion of any Alterations in the Premises or the decoration thereto or any of Tenant's personal property or fixtures in the Premises. If Tenant desires that Landlord perform such restoration or any other additional repairs or restoration, and if Landlord consents thereto, it shall be done at Tenant's sole cost and expense subject to all of the applicable provisions of this Lease. Tenant acknowledges that if this Lease is terminated under any of the provisions of this Article X, Landlord shall be entitled to the full proceeds of any insurance coverage, whether carried by Landlord or Tenant, for damage to any alterations, addition, installation, improvements or decorations which would become Landlord's property upon the termination of the Lease. This Article X shall be deemed an express agreement governing any damage or destruction of the Premises by fire or other casualty, and any law providing for a contingency in the absence of an express agreement, now or hereafter in force, shall have no application.

10.2. Condemnation

(a) If the Property or the Building (or any portion of the Building, the loss of which would require reconfiguration or restoration of the Building and (i) Landlord reasonably estimates such reconfiguration or restoration will cost in excess of twenty-five percent (25%) of the current replacement cost of the Building or (ii) Landlord's lender will not permit Landlord to use the condemnation proceeds to restore the Building) shall be taken or condemned by any competent authority for any public or quasi-public use or purpose, Landlord shall have the right, exercisable at its sole direction, to cancel this Lease upon not less than sixty (60) days' notice prior to the date of cancellation designated in the notice. No money or other consideration shall be payable by Landlord to Tenant for the right of cancellation and Tenant shall have no right to share in any condemnation award made to Landlord or in any judgment for damages obtained by Landlord caused by such taking or condemnation.

(b) If any such taking (i) renders twenty-five percent (25%) or more of the Premises untenantable or (ii) renders general Building systems inoperable and such systems cannot be repaired in Landlord's reasonable estimate within one hundred eighty (180) days from the date of such taking or (iii) occurs within the last twenty-four (24) months of the Lease Term, Landlord or Tenant shall have the right to terminate this Lease as of the date of such taking upon notice given to the other at any time within one hundred twenty (120) days after the date of such taking. If neither party so terminates, Landlord shall, to the extent condemnation proceeds are paid to Landlord and not required to pay down Landlord's mortgage loan, use diligent efforts to restore or repair the Building. Landlord shall have no liability to Tenant, and Tenant shall not be entitled to terminate this Lease, by virtue of any delays in completion of such repairs and restoration unless such repairs are not completed within such one hundred eighty (180) day period, in which event Tenant shall have the right to terminate this Lease if such repairs are not completed within such one hundred eighty (180) day period, subject to extension under Section 12.15 hereof by notice given within thirty (30) days after such repair period expires, which notice shall be deemed withdrawn if the restoration is completed within thirty (30) days after such notice is delivered to Landlord. Base Rent and Additional Rent, however, shall abate on those portions of the Premises as are, from time to time, untenantable and, in fact, unoccupied by Tenant as a result of such taking.

ARTICLE XI: PROTECTION OF LENDERS

11.1. Subordination and Superiority of Lease. Tenant agrees that this Lease and the rights of Tenant hereunder will be subject and subordinate to the present or future lien of any first mortgage (and at Landlord's election, to the lien of any subordinate mortgage or mortgages) and to the rights of any lessor under any ground or improvements lease of the Property (collectively referred to in this Lease as a "mortgage" and the holder or lessor thereof from time to time as a "mortgagee"), and to all advances and interest thereunder and all modifications, renewals, extensions and consolidations thereof; and that Tenant shall attorn to any such mortgagee succeeding to Landlord's interest in the Property by foreclosure, deed in lieu of foreclosure, or otherwise, promptly after the giving of notice by such mortgagee requiring such attornment; provided, however, that the mortgagee of any mortgage executes and delivers to Tenant an agreement in the mortgagee's customary form in which the mortgagee agrees that Tenant shall not be disturbed in Tenant's possession upon Tenant's attornment to such mortgagee as Landlord and performance of its Lease covenants (both of which conditions Tenant agrees with all mortgagees to perform). Tenant agrees that any mortgagee may at its option unilaterally elect to subordinate, in whole or in part and by instrument in form and substance satisfactory to such mortgagee alone, the lien of its mortgage (or the priority of its ground lease) to some or all provisions of this Lease. Landlord shall cause its current mortgagee to execute and deliver to Tenant a written subordination and non-disturbance agreement in recordable form.

Tenant agrees that this Lease shall survive the merger of estates of any ground (or improvements) lessor and lessee. Until a mortgagee (either superior or subordinate to this Lease) forecloses Landlord's equity of redemption (or terminates in the case of a ground or improvements lease), no mortgagee shall be liable for failure to perform any of Landlord's obligations (and such mortgagee shall thereafter be liable only after it succeeds to and holds Landlord's interest and then only as limited herein). Any mortgagee (or any other successor to Landlord acquiring the Property by foreclosure, deed in lieu of foreclosure, or otherwise) shall not be: (i) liable for any previous act or omission of Landlord under the Lease; (ii) subject to any credit, demand, claim, counterclaim, offset or defense which theretofore accrued to Tenant against Landlord; (iii) unless consented to by such mortgagee, bound by any previous amendment or modification of the Lease or by any previous prepayment of more than one (1) month's payment of Base Rent or Additional Rent (except estimated payments of Additional Rent); (iv) required to account for any security deposit of Tenant other than any security deposit actually delivered to such mortgagee by Landlord; (v) bound by any obligation to make any payment to Tenant or grant any credits, except for services, repairs, maintenance and restoration provided for under the Lease to be performed by Landlord after the date of such attornment; or (vi) responsible for any monies owing by Landlord to Tenant. Tenant shall give notice of any alleged non-performance on the part of Landlord to any mortgagee of which Tenant has notice, simultaneously with the default notice delivered to Landlord; and Tenant agrees that such mortgagee shall have a separate, consecutive reasonable cure period of no less than thirty (30) days (to be reasonably extended in the same manner Landlord's thirty (30) day cure period is to be extended) following Landlord's cure period during which such mortgagee may, but need not, cure any non-performance by Landlord. The foregoing shall not relieve such mortgagee of the obligation to remedy or cure any conditions at the Premises the existence of which constitutes a Landlord default under this Lease and which continue at the time of such mortgagee's taking title to the Property. The agreements in this Lease with respect to the rights and powers of a mortgagee constitute a continuing offer to any person which may be accepted by taking a mortgage (or entering into a ground or improvements lease) of the Property.

11.2. Rent Assignment. If from time to time Landlord assigns this Lease or the rents payable hereunder to any person, whether such assignment is conditional in nature or otherwise, such assignment shall not be deemed an assumption by the assignee of any obligations of Landlord; but the assignee shall be responsible only for non-performance of Landlord's obligations which occur after it succeeds to and only while it holds Landlord's interest in the Premises.

11.3. Other Instruments. The provisions of Article XI of this Lease shall be self- operative; nevertheless, Tenant agrees to execute, acknowledge and deliver any subordination, attornment or priority agreements or other instruments conforming to the provisions of Article XI of this Lease (and being otherwise commercially reasonable) from time to time requested by Landlord or any mortgagee in furtherance of the foregoing, and further agrees that its failure to do so within ten (10) business days after written demand shall be subject to the monetary default provisions of this Lease.

11.4. Financial Condition of Tenant. On or before September 1 of each calendar year, Tenant shall deliver to Landlord unaudited financial statements of Tenant, including without limitation unaudited quarterly financial statements, balance sheets, income statements, and statements of cash flow together with cash receipts and disbursements report; bank statements; backlog report; and borrowing base certificate, certified as true, correct and complete by the Treasurer or the Chief Financial Officer of Tenant. On or before March 1 of each calendar year, Tenant shall deliver to Landlord financial statements of Tenant, including audited annual financial statements, balance sheets, income statements, and statements of cash flow, and accompanying financial statement notes, certified by the Treasurer or Chief Financial Officer of Tenant. Such financial statements shall be delivered to Landlord's mortgagees and lenders and prospective mortgagees, lenders and purchasers directly by Tenant, or at Landlord's option, by Landlord on Tenant's behalf. Additionally, on a periodic basis, but not more than twice per annum, Landlord has the right to contact Tenant via phone or to meet in person to discuss financial and business conditions. If an Event of Default has occurred, Landlord has this right on an as needed basis within reason.

ARTICLE XII: MISCELLANEOUS

12.1. Notice from One Party to the Other. All notices, consents, approvals and the like shall be in writing and shall be delivered in hand by any courier service providing receipts, by a nationally recognized overnight courier providing receipts, or mailed by certified mail addressed to Landlord or Tenant as set forth below. If requested, Tenant shall deliver copies of all notices in like manner to Landlord's mortgagees and other persons having a relationship to the Premises at such address as designated from time to time by Landlord or such mortgagee. Any notice so addressed shall be deemed duly given on the second business day following the day of mailing if so mailed by registered or certified mail, return receipt requested, whether or not accepted, or if by hand or by overnight courier upon actual receipt by any person reasonably appearing to be an agent or employee working in the executive offices of the addressee.

If to Tenant:	BioLife Solutions, Inc. 35 Dunham Rd Billerica, MA 01821 Attn: Graham Young
If to Landlord:	301 Treble Cove Road Billerica, LLC c/o Calare Properties, Inc. 30 Speen Street Framingham, MA 02111
with a copy to:	Dain, Torpy, Le Ray, Wiest, & Garner, P.C. 745 Atlantic Avenue, 5th Floor Boston, Massachusetts 02111 Attn: Calare Properties Team

Any address or name specified above may be changed by notice given to the addressee by the other party in accordance with Section 12.1 hereof. The inability to deliver notice because of a changed address of which no notice was given as provided above, or because of rejection or other refusal to accept any notice, shall be deemed to be the receipt of the notice as of the date of such inability to deliver or rejection or refusal to accept. Any notice to be given by any party hereto may be given by the counsel for such party.

12.2. Quiet Enjoyment. Landlord agrees that upon Tenant's paying all Rent and performing and observing all covenants, conditions and other provisions on its part to be performed and observed, Tenant may peaceably and quietly have, hold and enjoy the Premises during the Lease Term without disturbance by Landlord or anyone claiming by, through or under it, subject always to the terms of this Lease, provisions of law, and rights or interests of record to which this Lease may be or become subject and subordinate.

12.3. Limitation of Landlord's Liability. Landlord shall be liable only for breaches of Landlord's obligations occurring while Landlord is owner of the fee of which the Premises are a part (provided, however, that if Landlord shall ever sell and lease-back such fee, or the ground thereof or the improvements thereon, then "fee" shall, in such event, be deemed to mean Landlord's leasehold interest). Tenant (and all persons claiming by, through or under Tenant) agrees to look solely to Landlord's interest from time to time in the Property (including the uncollected rents, issues, profits, and proceeds thereof, subject to the superior rights of mortgagees therein) for satisfaction of any claim or recovery of any judgment from Landlord; it being agreed that neither Landlord nor any trustee, beneficiary, partner, member, manager, shareholder, agent or employee of Landlord shall ever be personally or individually liable for any claim or judgment, or otherwise, to Tenant (or such persons). In no event shall Landlord ever be liable to Tenant (or such persons) for indirect or consequential damages; nor shall Landlord ever be answerable or liable in any equitable judicial proceeding or order beyond the extent of such interest in the Property.

12.4. Applicable Law and Construction. This Lease may be executed in counterpart copies and shall be governed by and construed as a sealed instrument in accordance with the laws of the Commonwealth of Massachusetts. If any provision shall to any extent be invalid, the remainder of this Lease shall not be affected. Other than contemporaneous instruments executed and delivered as of the Effective Date, if any, this Lease contains all of the agreements between Landlord and Tenant with respect to the Premises and supersedes all prior dealings between them with respect thereto. There are no oral agreements between Landlord and Tenant affecting this Lease. This Lease may be amended only by an instrument in writing executed by Landlord and Tenant. The enumeration of specific examples of a general provision shall not be construed as a limitation of the general provision. Unless Landlord's approval or consent is required by its terms not to be unreasonably withheld, such approval or consent may be withheld in Landlord's sole discretion. If Tenant is granted any extension or other option, to be effective the exercise (and notice thereof) shall be unconditional, time always being of the essence to any options; and if Tenant purports to condition the exercise of any option or vary its terms in any manner, then the option granted will automatically and immediately become null and void and the purported exercise will be ineffective. This Lease and all consents, notices and other related instruments may be reproduced by any party by photographic, .pdf scan or other reproduction process and the originals thereof may be destroyed; and each party agrees that reproductions will be admissible in evidence to the same extent as the original itself in and judicial or administrative proceeding (whether or not the original is in existence and whether or not reproduction was made in the regular course of business), and further reproduction will likewise be admissible. The titles of the several Articles and Sections of this Lease are for convenience only, and shall not be considered a part hereof. The submission of a form of this Lease or any summary of its terms shall not constitute an offer by Landlord to Tenant; but a leasehold shall only be created and the parties bound when this Lease is executed and delivered by both Landlord and Tenant.

12.5. Successors and Assigns. Except as herein provided otherwise, the agreements and conditions in this Lease contained on the part of Landlord to be performed and observed shall be binding upon Landlord and its legal representatives, successors and assigns, and shall inure to the benefit of Tenant and its legal representatives, successors and permitted assigns; and the agreements and conditions on the part of Tenant to be performed and observed shall be binding upon Tenant (and any guarantor of Tenant) and Tenant's legal representatives, successors and permitted assigns and shall inure to the benefit of Landlord and its legal representatives, successors and assigns.

12.6. Relationship of the Parties. Nothing herein shall be construed as creating the relationship between Landlord and Tenant of principal and agent, or of partners or joint venturers; it being understood and agreed that neither the manner of fixing rent, nor any other provision of this Lease, nor any act of the parties, shall ever be deemed to create any relationship between them other than the relationship of landlord and tenant.

12.7. Estoppel Certificate. Within ten (10) business days after either party's request, Landlord and Tenant agree, in favor of the other, to execute, acknowledge and deliver a statement in writing certifying that this Lease is unmodified and in full force and effect (or, if there have been any modifications that the same is in full force and effect as modified and stating the modifications), and the amount and dates to which the Base Rent (and Additional Rent and all other charges) have been paid and any other information reasonably requested by the requesting party or Landlord's mortgagee. Both parties intend and agree that any such statement may be relied upon by any prospective purchaser, mortgagee, or other person to whom the same is delivered. Tenant acknowledges that prompt execution and delivery of such statements, and all instruments referred to in Article XI of this Lease, constitute essential requirements of any financings or sales by Landlord, and Tenant will indemnify Landlord in the manner elsewhere provided against all costs and damages resulting from Tenant's failure to comply herewith (notwithstanding any grace period) or Landlord's right to execute the same on Tenant's behalf.

12.8. No Recordation of Lease. Neither Landlord nor Tenant shall record this Lease or any memorandum thereof.

12.9. Tenant as Business Entity. If requested by either of the parties to this Lease, each of Landlord and Tenant shall deliver to the other simultaneously with the execution of this Lease (i) a certificate of legal existence and good standing and (ii) a certified copy of a resolution of its directors, manager, members, or general partner authorizing the execution of this Lease or other reasonable evidence of such authority.

12.10. Legal Proceedings. If either party shall be in breach or default under this Lease, such defaulting party shall reimburse the other upon demand for any costs or expenses incurred in connection with the successful enforcement by the other party of its rights.

12.11. Landlord's Consent. Tenant shall pay Landlord's reasonable fees and expenses, including, without limitation, legal, engineering and other consultants' fees and expenses, incurred in connection with Tenant's request for Landlord's consent under this Lease, or in connection with any other act by Tenant which requires Landlord's consent or approval under this Lease.

12.12. Holding Over. If Tenant (or anyone claiming by, through or under Tenant) shall remain in possession of the Premises or any part thereof after the expiration or earlier termination of this Lease with respect to any portion of the Premises without any agreement in writing executed with Landlord, such holdover shall be treated as a tenancy at sufferance and shall be on the terms and conditions as set forth in this Lease as far as applicable except that, following the expiration of the first month of such tenancy at sufferance (the date immediately following such expiration to be referred to herein as the "Holdover Rent Escalation Date"), Tenant shall pay as a use and occupancy charge an amount equal to one hundred fifty percent (150%) of the Base Rent and Additional Rent payable for the twelve (12) month period immediately preceding such expiration or termination, measured from Holdover Rent Escalation Date and terminating on the day on which Tenant vacates the Premises. In addition, Tenant shall protect, defend, indemnify and hold Landlord harmless from all loss, costs and damages, direct and/or indirect, sustained by reason of any such holding over, including, without limitation, claims made by and loss of any succeeding tenant arising out of such failure to timely surrender possession in the condition required under this Lease. In all other respects, such holding over shall be on the terms and conditions set forth in this Lease as far as applicable (and excluding any extension, expansion or rights of first offer of Tenant) in the Lease. Nothing contained in this Section 12.12 shall be construed as a consent by Landlord to any holding over by Tenant, and Landlord shall have the right to immediately terminate such holding over pursuant to applicable Laws.

12.13. Interpretation. Whenever required by the context of this Lease, the singular shall include the plural and the plural shall include the singular. The masculine, feminine and neuter genders shall each include the other. In any provision relating to the conduct, acts or omissions of Tenant, the term "Tenant" shall include Tenant's agents, employees, contractors, invitees, successors or others using the Premises with Tenant's expressed or implied permission.

12.14. Waivers. All waivers shall be in writing and signed by the waiving party. Landlord's failure to enforce any provision of this Lease or its acceptance of rent shall not be a waiver and shall not prevent Landlord from enforcing that provision or any other provision of this Lease in the future, even if such violation is continued or repeated subsequently, and no express waiver shall affect any provision other than the one specified in such waiver and that one only for the time and in the manner specifically stated. No statement on a payment check from Tenant or in a letter accompanying a payment check shall be binding on Landlord. Landlord may, with or without notice to Tenant, negotiate such check without being bound by to the conditions of such statement.

12.15. Force Majeure. If Landlord cannot perform any of its obligations due to events beyond Landlord's reasonable control ("Force Majeure"), the time provided for performing such obligations shall be extended by a period of time equal to the duration of such events. Events beyond Landlord's reasonable control include, but are not limited to, acts of God, war, civil commotion or terrorism, labor disputes, strikes, fire, flood, or other casualty, epidemic, pandemic, or other public health crisis, shortages of labor or material, government orders, regulations, or restrictions, and weather conditions, but exclude financial circumstances.

12.16. Brokers. Each of Tenant and Landlord represents and warrants to the other that it has not dealt with any broker in connection with this Lease or the Premises other than the brokers identified in Section 1.1 hereof and agrees to indemnify and save the other harmless from all loss, claim, damage, cost or expense (including reasonable attorneys' fees of counsel of the other's choice against whom the indemnifying party makes no reasonable objection) arising from any its breach of this representation and warranty. This warranty and representation shall survive the Lease Term or any early termination of this Lease.

12.17. Landlord's Representations and Warranties. Effective as of the Commencement Date, Landlord represents and warrants that, to the best of Landlord's actual knowledge:

(a) the Premises and the Building are free of mold, asbestos and other hazardous materials;

(b) the Building is in conformance with all applicable building codes, permits, laws and regulations, including without limitation the Americans with Disabilities Act; and

(c) all (i) structural elements, (ii) Building and common area systems (including without limitation mechanical, plumbing, electrical, life safety, and roof), and (iii) subsystems of the Building serving the Premises (including without limitation HVAC, mechanical, electrical, and plumbing) are in good working condition and repair.

12.18. Signage. Landlord shall, at Landlord's sole cost and expense, construct a monument sign at or near the entrance to the Property. Tenant may, at Tenant's sole cost and expense, in each case subject to Landlord's approval and in accordance with any applicable Laws and the signage standards and specifications adopted by Landlord from time-to-time, (a) install the name of its business on (i) such monument sign and (ii) the entrance door to the Premises, and (b) install signage on the exterior of the Building.

12.19. Security. Tenant shall be solely responsible for the security of the Premises and Tenant's property. Tenant shall, at Tenant's sole cost and expense and subject to Landlord's approval (which approval shall not be unreasonably withheld), provide and maintain in good working order such security systems and measures (collectively, "Tenant's Security System") as Tenant deems necessary or desirable to provide protection for the Premises and Tenant's Property. In no event shall Landlord have any liability or obligation to Tenant arising from any claims for loss, injury or damage to persons or property in connection with Tenant's Security System.

ARTICLE XIII: LANDLORD'S WORK

13.1. Definitions; Substantial Completion. For purposes of this Lease, "Landlord's Work," "Substantial Completion," and "Tenant Delay" shall have the meanings ascribed to them in the Work Letter attached hereto as Exhibit C and made a part hereof by reference (the "Work Letter"). Landlord shall use commercially reasonable efforts to Substantially Complete Landlord's Work not later than the Substantial Completion Target Date. Landlord shall have no liability whatsoever to Tenant in the event that Landlord shall fail for any reason whatsoever to Substantially Complete Landlord's Work on or before the Substantial Completion Target Date (including, without limitation, for any damages that Tenant may suffer as a result thereof or in connection therewith); provided, however, in such event, Landlord shall use commercially reasonable efforts to Substantially Complete Landlord's Work as soon as possible thereafter.

13.2. Tenant Delay. Notwithstanding the terms and conditions of Section 13.1 hereof, in the event that Landlord's Work shall not be Substantially Completed by Landlord on or before the Substantial Completion Target Date as a result of Tenant Delay, then in such event, for all intents and purposes of this Lease, Landlord's Work shall be deemed to have been Substantially Completed by Landlord as of the date Landlord shall determine, in the sole and absolute discretion of Landlord, that Landlord would have Substantially Completed Landlord's Work but for the occurrence of such Tenant Delay. Furthermore, not later than ten (10) days after written demand shall be made therefor by Landlord of Tenant, Tenant shall reimburse Landlord for all costs and/or expenses (if any) that Landlord shall incur in connection with the construction and/or installation of Landlord's Work as a result of (i) the occurrence of any Tenant Delay or (ii) any change with regard to the scope or details of Landlord's Work (as described in Exhibit C) requested by Tenant and approved by Landlord subsequent to the Effective Date.

13.3. Contractors; Construction Standards. Landlord's Work shall be constructed and/or installed by Landlord using contractors (and subcontractors, if deemed necessary by Landlord) selected by Landlord, in Landlord's sole and absolute discretion, as having experience in connection with the construction and/or installation of alterations and improvements similar in nature to Landlord's Work. Landlord's Work shall be constructed and/or installed (a) in a good and workmanlike manner, (b) in accordance with all applicable Laws, and (c) in accordance with all final construction drawings, plans and specifications relating thereto approved by Landlord (if any). Except to the extent expressly set forth to the contrary in Exhibit C, all of the materials, equipment, and components of Landlord's Work, as well as the style, color, brand, and specification thereof and the location of installation thereof within the Premises, shall be selected by Landlord, in Landlord's sole but reasonable discretion.

13.4. Delay In Possession. If for any reason Landlord cannot Substantially Complete Landlord's Work and deliver possession of the Premises to Tenant on or before the Substantial Completion Target Date, Landlord shall not be subject to any liability therefor, nor shall such failure affect the validity of this Lease or the obligations of Tenant hereunder. In such case, Tenant shall not, except as otherwise provided herein, be obligated to pay Rent or perform any other obligation of Tenant under the terms of this Lease until Landlord delivers possession of the Premises to Tenant following Substantial Completion of Landlord's Work.

13.5. Cost of Landlord's Work. Subject to the terms and conditions of Section 13.2 hereof, Landlord's Work shall be completed at Landlord's sole cost and expense.

13.6. Landlord's Access to Complete Landlord's Work. For purposes of this Lease, "Landlord's Work Construction Period" means that period of time commencing on the Effective Date of this Lease and ending on the date as of which Landlord shall deem Landlord's Work to have been completed in all respects. Tenant hereby agrees that Landlord and the agents, employees and contractors of Landlord shall have the right to enter upon the Premises at any and all times during Landlord's Work Construction Period (including, without limitation, on weekends and at hours other than the normal business hours of Tenant) for the purposes of completing Landlord's Work. Neither Landlord nor any agents, employees, or contractors of Landlord shall have any liability to Tenant (including, without limitation, for any damages that Tenant may suffer) as a result of, or in connection with, any disruption to, or interference with, the business operations of Tenant being conducted at the Premises during Landlord's Work Construction Period as a result of the construction and/or installation of Landlord's Work so long as Landlord shall use commercially reasonable efforts to avoid any material disruption to, or interference with, the business operations of Tenant being conducted at the Premises during Landlord's Work Construction Period as a result of the construction and/or installation of Landlord's Work. At Tenant's sole cost and expense, Tenant shall cooperate, and cause its agents and employees to cooperate, fully and in all respects, with Landlord and the agents, employees and contractors of Landlord in the Premises during Landlord's Work Construction Period for the purposes of facilitating the completion of Landlord's Work. In furtherance of the foregoing, upon request made at any time or times during Landlord's Work Construction Period by Landlord or any of the agents, employees or contractors of Landlord so as to facilitate the completion of Landlord's Work, at Tenant's sole cost and expense, Tenant shall move, remove and/or relocate, or cause to be moved, removed and/or relocated, to, from or within the Premises, any machinery, equipment, furniture, furnishings, inventory or other personal property of Tenant that may at such time be located in, on or about the Premises.

[Separate signature page to follow.]

Executed as a sealed instrument as of the Effective Date.

LANDLORD:

301 TREBLE COVE ROAD BILLERICA, LLC,
a Massachusetts limited liability company

By: /s/ Bob Flynn
Name: Bob Flynn
Title: Authorized Signatory

TENANT:

BIOLIFE SOLUTIONS, INC.,

TENANT:

BIOLIFE SOLUTIONS, INC.,
a Delaware corporation

By: /s/ Roderick de Greef
Name: Roderick de Greef
Title: CFO

EXHIBIT A-1

PLAN OF PREMISES

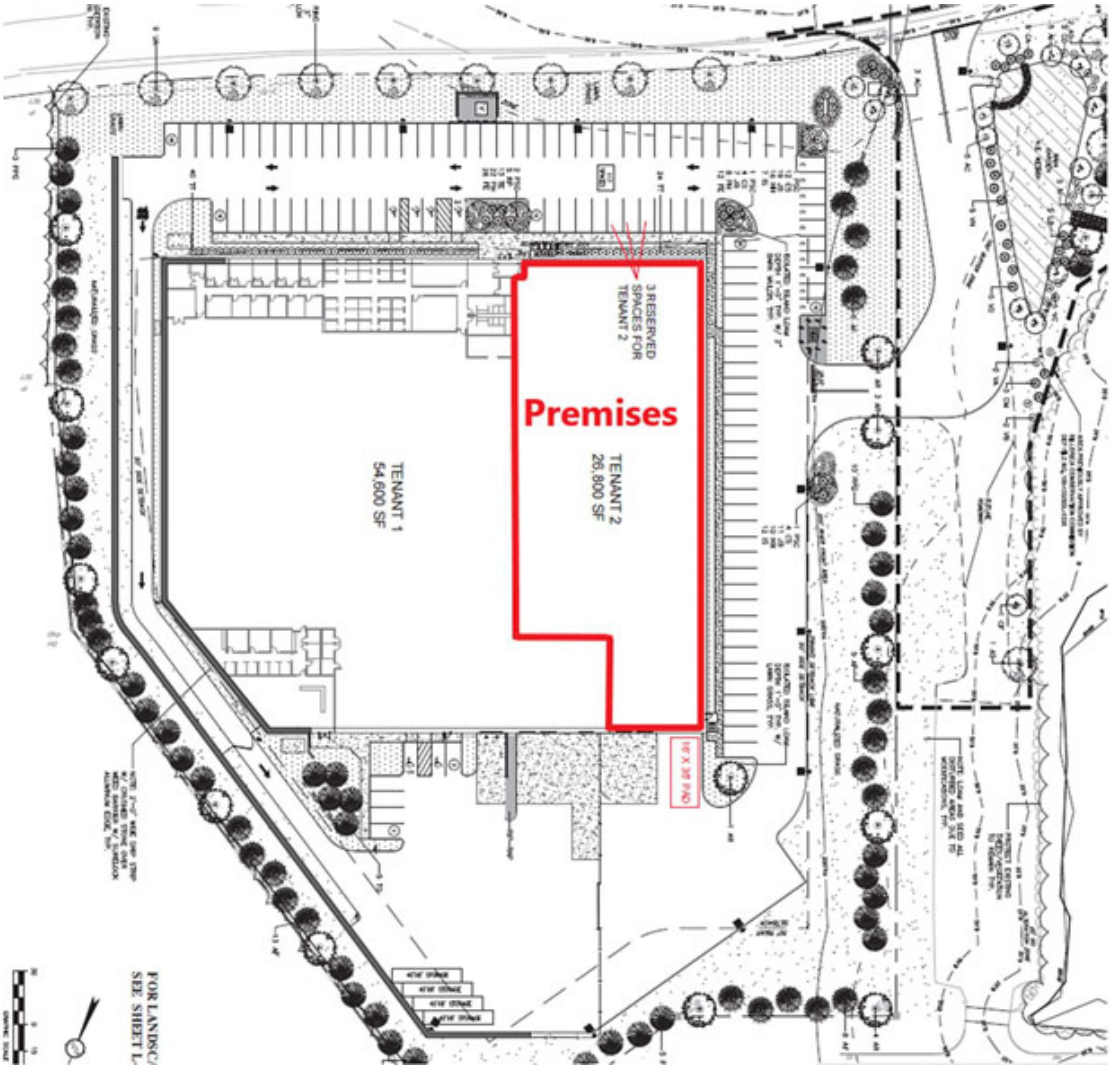


EXHIBIT A-2

LEGAL DESCRIPTION OF THE LAND

A certain parcel of land, with the buildings thereon, shown as Lot 2-3 on a "Plan of Land, Nashua Road, Billerica, MA" prepared by Beals and Thomas Inc., dated August 23, 2017 and filed in the Middlesex County North District Registry of Deeds as Plan 148 in Plan Book 243, bounded and described as follows:

SOUTHWESTERLY	by Treble Cove Road, three courses measuring one hundred sixty-two and 39/100 (162.39) feet, one hundred thirty-three and 69/100 (133.69) feet; and one hundred eighty-five and 32/100 (185.32) feet;
NORTHWESTERLY	by land of Lantheus MI Real Estate, LLC five hundred fifty-four and 48/100 (554.48) feet;
NORTHERLY	by land of Lantheus MI Real Estate, LLC two courses measuring one hundred twenty-four and 06/100 (124.06) feet and one hundred forty-four and 38/100 (144.38) feet;
EASTERLY	by land now or formerly of Middlesex County House of Corrections three courses sixty-four and 20/100 (64.20) feet, forty-one and 76/100 (41.76) feet and two hundred seventy-three and 00/100 (273.00) feet;
SOUTHEASTERLY	by land now or formerly of Middlesex County House of Corrections two courses one hundred forty-six and 16/100 (146.16) feet and one hundred sixty and 30/100 (160.30) feet to the point of beginning.

Together with the easements and rights contains in Reciprocal Easement Agreement, dated February 1, 2018, recorded in Book 31486, Page 246.

EXHIBIT B

RULES AND REGULATIONS

1. No advertisements, pictures or signs of any sort shall be displayed on or outside the Premises without the prior written consent of Landlord, which shall not be unreasonably withheld. This prohibition shall include any portable signs placed within the parking lot or on streets adjacent thereto for the purpose of advertising or display. Landlord shall have the right to remove any such unapproved item without notice and at Tenant's expense.

2. Tenant shall not use any method of heating or air-conditioning other than that supplied by the Building systems without the prior written consent of Landlord, which shall not be unreasonably withheld.

3. Except for dock shelters and seals as may be expressly permitted by Landlord, no awnings or other projections shall be attached to the outside walls of the Building.

4. Tenant shall not use, keep or permit to be used or kept any flammable or combustible materials without proper governmental permits and approvals.

5. Tenant shall not use, keep or permit to be used or kept food or other edible materials in or around the Premises in such a manner as to attract rodents, vermin or other pests. Tenant shall not permit cooking in or about the Premises other than in microwave ovens.

6. Tenant shall not use or permit the use of the Premises for lodging or sleeping, for public assembly, or for any illegal or immoral purpose.

7. Tenant shall not alter any lock or install any new locks or bolts on any door at the Premises without the prior written consent of Landlord.

8. Storage of propane tanks, whether interior or exterior, shall be in secure and protected storage enclosures approved by the local fire department and, if exterior, shall be located in areas specifically designated by Landlord. Safety equipment, including eye wash stations and approved neutralizing agents, shall be provided in areas used for the maintenance and charging of lead-acid batteries. Tenant shall protect electrical panels and Building mechanical equipment from damage from forklift trucks.

9. Tenant shall not disturb, solicit or canvas any owners or occupants of any adjacent properties and shall cooperate to prevent same.

10. No person shall go on the roof of the Building without Landlord's permission except to perform obligations or to exercise Tenant's rights under its lease.

11. No animals (other than seeing eye dogs) or birds of any kind may be brought into or kept in or about the Premises.

12. Machinery, equipment and apparatus belonging to Tenant which cause noise or vibration that may be transmitted to the structure of the Building to such a degree as to cause harm to the Building shall be placed and maintained by Tenant, at Tenant's expense, on vibration eliminators or other devices sufficient to eliminate the transmission of such noise and vibration. Tenant shall cease using any such machinery which causes such noise and vibration which cannot be sufficiently mitigated.

13. All goods and equipment, including material used to store goods, delivered to the Premises of Tenant shall be immediately moved into the Premises and shall not be left in parking or exterior loading areas overnight, except within vehicles.

14. Tractor trailers which must be unhooked or parked with dolly wheels beyond the concrete loading areas must use steel plates or wood blocks of sufficient size to prevent damage to the asphalt paving surfaces. No parking or storing of such trailers will be permitted on streets adjacent to the Property.

15. Forklifts which operate on asphalt paving areas shall not have solid rubber tires and shall use only tires that do not damage the asphalt.

16. Tenant shall be responsible for the safe storage and removal of all pallets. Pallets shall be stored in a neat and orderly manner, so as not to have an unkempt appearance from the street or other public areas. If pallets are stored within the Premises, storage shall comply with safe practices as described in Factory Mutual Loss Prevention Data Sheet 8-24.

17. Tenant shall be responsible for the safe storage and removal of all trash and refuse. All such trash and refuse shall be contained in suitable receptacles stored in a neat and orderly manner, so as not to have an unkempt appearance from the street or other public areas. Landlord reserves the right to remove, at Tenant's expense and without further notice, any trash or refuse left elsewhere outside of the Premises or the Building.

18. Tenant shall not store or permit the storage or placement of goods or merchandise outside of the Building, except in vehicles. No displays or sales of merchandise shall be allowed in the parking lots or other common areas of the Property.

19. Tenant shall appoint an Emergency Coordinator who shall be responsible for assuring notification of the local fire department in the event of an emergency, assuring that sprinkler valves are kept open and implementing the Factory Mutual "Red Tag Alert" system, including weekly visual inspection of all sprinkler system valves on or within the Premises.

EXHIBIT C

WORK LETTER

This Work Letter shall set forth the obligations of Landlord and Tenant with respect to the improvements to be performed by Landlord in constructing the Building and preparing the Premises for Tenant's Permitted Use.

1. Landlord's Work. Subject to the provisions of the Lease, including, without limitation this Exhibit C, Landlord shall, at Landlord's cost and expense (provided that if the actual cost of any portion of Landlord's Work exceeds the amount set forth for such portion in the Scope of Work, as defined herein, due to any change requested by Tenant after the Effective Date, Tenant shall reimburse Landlord for such excess within ten (10) days of demand therefor), (i) construct the Building, (ii) prepare the Premises for delivery to Tenant in "warm, lit shell" condition (which shall include heat provided by one Cambridge Air Solutions model S950 heating unit, four (4) bathroom stalls, LED lighting, and all base building systems in good working order), and (iii) prepare up to 3,000 square feet of office space in "turn-key" condition for Tenant's Permitted Use (collectively "Landlord's Work"), substantially in accordance with the scope of work attached hereto as Exhibit C-1 (collectively, the "Scope of Work") and the office finish schedule attached hereto as Exhibit C-2. Landlord and Tenant will work together in good faith to finalize plans and specifications for Landlord's Work (the "Plans and Specifications") within forty-five (45) days after the Effective Date, provided that in no event shall Landlord be liable for any failure of the parties to finalize such Plans and Specifications within such forty-five (45) day period. Notwithstanding the foregoing, Landlord may, following such finalization, update, modify and refine such Plans and Specifications from time to time, including in connection with the completion of the construction documents phase of the Building's design process; provided, however, that any such modifications, unless required by Legal Requirements or by permits or approvals issued by governmental authorities having jurisdiction over the Project, (a) shall not materially and adversely affect Tenant's use of or access to the Premises and (b) shall otherwise comply with the terms and conditions of this Lease. Upon Tenant's request from time to time, Landlord shall update Tenant and its representatives about the status of Landlord's Work and the then estimated date of Substantial Completion.

2. Tenant Responses; Tenant Delay. Tenant shall respond, in writing, to any requests from Landlord, Landlord's contractor, or Landlord's architect for information, consents, or authorizations to proceed (including without limitation with respect to any proposed Plans and Specifications), within three (3) business days of Tenant's receipt of such request. Any failure by Tenant to respond within such time period shall constitute a Tenant Delay. "Tenant Delay" shall mean any delay in the performance and timely completion of Landlord's Work arising out of or resulting from (i) any delay by Tenant or Tenant's architect in submission of information or plans or to timely respond to requests for information within the time periods set forth in this Exhibit C, any interference with the performance of Landlord's Work by Tenant or any employee, agent, contractor or representative of Tenant, (iii) the design, construction, or installation of the Generator Pad, or (iv) any other act or omission by Tenant and/or any employee, agent, contractor or representative of Tenant, including but not limited to any change or addition to the Scope of Work requested by Tenant and any other change orders requested by Tenant. Notwithstanding the foregoing, except where a Tenant Delay arises from Tenant's failure timely to act within on or before a date or time period expressly set forth in the Lease (in which event no Tenant Delay Notice shall be required): (x) in no event shall any act or omission be deemed to be a Tenant Delay until and unless Landlord has given Tenant written notice (the "Tenant Delay Notice") advising Tenant (a) that a Tenant Delay is likely to occur or is occurring, and (b) of the basis on which Landlord has determined that a Tenant Delay is likely to occur or is occurring, and (y) no period of time prior to the time that Tenant receives a Tenant Delay Notice shall be included in the period of time charged to Tenant pursuant to such Tenant Delay Notice.

3. Performance and Coordination of Landlord's Work. After Tenant opens for business in the Premises, (i) Tenant shall cooperate with Landlord in providing such access to the Premises as may be required to perform any remaining Landlord's Work which must be performed in the Premises, including the Punchlist Items, and (ii) Landlord shall use commercially reasonable efforts to minimize any unreasonable interference with the conduct of Tenant's business in the Premises. Landlord shall conduct core drilling and other work of excessive noise or excessive vibration and any work emitting noxious or unpleasant odors after normal working hours.

4. Substantial Completion. "Substantially Complete" or "Substantial Completion," when referring to Landlord's Work, shall mean that: (1) Landlord's Work is completed, other than Punchlist Items (defined below) which do not materially affect Tenant's use of, or access to, the Premises, (2) the Premises and those portions of the common areas of the Building which affect Tenant's occupancy for the Permitted Use are in conformance with all applicable Legal Requirements, (3) Landlord has delivered to Tenant a Certificate of Occupancy for the Building and Premises, and (4) the general contractor, the construction manager, or the architect employed by Landlord with respect to the construction and/or installation of Landlord's Work has certified to Landlord that Landlord's Work has been substantially completed in all material respects substantially in accordance with the Plans and Specifications.

5. TI Allowance. Landlord shall provide to Tenant an allowance of up to Eighty Thousand Four Hundred Dollars ($80,400) (the "TI Allowance"), to be applied toward the cost (including architectural fees, engineering fees, third party construction supervision fees, construction costs, and similar expenses) of electrical modifications to the warehouse space and Fifty-Three Thousand Six Hundred Dollars ($53,600) for generators (the "Warehouse Electrical Modifications"), provided that (i) the written consent of Landlord shall be required prior to the performance of any such Warehouse Electrical Modifications by Tenant or Tenant's employees, agents, or contractors, or any other party claiming by or though Tenant; (ii) Tenant must submit a requisition to Landlord, including invoices and any other documentation reasonably requested by Landlord, prior to Tenant receiving any portion of the TI Allowance; (iii) no requisition for any portion of the TI Allowance may be submitted to Landlord more than six (6) months after the Commencement Date; and (iv) any portion of the TI Allowance not used in connection with this Exhibit C shall be forfeited and shall not be applied to Base Rent or any other obligation of Tenant under the Lease. Any and all costs of performing the Warehouse Electrical Modifications in excess of the TI Allowance shall be borne by Tenant.

6. Alteration Loans. To the extent Tenant desires to perform any Alterations to the Premises other than the Warehouse Electrical Modifications, and Tenant has complied with all requirements in connection therewith, including without limitation as set forth in Section 6.7 of the Lease, Landlord shall make one or more loans to Tenant (each an "Alteration Loan"), up to One Hundred Fifty Thousand Dollars ($150,000) in the aggregate, to be applied toward the cost of such Alterations, provided that (i) Tenant must request any Alteration Loan contemporaneously with Tenant's request for consent to the applicable Alterations, (ii) Alterations Loans shall accrue interest at a rate of eight percent (8%) per annum and shall be due and repayable to Landlord upon expiration of the Original Term, and (iii) Alterations Loans may not be requested in connection with Minor Alterations.

7. Punchlist. Promptly following Substantial Completion of Landlord's Work, Landlord and Tenant shall jointly inspect the Premises, and Landlord shall provide Tenant with a punchlist prepared by Landlord's architect (the "Punchlist") incorporating those items jointly identified by Landlord and Tenant during their joint inspection of Landlord's Work, of outstanding items (the "Punchlist Items"). Subject to Force Majeure and Tenant Delays, Landlord shall complete all Punchlist Items within sixty (60) days of the date of the Punchlist (other than seasonal items, such as landscaping, requiring a longer period), provided that Tenant reasonably cooperates in connection with the completion of such Punchlist Items.

8. Landlord's Warranty. Landlord hereby warrants and represents to Tenant that Landlord's Work shall be performed: (i) in a good and workmanlike manner; (ii) in all material respects, in accordance with the Plans and Specifications, and (iii) in accordance with all applicable Legal Requirements. The Landlord warranty and representations set forth in this Section 8 are referred to herein as "Landlord's Warranty". If, on or before the Warranty Expiration Date, Tenant gives Landlord written notice of any breach of Landlord's Warranty promptly after Tenant becomes aware of such breach, Landlord shall, at no cost to Tenant, correct or repair such breach as soon as conditions reasonably permit and as to which, in either case, Tenant shall have given notice to Landlord, as aforesaid. The "Warranty Expiration Date" shall be defined as the date one (1) year after the Substantial Completion Date. Except to the extent to which Tenant shall have given Landlord notice of respects in which Landlord has breached Landlord's Warranty or Landlord has otherwise failed to perform Landlord's construction obligations under this Exhibit C, Tenant shall be deemed conclusively to have: (x) approved Landlord's Work, (y) waived any claim that Landlord has breached Landlord's Warranty, and (z) agreed that Tenant has no claim that Landlord has failed to perform any of Landlord's obligations under this Work Letter. The provisions of this Section 8 sets forth the Tenant's sole and exclusive remedies for any breach of the Landlord's Warranty; however nothing in this Section 8 shall be deemed to relieve Landlord of its responsibilities to perform maintenance and repairs as required pursuant to Section 6.1 of the Lease. No cost incurred by Landlord pursuant to this Section 8 shall be included in Operating Expenses.

9. "As Is" Condition of Premises. Except for Landlord's Work, Tenant agrees to accept the Premises in its "as-is" condition and configuration, it being agreed that Landlord shall not be required to perform any work or, except as provided above with respect to the Allowance, incur any costs in connection with the construction of any improvements in the Premises. This Exhibit C shall not be deemed applicable to any additional space added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise, or to any portion of the original Premises or any additions to the Premises in the event of a renewal or extension of the Original Term, whether by any options under the Lease or otherwise, unless expressly so provided in the Lease or any amendment or supplement to the Lease.

10. Construction Representative. Each party authorizes the other to rely upon all approvals granted and other actions taken by the respective construction representative designated from time to time by such party, or any person hereafter expressly designated in writing in substitution or addition thereof by notice to the party relying thereon. Tenant hereby designates Graham Young, email: gry@scisafe.com as its construction representative ("Tenant's Construction Representative") and Landlord hereby designates Jeff Checkoway, email: jcheckoway@calare.com as its construction representative ("Landlord's Construction Representative"). Notices given under this Exhibit C shall comply with the terms and conditions of Section 12.1 of the Lease and simultaneously therewith, a copy of such notice shall be delivered to the applicable construction representatives by email at the addresses set forth above.

EXHIBIT C-1

SCOPE OF WORK

- Division 1 / General conditions = $48,100.00
  Supervision, dumpsters, temp lighting and power, temp toilets and final cleaning.
- Division 6 / woods & plastics = $16,500.00
  General carpentry, break room upper and lower cabinets with SS counters with integral sinks, SS bathroom counters with integral sinks.
- Division 8 / Doors & windows = $9,900.00
  Hollow metal frames with pre finished birch doors and Yale hardware,
- Division 9 / Finishes = $79,715.00
  Light gage framing and drywall to a level 4 finish.
  Acoustical ceilings @ $5.00/ sf
  VCT @ $11.00 sf (janitors closet and breakroom)
  Carpet tile @ $4.00 sf (office and lobby)
  Ceramic Tile @ $12.00 sf (bathroom floors and wet walls 4' wainscot)
  Paint on walls and door frames
- Division 10 / Specialties = $7,420.00
  Powder coated metal toilet partitions and urinal screen, Bobrick toilet accessories.
- Division 21 / Fire suppression = $16,000.00
  Concealed black pipe above ceiling to flex piped recessed pendent heads, plans and calculations per NFPA 13
- Division 22 / Plumbing = $56,000.00
  4 wall hung toilets with manual flush valve, 1 urinal with manual flush valve, 1 break room sink with manual faucet, 1 floor mounted mop sink, 1 40 gal water heater and 1 drinking fountain (no bottle filler)
- Division 23 / HVAC = $31,000.00
  Complete heating and cooling of the space, exhaust fans for bathrooms, break room and janitors closet.
- Division 26 / Electrical = $37,500.00
  Based on $12 sf
- Division 31 / Earthwork = $10,000.00
  Excavate and backfill interior plumbing

Permit = $5,000.00
OH&P = $19,300.00
Total = $336,435.00

ALTERNATES:

1. Add frameless glass partitions for 2 Conference Room Walls	$16,000.00 (Scisafe Tenant Cost)
2. Tray Ceiling in Conference Room	$ 5,000.00 (Scisafe Tenant Cost)

EXHIBIT C-2

	SCISAFE OFFICE FINISHES	
ITEM	DESCRIPTION	FINISH TYPE
OFFICE		
Walls	Light guage framing & drywall	Level 4
Paint	Benjamin More Standard Colors	Multiple Available
Carpet	Shaw Contract Carpet Tile 24"x24"	
Base	Johnsonite Vinyl Cove Base 4"	
Ceiling Tile	Armstrong Second Look II 2'x4'	
Lighting	LED 2'x2'	
Switches	Standard Code Req Occupancy Sensor	Standard White
Doors & Frames	Hollow metal w/ prefinished birch doors	Painted
Door Hardware	Yale Paddle Stlye Handles	Brushed Aluminium
BREAK ROOM		
Millwork	P-Lam Upper and Lower appx 9LF	
Counter	Solid Surface	
Sink	Integral w/ counter top	
LVT	Mannington Abstract 12"x18" or similar	Luxury Vinyl Tile
Base	Johnsonite Vinyl Cove Base 4"	
CONFERENCE ROOM		
Conf Room Walls	2 Frameless glass walls appx 48LF	SCISAFE SPECIALTY ITEM
All other finishes	Same as OFFICE Above	
RESTROOMS		
Floor Tile	Ceramic 12"x24" with matching base	Standard
Wall Tile	Ceramic 3"x6" Wet Wall Only to 4' AFF	Standard
Toilet Partitions	Powder Coated	Standard Color Options
Toilet Accessories	Bobrick or ASI standard	Stainless
Counters	Solid Surface	
Sinks	Integral w/ counter top	
Toilets	Wall hung toilets and urinals manual flush	
Faucets	Standard Manual Operation	Commercial Grade
SIGNAGE		
Code Required	Standard HD (mens, womens, elec, spr)	Off the Shelf
BY TENANT		
A/V installaltions		
Tel/Data Installations		
Rings and Strings for Tel/Data/A/V		
FFE - Furniture, Fixtures, Equipment		
Specialty Carpeting, walk off mats, floor runners, etc		
Specialty Lighting, dimmers, etc		
Office Specialty Signage other than standard code required. Office no's, name plates, wayfinding, etc		
Exterior Wayfinding Signage		
Monument Signage		
Exterior Wall Signage		

EXHIBIT D

FORM OF

COMMENCEMENT DATE CONFIRMATION AGREEMENT

[_____], 20[__]

[_____]
[_____]
[_____]
Attention: [_____]

Re: Lease (the "Lease") dated as of January 29, 2020 between 301 Treble Cove Road Billerica, LLC, a Massachusetts limited liability company ("Landlord"), and BioLife Solutions, Inc., a Delaware corporation("Tenant"), with respect to certain space (comprising approximately 26,800 square feet in that certain building owned by Landlord and located at 301 Treble Cove Road, Billerica, Massachusetts. Capitalized terms and herein but not defined shall be given the meanings assigned to them in the Lease.

Ladies and Gentlemen:

Landlord and Tenant agree as follows:

Commencement Date. The Commencement Date of the Lease is [_____], 20[__]. Rent

Commencement Date. The Rent Commencement Date of the Lease is [_____], 20[__].

Expiration Date. The Lease Term is scheduled to expire on [_____], 20[__].

Extended Terms. The First Extended Term, if applicable, shall commence on [_____], 20[_] and shall expire on [_____], 20[__], and the Second Extended Term, if applicable, shall commence on[_____], 20[_].

Ratification. Tenant hereby ratifies and confirms its obligations under the Lease, and represents and warrants to Landlord that it has no defenses thereto. Additionally, Tenant further confirms and ratifies that, as of the date hereof, (a) the Lease is and remains in good standing and in full force and effect, and (b) Tenant has no claims, counterclaims, set-offs or defenses against Landlord arising out of the Lease or in any way relating thereto or arising out of any other transaction between Landlord and Tenant.

[Separate signature page attached.]

Please indicate your agreement to the above matters by signing this letter in the space indicated below and returning an executed original to us.

Sincerely,

301 TREBLE COVE ROAD BILLERICA, LLC,
a Massachusetts limited liability company

By: _____
Name: _____
Title: _____

AGREED AND ACCEPTED:

BIOLIFE SOLUTIONS, INC.,
a Delaware corporation

By: _____
Name: _____
Title: _____

Exhibit 10.22

COMMERCIAL LEASE AND DEPOSIT RECEIPT

Received from hereinafter referred to as BioLife Solutions LESSEE, the sum of $11,072.00 (Eleven Thousand and Seventy-Two Dollars) as a deposit which shall belong to Lessor and shall be applied as follows:

	Total	Received	Due
Rent for unit 3505 & 3507	11,072.00		12/01/2020
Security Deposit 3505 Edison Wav	4,512.00		11/01/2020
Security Deposit 3507 Edison Way	6,560.00		11/0l/2020
Common Area Fees 3,460 so. ft. *(a)* .17	588.20		11/01/2020
Estimated Electric 3505 and 3507 *(a)* $ 330. Ea.	660.00		11/01/2020
-			
Total	$23,392.20		

In the event that this Lease is not accepted by the Lessor within 15 days, the total deposit received shall be refunded.

Lessee offers to lease from Lessor the premises situated in the Fair Oaks District, County of San Mateo, State of California, described as 1,410 sq. ft. at 3505 Edison Way and 2,050 sq. ft at 3507 Edison Way, Menlo Park, CA 94025 of a larger 15,000 Sq. Ft Building upon the following TERMS and CONDITIONS:

1. TERM: The term hereof shall commence on November 1, 2020 and end on Dec. 31, 2021. The rent for the month of November 2020 is free of charge to LESSEE. First month's rent shall be due on December 1, 2020.

2. RENT: The monthly rent for the first year shall be $3.20 per sq. ft. as follows: $12,320.20 ($11,072.00 for rent, $588.20 for common area charges and $660.00 for estimated electrical charges on the first day of each month). All rents shall be paid to Lessor or his/her authorized agent, at the following address:
Edison Technology Park Two, LLC, 3515-B Edison Way, Menlo Park, CA 94025 TEL: (650) 365-2843 or at such other places as may be designated by Lessor from time to time. In the event rent is not paid within 10 days after due date, Lessee agrees to pay a late charge of $100.00 plus interest at 10 % per annum on the delinquent amount. Lessee further agrees to pay$ 50.00 for each dishonored bank check. The late charge period is not a grace period, and Lessor is entitled to make written demand for any rent if not paid when due.

3. USE: The premises are to be used for biotech work and other related uses, but no other use without prior written consent of Lessor.

4. USES PROHIBITED: Lessee shall not use any portion of the premises for purposes other than those specified. No use shall be made or permitted to be made upon the premises, nor acts done, which will increase the existing rate of insurance upon the property, or cause cancellation of insurance policies covering the property. Lessee shall not conduct or permit any sale by auction on the premises.

5. ASSIGNMENT AND SUBLETTING: Lessee shall not assign this Lease or sublet any portion of the premises without prior consent of the Lessor, which shall not be unreasonably withheld. Any such assignment or subletting without consent shall be void and, at the option of the Lessor shall terminate this Lease.

6. ORDINANCES AND STATUTES: Lessee shall comply with all statutes, ordinances, and requirements of all municipal, state and federal authorities now in force, or which may later be in force. The commencement or pendency of any state or federal court abatement proceeding affecting the use of the premises shall, at the option of the Lessor, be deemed a breach of this Lease.

7. MAINTENANCE, REPAIRS, ALTERATIONS: Unless otherwise indicated, Lessee acknowledges that the premises are in good order and repair and Lessor has represented that as of September 1, 2020 the premises are in good working order and condition. Lessee shall, at his/her own expense, maintain the premises in a good and safe condition, including plate glass seals, electrical wiring, plumbing and heating installations, and any other system or equipment. The premises shall be surrendered, at termination of the Lease, in as good condition as received, normal wear and tear expected. Lessee shall be responsible for all repairs required, except the roof, exterior walls, and structural foundations, which shall be maintained by Lessor. No improvement or alteration of the premises shall be made without the prior written consent of Lessor. Prior to the commencement of any substantial repair, improvement, or alteration, Lessee shall give Lessor at least two (2) days written notice in order that Lessor may post appropriate notices to avoid any liability for liens.

8. ENTRY AND INSPECTION: Lessee shall permit Lessor or Lessor's agents to enter the premises at reasonable times and upon reasonable notice for the purpose of inspecting the premises, and shall permit Lessor, at any time within fifteen (15) days prior to the expiration of this Lease, to place upon the premises any usual "To Let" or "For Lease" signs, and permit persons desiring to lease the premises to inspect the premises at reasonable times.

9. INDEMNIFICATION OF LESSOR: Lessor shall not be liable for any damage or injury to Lessee, or any other person, or to any property occurring on the premises. Lessee agrees to hold Lessor harmless from any claims for damages arising out of Lessee's use of the premises, and to indemnify Lessor for any expense incurred by Lessor in defending any such claims.

10. POSSESSION: If Lessor is unable to deliver possession of the premises at the commencement date set forth above, Lessor shall not be liable for any damage caused by the delay, nor shall this Lease be void or voidable, but Lessee shall not be liable for any rent until possession is delivered. Lessee may terminate this lease if possession is not delivered within 15 days of the commencement term in Item 1.

11. LESSEE'S INSURANCE: Lessee, at his/her expense, shall maintain plate glass and public liability insurance, including bodily injury and property damage, insurance Lessee and Lessor with minimum coverage of $1,000,000. Lessee shall provide Lessor with a Certificate of Insurance showing Lessor as additional insured. The policy shall require ten (10) day's written notice to Lessor prior to cancellation or material change of coverage.

12. LESSOR'S INSURANCE: Lessor shall maintain hazard insurance covering one hundred percent (100%) replacement cost of the improvements throughout the Lease term. Lessor's insurance will not insure Lessee's personal property or leasehold improvements. Lessor shall also maintain a public liability insurance policy at the same limits and coverage as required by Lessee.

13. SUBROGATION: To the maximum extent permitted by insurance policies which may be owned by the parties, Lessor and Lessee waive any and all rights of subrogation which might otherwise exist.

14. UTILITIES: Lessee agrees that he shall be responsible for an estimated payment to the Lessor of $660.00 per month for the payment of electricity, to be audited at year end to actual usage. A True-up will be performed at year end. If more electricity has been used than the amount of the estimated payments, Lessee will owe the balance. If less electricity is used, Lessor will issue a credit. Lessee agrees to pay $.17 per square foot of space for Common Area Fees, which equals $588.20 a month which includes trash and water service. Lessee shall be solely responsible to pay for gas usage directly to PG&E.

15. SIGNS: Lessor reserves the exclusive right to the roof, side and rear walls of the premises. Lessee shall not construct any projecting sign or awning without the prior written consent of Lessor, which shall not be unreasonably withheld. Lessee may place their signage on the front plate glass window of the Suite. Lessor will add Lessee's company to the marque sign in front of the building.

16. ABANDONMENT OF PREMISES: Lessee shall not vacate or abandon the premises in conjunction with non-payment of rent at any time during the term of this Lease. If Lessee does abandon or vacate the premises, or is dispossessed by process of law, or otherwise, any personal property belonging to Lessee left on the premises shall be deemed to be abandoned, at the option of the Lessor.

17. TRADE FIXTURES: Any and all improvements made to the premises during the term shall belong to the Lessor, except trade fixtures of the Lessee. Lessee may, upon termination, remove all his/her trade fixtures, but shall pay for all costs necessary to repair any damage to the premises occasioned by the removal.

18. DESTRUCTION OF PREMISES: In the event of a partial destruction of the premises during the term, from any cause, Lessor shall promptly repair the premises, provided that such repairs can be reasonably made within sixty (60) days. Such partial destruction shall not terminate his Lease, except that Lessee shall be entitled to a proportionate reduction of rent while such repairs are being made, based upon the extent to which the making of such repairs interferes with the business of Lessee on the premises. If the repairs cannot be made within sixty (60) days, this Lease may be terminated at the option of either party by giving written notice to the other party within the sixty (60) day period.

19. HAZARDOUS MATERIALS: Lessee shall not use, store, or dispose of any hazardous substances upon the premises, except the use and storage of such substances that are customarily used in Lessee's business, and are in compliance with all environmental laws. Hazardous Substances means any hazardous waste, substance or toxic materials regulated under any environmental laws or regulations applicable to the property. Lessor represents to the best of its knowledge, after due inquiry, the building and premises are presently free of asbestos, toxic waste, underground storage tanks, and other hazardous materials in amounts exceeding legally established thresholds.

20. INSOLVENCY: The appointment of a receiver, an assignment for the benefits of creditors, or the filing of a petition in bankruptcy by or against Lessee, shall constitute a breach of this Lease by Lessee.

21. DEFAULT: In the event of any breach of this Lease by Lessee for a period of three (3) days after receipt of written notice from Lessor to Lessee in which Lessee has not cured or begun to cure such default, Lessor may, at his/her option, terminate the Lease and recover from Lessee: (a) the worth at the time of award of the unpaid rent, which had been earned at the time of termination;(b) the worth at the time of award of the, amount by which the unpaid rent which would have been earned after termination until the time of the award exceeds the amount of such rental loss that the Lessee proves could have been reasonably avoided;(c) the worth at the time of award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds the amount of such rental loss that the Lessee proves could be reasonably avoided, and (d) any other amount necessary to compensate Lessor for all the detriment proximately caused by the Lessee's failure to perform his/her obligations under the Lease or which in the ordinary course of things would be likely to result therefrom.

    Lessor may, in the alternative, continue this lease in effect, as long as Lessor does not terminate Lessee’s right to possession, and Lessor may enforce all of Lessor's rights and remedies under the Lease, including the right to recover the rent as it becomes due under the Lease. If said breach of Lease continues, Lessor may, at any time thereafter, elect to terminate the Lease.

    Nothing contained herein shall be deemed to limit any other rights or remedies which Lessor may have.

22. SECURITY: The security deposit set forth above shall secure the performance of the Lessee's obligations. Lessor may, but shall not be obligated to apply all or portions of the deposit on account of Lessee's obligations. Any balance remaining upon termination shall be returned to Lessee. Lessee shall not have the right to apply the security deposit in payment of the last month's rent.

23. DEPOSIT REFUNDS: The balance of all deposit shall be refunded within three weeks (or otherwise required by law), from date possession is delivered to Lessor of his/her authorized Agent, together with a statement showing any charges made against such deposits by Lessor.

24. ATTORNEY'S FEE AND COSTS: in any action or proceeding involving a dispute between Lessor and Lessee arising out of this Lease, the prevailing party shall be entitled to reasonable attorney's fees.

25. WAIYER: No failure of Lessor to enforce any term of this Lease shall be deemed to be a waiver.

26. NOTICES: Any notice which either party may or is required to give, shall be given by mail or by E Mail.

27. HEIRS, ASSIGNS, SUCCESSORS: This lease is binding upon and inures to the benefit of the heirs, assigns and successors of the parties.

28. AMERICANS WITH DISABILITIES ACT: The parties are alerted to the existence of the Americans with Disabilities Act, which may require costly structural modifications. The parties are advised to consult with a professional familiar with the requirements of the Act.

29. LESSOR'S LIABILITY: In the event of a transfer of Lessor's title or interest to the property during the term of this Lease, Lessee agrees that the grantee of such title or interest shall be substituted as the Lessor under this Lease, and the original Lessor shall be released of all further liability; provided, that all deposits shall be transferred to the grantee.

30. ESTOPPEL CERTIFICAIB:

    (a) On ten (10) days prior written notice from Lessor, Lessee shall execute, acknowledge, and deliver to Lessor a statement in writing:(l) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease, as so modified, is in full force and effect), the amount of any security deposit, and the date to which the rent and other charges are paid in advance, if any; and (2) acknowledging that there are not, to Lessee's knowledge, any uncured defaults on the part of the Lessor, or specifying such defaults if any are claimed. Any such statement may be conclusively relied upon by any prospective buyer or encumbrancer of the premises.

    b) At Lessor's option, Lessee's failure to deliver such statement within such time shall be a material breach of this Lease or shall be conclusive upon Lessee:(1) that this Lease is in full force and effect, without modification except as may be represented by Lessor; (2) that there are no uncured defaults in Lessor's performance; and (3) that not more than one month's rent has been paid in advance.

    (c) If Lessor desires to finance, refinance, or sell the premises, or any part thereof, Lessee agrees to deliver to any lender or buyer designated by Lessor such financial statements of Lessee as may be reasonably required by such lender or buyer. All financial statements shall be received by the Lessor or the lender or buyer in confidence and shall be used only for the proposes set forth.

31. ENTIRE AGREEMENT: The foregoing constitutes the entire Agreement between the parties and may be modified only in writing signed by all parties.

The undersigned Lessee hereby acknowledges that he/she has thoroughly read and approved each of the provisions contained in this Offer and agrees to the terms and conditions specified. Lessee acknowledges receipt of a copy of the

Lessee: /s/ Tim Bush Date: 11/02/2020
Tim Bush

The undersigned Lessor accepts the foregoing Offer and agrees to lease the premises on the terms and conditions set forth above.

Lessor: _____ Date: _____
Robert Newdoll, Vice President
Edison Technology Park Two LLC

Exhibit 10.23

EXTENSION AND AMENDMENT OF LEASE

THIS EXTENSION AND AMENDMENT OF LEASE ("Amendment") is entered into by and between the EDISON TECHNOLOGY PARK TWO LLC ("Lessor") and BIOLIFE SOLUTIONS, INC. ("Lessee") and is effective as of the 4th day of February 2022. Lessor and Lessee are herein collectively referred to as "Parties."

RECITALS

This Amendment is made and entered into on the basis of the following facts, understandings and intentions of the Parties:

A. The Parties entered into a Commercial Lease on November 1, 2020, which ended on December 31, 2021.

B. The premises leased are situated in the Fair Oaks District, County of San Mateo, State of California, described as 1,410 sq. ft. at 3505 Edison Way and 2,050 sq. ft at 3507 Edison Way, Menlo Park, CA 94025 of a larger 15,000 Sq. Ft Building.

C. The Parties desire to extend and amend the Lease as set forth in this Amendment on a lease through December 31, 2022.

NOW, THEREFORE, for good and valuable consideration, the Parties agree as follows:

1. The term of the Lease is hereby extended and shall expire on December 31, 2022.

2. The new terms of the lease for 3505 & 3507 Edison Way, Menlo Park, CA, 94025 for the period of February 1, 2022, through December 31, 2022, shall be as follows:

3505-3507 Edison Way Rental rate increase for the months of February 2022 thru December 2022	Total Sq Ft	Cost / sq. ft.	Total Cost
Base rent increase of $.30 from $ 3.20/ sq. ft to $3.50/ sq. ft.	3460	$ 3.50	$12,110.00
Common Area charge unchanged at $.17/ sq. ft.	3460	$ 0.17	$588.20
Electrical for 3505	1	LS	$330.00
Electrical for 3507	1	LS	$330.00
Total monthly charges			$13,358.20

3. This Amendment may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and all of which, when taken together, constitute one and the same document. The signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. A facsimile copy and/or an electronic copy of this Amendment signed by the parties shall be deemed an original and enforceable as if it were the original.

4. Except as modified herein, all the remaining terms and provisions of the Lease shall remain in full force and effect. If any conflicts exist between the Lease and this Amendment, the terms of this Amendment shall govern.

5. 60 days prior to the extended lease term expiration date, the Lessee must notify the Lessor on whether they desire to vacate the premises after the expiration date, or whether they choose to remain in the leased premises either on a month-to-month basis, or through an additional lease extension.

6. Lessee has the option to extend the lease for one (1) additional year in which the rental rate will increase 6% to a rate of $3.71/ sq. ft. Common area charges would be determined at year two of lease extension, but would not exceed an increase of $ .02/ sq. ft.

Lessor

EDISON TECHNOLOGY PARK TWO LLC, By:
Edison Technology Park Inc., Its Manager

By: /s/ Robert M. Newdoll
Robert M. Newdoll, Vice President

Date: 02/24/2022

Lessee

BIOLIFE SOLUTIONS, INC.

By: /s/ Troy Wichterman

Date: 02/24/2022

Exhibit 10.24

Lease Agreement Between

Athens County Port Authority
("Landlord")

and

Global Cooling Inc.
A Delaware Corporation
("Tenant")

ARTICLE ONE: **BASIC TERMS**

This Article One contains the Basic Terms of this Lease between the Landlord and Tenant named below. Other Articles, Sections and Paragraphs of the Lease referred to in this Article One explains and defines the Basic Terms and are to be read in conjunction with the Basic Terms.

Section 1.01. Date of Lease: _____, 2011.

Section 1.02. Landlord (include legal entity): Athens County Port Authority

Address of Landlord: 340 W. State Street, Unit #26, Athens, Ohio 45701

Section 1.03. Tenant (include legal entity): Global Cooling, Inc. (a Delaware Corporation)

Address of Tenant: 141 Columbus Road, Athens, OH 45701

Section 1.04. Property: (include Street address, approximate square footage and description) 6000 Poston Road, The Plains, Ohio, with approximately 50,000 rentable square feet.

Section 1.05. Lease Term: Ten (10) years 0 months beginning on April 1, 2011, or such other date as is specified in this Lease and ending on March 31, 2021.

Section 1.06. Permitted Uses: (See Article Five) The property shall be used for offices, assembly/light manufacturing, research and development, and parts/inventory storage for the business of developing, assembling, and selling Ultra-Low Temperature cooling engines and freezers. The Premises shall not be used for other purposes without the prior written consent of Landlord. Tenant is responsible to obtain the proper zoning and occupancy permit for this usage.

Section 1.07. Tenant's Guarantor: (If none, so state) None

Section 1.08. Brokers:

Landlord's Broker: None

Tenant's Broker: None

Section 1.09. Commission Payable to Landlord's Broker: (See Article Fourteen)

Section 1.10. Initial Security Deposit: None.

Section 1.11. Vehicle Parking Spaces Allocated to Tenant: Entire Parking Lot

Section 1.12. Rent and Other Charges Payable by Tenant:

a. **RENT: Monthly rent shall be as follows:**

Year 1:	$0
Year 2:	$16,000
Year 3:	$16,500
Year 4:	$17,000
Year 5:	$17,500
Year 6:	$18,000
Year 7:	$18,500
Year 8:	$19,000
Year 9:	$19,500
Year 10:	$20,000

This is a “Triple Net” lease. Tenant is responsible for Taxes, Insurance, and Repairs and Maintenance (see further below).

RENT REDUCTION: In consideration of the lease term of ten (10) years, and as inducement for Tenant to enter into this Lease, Landlord will offer free rent for Year 1. This inducement is offered in good faith based upon, among other things, the extent to which Tenant provides for Tenant improvements.

b. **OTHER PAYMENTS:**

(I) Real Property Taxes (See Section 4.02); (ii) Utilities (See Section 4.03); (iii) Insurance Premiums (See Section 4:04); (iv) Impounds for Insurance Premiums and Property Taxes (See Section 4.07); (v) Maintenance, Repairs and Alterations (See Article Six).

c. **OPTION TO RENEW:** Lease renewal shall be negotiable between Landlord and Tenant.

Section 1.13. Landlord’**s Share of Profit on Assignment or Sublease:** (See Section 9.05) seventy five percent (75%) of the Profit (the “Landlord’s Share”).

Section 1.14. Riders: The following Riders are attached to and made a part of this Lease (If none, so state)

ARTICLE TWO LEASE TERM

Section 2.01. Lease of Property For Lease Term. Landlord leases the Property to Tenant and Tenant leases the Property from Landlord for the Lease Term. The Lease Term is for the period stated in Section 1.05 above and shall begin and end on the dates specified in Section 1.05 above unless the beginning or end of the Lease Term is changed under any provision of this Lease. The "Commencement Date" shall be on the sooner of (1) the date the Tenant occupies the Premises, or (2) 30 days after Delivery Date below (the "Commencement Date").

Delivery Date: Landlord shall deliver the Premises, in a condition suitable for the Tenant's commencement of construction of its improvements, on or about April 1, 2011 (the "Delivery Date"). The Landlord will be responsible for any repairs, if any, necessary to bring the building in compliance.

Section 2.02. Delay in Commencement. Landlord shall not be liable to Tenant if Landlord does not deliver possession of the Property to Tenant on the Commencement Date. Landlord's non- delivery of the Property to Tenant on that date shall not affect this Lease or the obligations of Tenant under this Lease except that the Commencement Date shall be delayed until Landlord delivers possession of the Property to Tenant and the Lease Term shall be extended for a period equal to the delay in delivery of possession of the Property to Tenant, plus the number of days necessary to end the Lease Term on the last day of a month. If Landlord does not deliver possession of the Property to Tenant within sixty (60) days after the Commencement Date, Tenant may elect to cancel this Lease by giving written notice to Landlord within ten (10) days after the sixty (60) day period ends. If Tenant gives such notice, the Lease shall be cancelled and neither the Landlord nor Tenant shall have any further obligations to the other. If Tenant does not give such notice, Tenant's right to cancel the Lease shall expire and the Lease Term shall commence upon the delivery of possession of the Property to Tenant. If delivery of possession of the Property to Tenant is delayed, Landlord and Tenant shall, upon such delivery, execute an amendment to this Lease setting forth the actual Commencement Date and expiration date of the Lease. Failure to execute such amendment shall not affect the actual Commencement Date and expiration date of the Lease.

Section 2.03. Early Occupancy. If Tenant occupies the Property prior to the Commencement Date, Tenant's occupancy of the Property shall be subject to all of the provisions of this Lease. Early occupancy of the Property shall not advance the expiration date of this Lease. Tenant shall pay Rent and all other charges specified in this Lease for the early occupancy period.

Section 2.04. Holding Over. Tenant shall vacate the Property upon the expiration or earlier termination of this Lease. Tenant shall reimburse Landlord for and indemnify Landlord against all damages, which Landlord incurs from Tenant's delay in vacating the Property. If Tenant does not vacate the Property upon the expiration or earlier termination of the Lease and Landlord thereafter accepts rent from Tenant, Tenant's occupancy of the Property shall be a "month-to- month" tenancy, subject to all of the terms of this Lease applicable to a month-to-month tenancy, except that the Rent then in effect shall be increased by twenty-five percent (25%).

ARTICLE THREE; RENT

Section 3.01. Time and Manner of Payment. Upon execution on of this Lease, Tenant shall pay Landlord the Rent in the amount stated in paragraph 1.12(a) above beginning April 1, 2012, and each month thereafter, Tenant shall pay Landlord the Rent as stated in paragraph 1.12 (a), in advance, without offset, deduction or prior demand. The Rent shall be payable at Landlord's address or at such other place as Landlord may designate in writing Tenant shall not be obligated to make lease payments under this lease until the latter of the following; (a) Tenant has occupancy of the building or (b) Commencement Date as stated in Section 1.05.

Section 3.02. Security Deposit. N/A

Section 3.03. Termination; Advance Payments. N/A

Section 3.04. Renewal. Lease renewal shall be negotiable between the Landlord and Tenant provided that Tenant is not delinquent in the payment of rent or is not in default of the performance of any other terms or conditions of this lease. Tenant shall provide to Landlord nine months' notice for renewal of lease. All provisions of this lease shall remain in full force and effect during any renewal term.

ARTICLE FOUR OTHER CHARGES PAYABLE BY TENANT

Section 4.01. Additional Rent. All charges payable by Tenant other than Rent are called "Additional Rent." Unless this Lease provides otherwise, Tenant shall pay all Additional Rent then due with the next monthly installment of Rent. The term "rent' shall mean Rent and Additional Rent.

Section 4.02. Property Taxes.

Tenant shall pay all taxes, assessments, liens and license fees ("Taxes") levied, assessed or imposed by any authority having the direct or indirect power to tax or assess any such liens, by reason of Tenant's use of the Premises, and all Taxes on Tenant's personal property located on the Premises as addressed in the following:

a. Real Property Taxes. Tenant shall pay all real property taxes on the Property (including any fees, taxes or assessments against or as a result of, any tenant improvements installed on the Property by or for the benefit of Tenant) during the Lease Term, Subject to Paragraph 4.02(e) and Section 4.07 below, such payment shall be made at least ten (10) days prior to the delinquency date of the taxes. Within such ten (10) day period, Tenant shall furnish Landlord with satisfactory evidence that the real property taxes have been paid. Landlord shall reimburse Tenant for any real property taxes paid by Tenant covering any period of time prior to or after the Lease Term. If Tenant fails to pay the real property taxes when due, Landlord may pay the taxes and Tenant shall reimburse Landlord for the amount of such tax payment as Additional Rent.

b. Definition of "**Real Property Tax.**": "Real property tax" means; (1) any fee, license fee, license tax, business license fee commercial rental tax, levy, charge assessment, penalty or tax imposed by any taxing authority against the Property; (ii) any tax on the Landlord's right to receive, or the receipt of, rent or income from the Property or against Landlord's business of leasing the Property; (iii) any tax or charge for fire protection, streets, sidewalks, road maintenance, refuse or other services provided to the Property by any governmental agency; (iv) any tax imposed upon this transaction or based upon a re-assessment of the Property due to a change of ownership, as defined by applicable law, or other transfer of all or part of Landlord's interest in the Property; and (v) any charge or fee replacing any tax previously included within the definition of real property tax. "Real property tax" does not, however, include Landlord's federal or state income, franchise, inheritance or estate taxes.

c. Personal Property Taxes. Tenant shall pay all taxes charged against trade fixtures, furnishings, equipment or any other personal property belonging to Tenant, Tenant shall try to have personal property taxes separated from the Property. If any of Tenant's personal property is taxed with the Property, Tenant shall pay Landlord the taxes for the personal property within fifteen (15) days after Tenant receives a written statement from Landlord for such personal property taxes.

d. Tenant's Right to Contest Taxes. Tenant may attempt to have the assessed valuation of the Property reduced or may initiate proceedings to contest the real property taxes. If required by law, Landlord shall join in the proceedings brought by Tenant. However, Tenant shall pay all costs of the proceedings, including any costs or fees incurred by Landlord. Upon the final determination of any proceeding or contest, Tenant shall immediately pay the real property taxes due, together with all costs, charges. interest and penalties incidental to the proceedings. If Tenant does not pay the real property taxes when due and contests such taxes, Tenant shall not be in default under this Lease for nonpayment of such taxes if Tenant deposits funds with Landlord or opens an interest- bearing account reasonably acceptable to Landlord in the joint names of Landlord and Tenant. The amount of such deposit shall be sufficient to pay the real property taxes plus a reasonable estimate of the interest, costs, charges and penalties which may accrue if Tenant's action is unsuccessful, less any applicable tax impounds previously paid by Tenant to Landlord. The deposit shall be applied to the real property taxes due, as determined at such proceedings. The real property taxes shall be paid under protest from such deposit if such payment under protest is necessary to prevent the Property from being sold under a "tax sale" or similar enforcement proceeding.

Section 4.03. Utilities. To the best of its ability, Landlord shall provide the Premises with water, electricity, and gas, seven (7) days per week, twenty-four (24) hours per day. Tenant shall pay all utilities directly to the appropriate supplier, the cost of all utilities, including but not limited to natural gas, water and electric, and at Tenant's sole expense, shall provide for all other utilities, (including but not limited to heating, ventilation, air conditioning, janitorial services, telephone/cable service and refuse).

Section 4.04. Insurance Policies.

a. **Liability Insurance.** During the Lease Term, Tenant shall maintain a policy of commercial general liability insurance (sometimes known as broad form comprehensive general liability insurance) insuring Tenant against liability for bodily injury, property damage (including loss of use of property) and personal injury arising out of the operation, use or occupancy of the Property. Tenant shall name Landlord as an additional insured under such policy. The initial amount of such insurance shall be Two Million Dollars (2,000,000) per occurrence and Three Million Dollars (3,000,000) aggregate, and shall be subject to periodic increase based upon inflation, increased liability awards, recommendation of Landlord's professional insurance advisers and other relevant factors. The liability insurance obtained by Tenant under this paragraph 4.04(a) shall (I) be primary and non-contributing; (ii) contain cross-liability endorsements; and (iii) insure Landlord against Tenant's performance under Section 5.05, if the matters giving rise to the indemnity under Section 5.05 results from the negligence of the Tenant. The amount and coverage of such insurance shall not limit Tenant's liability nor relieve Tenant of any other obligation under this Lease. Landlord may also obtain comprehensive public liability insurance in an amount and with coverage determined by Landlord insuring Landlord against liability arising out of ownership, operation, use or occupancy of the Property. The policy obtained by Landlord shall not be contributory and shall not provide primary insurance.

b. Property and Rental Income Insurance. During the Lease Term, Landlord shall maintain policies of insurance governing loss of or damage to the Property in the full amount of its replacement value. Such policy shall contain an Inflation Guard Endorsement and shall provide protection against all perils included within the classification of fire, extended coverage, vandalism, malicious mischief, special extended perils (all risk), sprinkler leakage and any other perils which Landlord deems reasonably necessary. Landlord shall have the right to obtain flood and earthquake insurance if required by any lender holding a security interest in the Property. Landlord shall not obtain insurance for Tenant's fixtures or equipment or building improvements installed by Tenant on the Property. During the Lease Term, Landlord shall also maintain a rental income insurance policy, with loss payable to Landlord, in an amount equal to one year's Rent, plus estimated real property taxes and insurance premiums. Tenant shall be liable for the payment of any deductible amount under Landlord's or Tenant's insurance policies maintained pursuant to this Section 4.04 in an amount not to exceed Ten Thousand Dollars ($10,000.00). Tenant shall not do or permit anything to be done which invalidates any such insurance policies.

c. **Payment of Premiums.** Subject to Section 4.07, Tenant shall pay all premiums for the insurance policies described in Paragraphs 4.04(a) and (b) (whether obtained by Landlord or Tenant) within fifteen (15) days after Tenant's receipt of a copy of the premium statement or other evidence of the amount due, except Landlord shall pay all premiums for non-primary comprehensive public liability insurance which Landlord elects to obtain as provided in Paragraph 4.04(a). If insurance policies maintained by Landlord cover improvements on real property other than the Property, Landlord shall deliver to Tenant a statement of the premium applicable to the Property showing in reasonable detail how Tenant's share of the premium was computed. If the Lease Term expires before the expiration of an insurance policy maintained by Landlord, Tenant shall be liable for Tenant's prorated share of the insurance premiums. Before the Commencement Date, Tenant shall deliver to Landlord a copy of any policy of insurance which Tenant is required to maintain under this Section 4 04. At least thirty (30) days prior to the expiration of any such policy, Tenant shall deliver to Landlord a renewal of such policy. As an alternative to providing a policy of insurance, Tenant shall have the right to provide Landlord a certificate of insurance, executed by an authorized officer of the insurance company, showing that the insurance which Tenant is required to maintain under this Section 4.04 is in full force and effect and containing such other information which Landlord reasonably requires. The Tenant shall be responsible for an insurance deductible not to exceed Ten Thousand Dollars ($10,000.00).

d. General Insurance Provisions.

(I) Any insurance which Tenant is required to maintain under this Lease shall include a provision which requires the insurance carrier to give Landlord not less than thirty (30) days written notice prior to any cancellation or modification of such coverage.

(ii) If Tenant fails to deliver any policy, certificate or renewal to Landlord required under this Lease within the prescribed tine period or if any such policy is cancelled or modified during the Lease Term without Landlord's consent, Landlord may obtain such insurance in which case Tenant shall reimburse Landlord for the cost of such insurance within fifteen (15) days after receipt of a statement that indicates the cost of such insurance.

(iii) Tenant shall maintain all insurance required under this Lease with companies holding a "General Policy Rating of A-12 or better, as set forth in the most current issue of "Best Key Rating Guide." Landlord and Tenant acknowledge the insurance markets are rapidly changing and that insurance in the form and amounts described in this Section 4 04 may not be available in the future. Tenant acknowledges that the insurance described in this Section 4.04 is for the primary benefit of the Landlord. If at any time during the Lease Term, Tenant is unable to maintain the insurance required under the Lease, Tenant shall nevertheless maintain insurance coverage which is customary and commercially reasonable in the insurance industry for Tenant's type of business, as that coverage may change from time to time. Landlord makes no representation as to the adequacy of such Insurance to protect Landlord's or Tenant's interests, Therefore, Tenant shall obtain any such additional property or liability, which Tenant deems necessary to protect Landlord and Tenant.

(iv) Unless prohibited under any applicable insurance policies maintained, Landlord and Tenant each hereby waive any and all rights of recovery against the other, or against the officers, employees, agents or representatives of the other, for loss of or damage to its property of others under its control, if such loss or damage is covered by any insurance policy in force (whether or not described in this Lease) at the time of such loss or damage. Upon obtaining the required policies of insurance, Landlord and Tenant shall give notice to the insurance carriers of this mutual waiver of subrogation.

Section 4.05. Late Charges. Tenant's failure to pay rent promptly may cause Landlord to incur unanticipated costs. The exact amount of such costs are impractical or extremely difficult to ascertain. Such costs may include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord by any ground lease, mortgage or trust deed encumbering the Property. Therefore if Landlord does not receive any rent payment within ten (10) days after it becomes due, Tenant shall pay Landlord a late charge equal to three percent (3%) of the overdue amount. The parties agree that such late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of such late payment.

Section 4.06. Interest on Past Due Obligations. Any amount owed by Tenant to Landlord which is not paid when due shall bear interest at the rate of fifteen percent (15%) per annum from the due date of such amount. However, interest shall not be payable on late charges to be paid by Tenant under this Lease. The payment of interest on such amounts shall not excuse or cure any default by Tenant under this Lease. If the interest rate specified in this Lease is higher than the rate permitted by law, the interest rate is hereby decreased to the maximum legal interest rate permitted by law.

Section 4.07. Impounds for Insurance Premiums and Real Property Taxes. If requested by any ground lessor or lender to whom Landlord has granted a security interest in the Property, or if Tenant is more than ten (10) days late in the payment of rent more than once in any consecutive twelve (12) month period, Tenant shall pay Landlord a sum equal to one-twelfth (1/12) of the annual real property taxes and insurance premiums payable by Tenant under this Lease, together with each payment of Rent. Landlord shall hold such payments in a non-interest bearing impound account. If unknown, Landlord shall reasonably estimate the amount of real property taxes and insurance premiums when due. Tenant shall pay any deficiency of funds in the impound account to Landlord upon written request. If Tenant defaults under this Lease, Landlord may apply any funds in the impound account to any obligation then due under this Lease.

ARTICLE FIVE USE OF PROPERTY

Section 5.01. Permitted Uses. Tenant may use the Property only for the Permitted Uses set forth in Section 1.06 above.

Section 5.02. Manner of Use. Tenant shall not cause or permit the Property to be used in any way which constitutes a violation of any law, ordinance or government regulation or order, which annoys or interferes with the rights of other tenants of Landlord, or which constitutes a nuisance or waste. Tenant shall obtain and pay for all permits, including a Certificate of Occupancy, required for Tenant's occupancy of the Property and shall promptly take all actions necessary to comply with all applicable statutes, ordinances, rules, regulations, orders and requirements regulating the use by Tenant of the Property, including the Occupational Safety and Health Act.

Section 5.03. Hazardous Materials. As used in this Lease, the term "Hazardous Material" means any flammable items, explosives radioactive materials hazardous or toxic substances, material or waste or related materials, including any substances defined as or included in the definition of "hazardous substances", "hazardous wastes", "hazardous materials" or "toxic substances" now or subsequently regulated under any applicable federal, state or local laws or regulations including without limitation petroleum-based products, paints, solvents, lead, cyanide. DDT, printing inks, acids, pesticides, ammonia compounds and other chemical products, asbestos, PCBs and similar compounds and including any different products and materials which are subsequently found to have adverse effects on the environment or the health and safety of persons. Tenant shall not cause or permit any Hazardous Material (other than cleaning and other products used in the ordinary course of business) to be generated, produced, brought upon, used, stored, treated or disposed of in or about the Property by Tenant, its agents. employees, contractors subleasees or invitees without the prior written consent of Landlord. Landlord shall be entitled to take into account such other factors or facts as Landlord may reasonably determine to be relevant in determining whether to grant or withhold consent to Tenant's proposed activity with respect to Hazardous Material. In no event, however, shall Landlord be required to consent to the installation or use of any storage tanks on the Property.

Section 5.04. Signs and Auctions. Tenant's signage must conform to and abide by any relevant regulations and must be pre-approved by Landlord. Tenant shall not conduct or permit any auctions or sheriff's sales at the Property. Landlord will permit Tenant to place business identifying signs on the property with the consent of Landlord, which shall not unreasonably be withheld.

Section 5.05. Indemnify. Tenant shall indemnify Landlord against and hold Landlord harmless from any and all costs, claims or liability arising from (a) Tenant's use of the Property; (b) the conduct of Tenant's business or anything else done or permitted by Tenant to be done in or about the Property, including any contamination of the property or any other property resulting from the presence or use of Hazardous Materials caused or permitted by Tenant; (c) any breach or default in the performance of Tenant's obligations under this lease; (d) any misrepresentation or breach of warranty by Tenant under this Lease; or (e) other acts or omissions of Tenant. Tenant shall defend Landlord against any such cost, claim or liability at Tenant's expense with counsel reasonably acceptable to Landlord. As a material part of the consideration to Landlord, Tenant assumes all risk of damage to property or injury to persons in or about the Property arising from any cause, and Tenant hereby waives all claims in respect thereof against Landlord, except for any claim arising out of Landlord's gross negligence or willful misconduct. As used in this Section, the term "Tenant" shall include Tenant's employees, agents, contractors and invitees, if applicable.

Section 5.06. Landlord's Access. Landlord or its agents may enter the Property at all reasonable times to show the Property to potential buyers, investors or tenants or other parties; to do any other act or to inspect and conduct tests in order to monitor Tenant's compliance with all applicable environmental laws and all laws governing the presence and use of Hazardous Material; or for any other purpose Landlord deems necessary. Landlord shall give Tenant prior notice of such entry, except in the case of an emergency. Landlord may place customary "For Sale" or "For Lease" signs on the Property during the final six months of the lease term.

Section 5.07. Quiet Possession. If Tenant pays the rent and complies with all other terms of this Lease, Tenant may occupy and enjoy the Property for the full Lease Term, subject to the provisions of this Lease.

ARTICLE SIX; CONDITION OF PROPERTY; MAINTENANCE, REPAIRS AND ALTERATIONS

Tenant shall, at its sole expense, maintain the Premises, in good condition, and promptly make all repairs and replacement, whether structural or non-structural, necessary to keep the Premises safe and in good condition, including all utilities and other systems serving the Premises. Landlord shall maintain and repair the building structure, foundations, exterior walls and roof.

Section 6.01. Existing Conditions. Tenant accepts the Property in its condition as of the execution of the Lease, subject to all recorded matters, laws, ordinances, and governmental regulations and orders. Except as provided herein, Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representations as to the condition of the Property or the suitability of the Property for Tenant's intended use. Tenant represents and warrants that Tenant has made its own inspection of and inquiry regarding the condition of the Property and is not relying on any representations of Landlord with respect thereto. If Landlord has provided a Property Information Sheet or other Disclosure Statement regarding the Property, a copy is attached as an exhibit to the Lease. Landlord will provide Tenant with a copy of the title policy on the property

Section 6.02. Exemption of Landlord from Liability. Landlord shall not be liable for any damage or injury to the person, business (or any loss of income therefrom). goods, wares, merchandise or other property of the Tenant, Tenant's employees, invitees, customers or any other person in or about the Property, whether such damage or injury is caused by or results from fire, steam, electricity, water, gas or rain; (b) the breakage, leakage, obstruction or other defects of pipes, sprinklers wires, appliances, plumbing, air conditioning or lighting fixtures or any other cause; (c) conditions arising in or about the Property or upon other portions of the Project, or from other sources or places; or (d) any act or omission of any other tenant of the Project. Landlord shall not be liable for any such damage or injury even though the cause of or the means of repairing such damage or injury are not accessible to Tenant. The provisions of this Section 6.02 shall not, however exempt Landlord from liability for Landlord's gross negligence or willful misconduct.

Section 6.03. Landlord's Obligations. Subject to the provisions of Article Seven (Damage or Destruction) and Article Eight (Condemnation), Landlord shall have absolutely no responsibility to repair, maintain or replace any portion of the Property at any time with the exception of the foundation and roof structure. Tenant waives the benefit of any present or future law, which might give Tenant the right to repair the Property at Landlord's expense or to terminate the Lease due to the condition of the Property.

Section 6.04. Tenants Obligations.

(a) Except as provided in Article Seven (Damage or Destruction) and Article Eight (Condemnation), and Section 6.03 above, Tenant shall keep all portions of the Property (including structural, nonstructural, interior, exterior, and landscaping areas, portions, systems and equipment) in good order, condition and repair (including interior painting and refinishing, as needed). If any portion of the Property or any system or equipment in the Property which Tenant is obligated to repair cannot be fully repaired or restored, Tenant shall promptly replace such portion of the Property or system or equipment in the Property, regardless of whether the benefit of such replacement extends beyond the Lease Term; but if the benefit or useful life of such replacement extends beyond the Lease Term (as such term may be extended by exercise of any options), the useful life of such replacement shall be prorated over the remaining portion of the Lease Term (as extended), and Tenant shall be liable only for that portion of the cost which is applicable to the lease Term (as extended). Tenant shall maintain a preventive maintenance contract providing for the regular inspection and maintenance of the heating and air-conditioning system by a licensed heating and air-conditioning contractor. If any part of the Property is damaged by any act or omission of Tenant, Tenant shall pay Landlord the cost of repairing or replacing such damaged property, whether or not Landlord would otherwise be obligated to pay the cost of maintaining or repairing such property. It is the intention of the Landlord and Tenant that at all times Tenant shall maintain the portions of the Property which Tenant is obligated to maintain in an attractive, first-class and fully operative condition.

(b) Tenant shall fulfill all of Tenant's obligations under this Section 6.04 at Tenant's sole expense. If Tenant fails to maintain, repair or replace the Property as required by this Section 6 04, Landlord may, upon ten (10) days' prior notice to Tenant (except that no notice shall be required in the case of an emergency), enter the Property and perform such maintenance or repair (including replacement, as needed) on behalf of Tenant. In such case, Tenant shall reimburse Landlord for all costs incurred in performing such maintenance or repair immediately upon demand.

Section 6.05. Alterations, Additions, and Improvements.

(a) Tenant shall only make alterations, additions, or improvements to the Premises with prior written consent of the Landlord, non-structural alterations which do not exceed Ten Thousand Dollars ($10,000) in cost and which are not visible from the outside of any building of which the Property is part. Landlord may require Tenant to provide demolition and/or lien and completion bonds in form and amount satisfactory to the Landlord. Tenant shall promptly remove alterations, additions, or improvements constructed in violation of this Paragraph 6.05(a) upon Landlord's written request all alterations additions and improvements shall be done in a good and workmanlike manner, in conformity with all applicable laws and regulations, and by a contractor approved by the Landlord. Upon completion of any such work, Tenant shall provide Landlord with "as built" plans copies of air construction contracts, and proof of payment for all labor and materials.

(b) Tenant shall pay when due all claims for labor and material furnished to the Property. Tenant shall give Landlord at least twenty (20) days prior written notice of the commencement of any work on the Property, regardless of whether Landlord's consent to such work is required. Landlord may elect to record and post notices of non-responsibility on the Property.

(c) This Lease anticipates the following improvements to be completed at Tenant's sole expense: (1) Paving of the parking lot, including an additional entrance from Poston Road and; (2) additional exterior lighting. Landlord will approve the specifications and scope of work for the parking lot prior to work beginning. Rent reduction for Year 1 will be contingent on the Tenant improvements being equal to or greater than $120,000.00. The tenant will be required to provide verification of project costs to the landlord in writing. If the verifiable expenses are less than the $120,000.00 threshold, the balance shall be payable to the landlord immediately.

Section 6.06. Condition upon Termination. Upon the termination of the lease, Tenant shall surrender the Property to Landlord broom clean and in the same condition as received except for ordinary wear and tear which tenant was not otherwise obligated to remedy under any provision of this Lease. However, Tenant shall not be obligated to repair any damage, which Landlord is required to repair under Article Seven (Damage or Destruction). In addition, Landlord may require Tenant to remove any alterations, additions or improvements (whether or not made with Landlords consent) prior to the expiration of the Lease and to restore the Property to its prior condition, all at Tenant's expense. All alternations, additions and improvements which Landlord has not required Tenant to remove shall become Landlord's property and shall be surrendered to Landlord upon the expiration or earlier termination of the Lease, except that Tenant may remove any of Tenant's machinery or equipment which can be removed without material damage to the Property. Tenant shall repair, at Tenant's expense any damage to the Property caused by the removal of any such machinery or equipment. In no event, however shall Tenant remove any of the following materials or equipment (which shall be deemed Landlord's property) without Landlord's prior written consent; any power wiring or power panels; lighting or lighting fixtures; wall coverings; drapes; blinds or other window coverings, carpet or other floor coverings; heaters; air conditioners or any other heating or air-conditioning equipment; fencing or security gates; or similar building operating equipment and decorations.

ARTICLE SEVEN DAMAGE OR DESTRUCTION

Section 7.01. Partial Damage to Property.

(a) Tenant shall notify Landlord in writing immediately upon the occurrence of any damage to the Property. If the Property is only partially damaged (i.e., less than fifty percent (50%) of the Property is untenantable as a result of such damage or less than fifty percent (50%) of Tenant's operations are materially impaired) and if the proceeds received by the Landlord from the insurance policies described in Paragraph 4.04(b) are sufficient to pay for necessary repairs, this Lease shall remain in effect and Landlord shall repair the damage as soon as reasonably possible Landlord may elect (but is not required) to repair any damage to Tenant's fixtures equipment, or improvements.

(b) If the insurance proceeds received by Landlord are not sufficient to pay the entire cost of repair, or if the cause of the damage is not covered by the insurance policies which Landlord maintains under Paragraph 4.04(b), Landlord may elect either to (i) repair the damage as soon as reasonably possible, in which case this Lease shall remain in full force and effect, or (ii) terminate this Lease as of the date the damage occurred Landlord shall notify Tenant within thirty (30) days after receipt of notice of the occurrence of the damage whether Landlord elects to repair the damage or terminate the Lease. If Landlord elects to repair the damage, Tenant shall pay Landlord the "deductible amount" (if any) under Landlord's insurance policies and, if the damage was due to an act or omission of Tenant, or Tenant's employees, agents, contractors or invitees, the difference between the actual cost of repair and any insurance proceeds received by the Landlord. If Landlord elects to terminate the Lease, Tenant may elect to continue this Lease in full force and effect, in which case Tenant shall repair any damage to the Property and any building in which the Property is located Tenant shall pay the cost of such repairs, except that upon satisfactory completion of such repairs, Landlord will deliver to Tenant any insurance proceeds received by Landlord for the damage repaired by the Tenant. Tenant shall give Landlord written notice of such election within ten (10) days after receiving Landlord's termination notice.

(c) If the damage occurs to the Property during the last six (6) months of the Lease Term and such damage will require more than thirty (30) days to repair, either Landlord or Tenant may elect to terminate this Lease as of the date the damage occurred, regardless of the sufficiency of any insurance proceeds. The party electing to terminate the Lease shall give written notification to the other party of such election within thirty (30) days after Tenant's notice to Landlord of the occurrence of the damage.

Section 7.02. Substantial or Total Destruction. If the Property is substantially or totally destroyed by any cause whatsoever (i.e., the damage to the Property is greater than partial damage as described in Section 7.01), and regardless of whether Landlord receives any insurance proceeds, this Lease shall terminate as of the date the destruction occurred. Notwithstanding the preceding sentence, if the Property can be rebuilt within six (6) months after the date of destruction, Landlord may elect to rebuild the Property at Landlord's own expense, in which case this Lease shall remain in full force and effect. Landlord shall notify Tenant of such election within thirty (30) days after Tenant's notice of the occurrence of total or substantial destruction.

Section 7.03. Temporary Reduction of Rent. If the property is destroyed or damaged and Landlord or Tenant repairs or restores the Property pursuant to the provisions of this Article Seven, any rent payable during the period of such damage, repair and/or restoration shall be reduced according to the degree, if any, to which Tenant's use of the Property is impaired. However, the reduction shall not exceed the sum of one year's payment of Rent, insurance premiums and real property taxes. Except for such possible reduction in Rent, insurance premiums and real property taxes, Tenant shall not be entitled to any compensation, reduction, or reimbursement from Landlord as a result of damage, destruction, repair, or restoration of or to the Property.

Section 7.04. Waiver. Tenant waives the protection of any statute, code or judicial decision, which grants a tenant the right to terminate a lease in the event of substantial or total destruction of the leased property. Tenant agrees that the provisions of Section 7.02 above shall govern the rights and obligations of Landlord and Tenant in the event of any substantial or total destruction to the Property.

ARTICLE EIGHT: CONDEMNATION

If all or any portion of the Property is taken under the power of eminent domain or sold under the threat of that power (all of which are called "Condemnation"), this Lease shall terminate as to the part taken or sold on the date the condemning authority takes title or possession, whichever occurs first. If more than twenty percent (20%) of the floor area of the building in which the Property is located or which is located on the Property is taken, either Landlord or Tenant may terminate this Lease as of the date the condemning authority takes title or possession, by delivering written notice to the other within ten (10) days after receipt of the written notice of such taking (or in the absence of such notice, within ten (10) days after the condemning authority takes title or possession). If neither Landlord nor Tenant terminates this Lease, this Lease shall remain in effect as to the portion of the Property not taken, except that the Rent and Additional Rent shall be reduced in proportion to the reduction in the floor area of the Property. Any condemnation award or payment shall be distributed in the following order (a) first, to any ground lessor, mortgagee or beneficiary under a deed of trust encumbering the Property, the amount of its interest in the Property; (b) second, to Tenant, only the amount of any award specifically designated for loss of or damage to Tenants trade fixtures or removable personal property; and (c) third, to the Landlord, the remainder of such award, whether as compensation for reduction if the value of the leaseholder, the taking of the fee, or otherwise. If this Lease is not terminated, Landlord shall repair any damage to the Property caused by Condemnation, except that Landlord shall not be obligated to repair any damage for which Tenant has been reimbursed by the condemning authority. If the severance damages received by Landlord are not sufficient to pay for such repair, Landlord shall have the right to either terminate this Lease or make such repair at Landlord's expense.

ARTICLE NINE; ASSIGNMENT AND SUBLETTING

Section 9.01. Landlord's Consent Required. No portion of the Property or of Tenant's interest in this Lease may be transferred to any other person or entity, whether by sale, assignment, mortgage, sublease, transfer, operation of law, or act of Tenant, without Landlord's prior written consent, except as provided in Section 9.02 below. Landlord has the right to grant or withhold its consent as provided in Section 9 05 below. Any attempted transfer without consent shall be void and shall constitute a non-curable breach of this Lease.

Section 9.02. Tenant Affiliate. Tenant may assign this Lease or sublease the Property without Landlord s consent to any corporation which controls, is controlled by or is under common control with Tenant, or to any corporation resulting from the merger or consolidation with Tenant ("Tenant's Affiliate"). In such case, any Tenant's Affiliate shall assume all of Tenant's obligations under this Lease.

Section 9.03. No Release of Tenant. No transfer permitted by this Article Nine, whether with or without Landlord's consent, shall release Tenant or change Tenant's primary liability to pay the rent and to perform all other obligations of Tenant under this lease. Landlord's acceptance of rent from any other person is not a waiver of any provision of this Article Nine. Consent to one transfer is not a consent to any subsequent transfer If Tenant's transferee defaults under this Lease. Landlord may proceed directly against Tenant without pursing remedies against the transferee. Landlord may consent to subsequent assignments or modifications of this Lease by Tenant's transferee, without notifying Tenant or obtaining its consent. Such action shall not relieve Tenant's liability under this Lease.

Section 9.04. Offer to Terminate. If Tenant desires to assign the Lease or sublease the Property, Tenant shall have the right to offer, in writing, to terminate the Lease as of a date specified in the offer. If Landlord elects in writing to accept the offer to terminate within twenty (20) days after notice of the offer, the Lease shall terminate as of the date specified and all the terms and provisions of the Lease governing termination shall apply. If Landlord does not so elect, the Lease shall continue in effect until otherwise terminated and the provisions of Section 9.05 with respect to any proposed transfer shall continue to apply.

Section 9.05. Landlord's Consent.

(a) Tenant's request for consent to any transfer described in Section 9.01 shall set forth in writing the details of the proposed transfer, including the name, business and financial condition of the prospective transferee, financial details of the proposed transfer (e g , the term of and the rent and security deposit payable under any proposed assignment or sublease), and any other information Landlord deems relevant. Landlord shall have the right to withhold consent, if reasonable, or to grant consent, based on the following factors: (1) the business of the proposed assignee or subtenant and the proposed use of the Property; (ii) the net worth and financial reputation of the proposed assignee or subtenant; (iii) Tenant's compliance with all of its obligations under the Lease; and (iv) such other factors as Landlord may reasonably deem relevant. If Landlord objects to a proposed assignment solely because of the net worth and/or financial reputation of the proposed assignee. Tenant may nonetheless sublease (but not assign), all or a portion of the Property to the proposed transferee, out only on the other terms of the proposed transfer.

(b) If Tenant assigns or subleases pursuant to Section 9.01, the following shall apply:

(i) Tenant shall pay to Landlord as Additional Rent under the Lease the Landlord's Share (stated in Section 1.13) of the Profit (defined below) on such transaction as and when received by Tenant, unless Landlord gives written notice to Tenant and the assignee or subtenant that Landlord's share shall be paid by the assignee or subtenant to Landlord directly. The "Profit" means (A) all amounts paid to Tenant for such assignment or sublease, including "key" money, monthly rent in excess of the monthly rent payable under the Lease, and all fees and other consideration paid for the assignment or sublease, including fees under any collateral agreements, less (B) costs and expenses directly incurred by Tenant in connection with the execution and performance of such assignment or sublease for real estate broker's commissions and costs of renovation or construction of tenant improvements required under such assignment or sublease. Tenant is entit1ed to recover such costs and expenses before Tenant is obligated to pay the Landlord's share to Landlord. The Profit in the case of a sublease of less than all the Property is the rent allocable to the subleased space as a percentage on a square footage basis; (ii) Tenant shall provide Landlord a written statement certifying all amounts to be paid from any assignment or sublease of the Property within thirty (30) days after the transaction documentation is signed, and Landlord may inspect Tenant's books and records to verify the accuracy of such statement. On written request, Tenant shall promptly furnish to Landlord copies of all transaction documentation all of which shall be certified by Tenant to be complete, true and correct. Landlord's receipt of the Landlord's share shall not be a consent to any further assignment or subletting. The breach of Tenant's obligation under this Paragraph 9.05(b) shall be a material default of the Lease.

Section 9.06. No Merger. No merger shall result from Tenants sublease of the Property under this Article Nine, Tenant's surrender of this Lease or the termination of this Lease in any other manner. In any such event, Landlord may terminate any or all subtenancies or succeed to the interest of Tenant as sublandlord under any or all subtenancies.

ARTICLE TEN: DEFAULTS; REMEDIES

Section 10.01. Covenants and Conditions. Tenants performance of each of Tenant's obligations under this Lease is a condition as well as a covenant. Tenant's rights to continue in possession of the Property is conditioned upon such performance. Time is of the essence in the performance of all covenants and conditions.

Section 10.02. Defaults. Tenant shall be in material default under this Lease:

(a) If tenant abandons the Property or if Tenant's vacation of the Property results in the cancellation of any insurance described in Section 4.04;

(b) If Tenant fails to pay rent or any other charge when due subject to a 10 day grace period for rental payments;

(c) If Tenant fails to perform any of Tenant's non-monetary obligations under this Lease for a period of thirty (30) days after written notice from Landlord; provided that if more than thirty (30) days are required to complete such performance, Tenant shall not be in default if Tenant commences such performance within the thirty (30) day period and thereafter diligently pursues its completion. However, Landlord shall not be required to give such notice if Tenant's failure to perform constitutes a non-curable breach of this Lease. The notice required by this Paragraph is intended to satisfy any and all notice requirements imposed by law on Landlord and is not in addition any such requirement;

(d) (i) If Tenant makes a general assignment or general arrangement for the benefit of creditors; (ii) if a petition for adjudication of bankruptcy or for reorganization or rearrangement is filed by or against Tenant and is not dismissed within thirty (30) days; (iii) if a trustee or receiver is appointed to take possession of substantially all of Tenant's assets located at the Property or of Tenant's interest in this Lease and possession is not restored to Tenant within thirty (30) days; or (iv) if substantially all of Tenant's assets located at the Property or of Tenant's interest in this Lease is subject to attachment, execution or other judicial seizure which is not discharged within thirty (30) days. If a court of competent jurisdiction determines that any of the acts described in this subparagraph (d) is not a default under this Lease, and a trustee is appointed to take possession (or if Tenant remains a debtor in possession) one such trustee or Tenant transfers Tenant's interest hereunder, then Landlord shall receive, as Additional Rent the excess, if any, of the rent (or any other consideration) paid in connection with such assignment or sublease over the rent payable by Tenant under this Lease;

(e) If any guarantor of the Lease revokes or otherwise terminates, or purports to revoke or otherwise terminate, any guaranty of all or any portion of Tenant's obligations under the Lease. Unless otherwise expressly provided, no guaranty of the Lease is revocable.

Section 10.03. Remedies. On the occurrence of any material default by Tenant, Landlord may, at any time thereafter, with or without notice or demand and without limiting Landlord in the exercise of any right or remedy, which Landlord may have.

(a) Terminate Tenant's right to possession of the Property by any lawful means, in which case this Lease shall terminate and Tenant shall immediately surrender possession of the Property to Landlord. In such event, Landlord shall be entitled to recover from Tenant all damages incurred by Landlord by reason of Tenant's default, including (i) the worth at the time of the award of the unpaid Rent, Additional Rent and other charges which Landlord has earned at the time of the termination; (ii) the worth at the time of the award of the amount by which the unpaid Rent, Additional Rent and other changes which Landlord would have earned after termination until the time of the award exceeds the amount of such rental loss that Tenant proves Landlord could have reasonably avoided; (iii) the worth at the time of the award of the amount by which the unpaid Rent, Additional Rent and Other charges which Tenant would have paid for the balance of the Lease Term after the time of award exceeds the amount of such rental loss that Tenant proves Landlord could have reasonably avoided; and (iv) any other amount necessary to compensate Landlord for all the detriment proximately caused the Tenant's failure to perform its obligations under the Lease or which in the ordinary course of things would be likely to receive therefrom, including, but not limited to any costs or expenses Landlord incurs in maintaining or preserving the Property after such default, the cost of recovering possession of the Property, expenses of releetting, including necessary renovation or alteration of the Property; Landlord's reasonable attorney's fees incurred in connection therewith, and any real estate commission paid or payable. As used in subparts (i) and (ii) above, the "worth at the time of the award' is computed by allowing interest on unpaid amounts at the rate of fifteen percent (15%) per annum, or such lesser amount as may then be the maximum lawful rate. As used in subpart (iii) above, the "worth at the time of the award" is computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of the award, plus one percent (1%). If Tenant has abandoned the Property, Landlord shall have the option of (i) retaking possession of the Property and recovering from Tenant the amount specified in this Paragraph 10.03(a), or (ii) proceeding under Paragraph 10.03(o)

(b) Maintain Tenant's right to possession, in which case this Lease shall continue in effect whether or not Tenant has abandoned the Property. In such event, Landlord shall be entitled to enforce all of Landlord's rights and remedies under this Lease, including the right to recover the rent as it becomes due;

(c) Pursue any other remedy now or hereafter available to Landlord under the laws or judicial decisions of the state in which the Property is located.

Section 10.04. Deleted intentionally.

Section 10.05, Automatic Termination. Notwithstanding any other term or provision hereof to the contrary, the Lease shall terminate on the occurrence of any act which affirms the Landlord's intention to terminate the Lease as provided in Section 10.03 hereof, including the filing of an unlawful detainer action against Tenant. On such termination, Landlord's damages for default shall include all costs and fees, including reasonable attorneys' fees that Landlord incurs in connection with the filing, commencement, pursuing and/or defending of any action in any bankruptcy court or other court with respect to the Lease; the obtaining of relief from any stay in bankruptcy restraining any action to evict Tenant; or the pursuing of any action with respect to Landlord's right to possession of the Property. All such damages suffered (apart from Rent and other rent payable hereunder) shall constitute pecuniary damages which must be reimbursed to Landlord prior to assumption of the Lease by Tenant or any successor to Tenant in any bankruptcy or other proceeding.

Section 10.06. Cumulative Remedies. Landlord's exercise of any right or remedy shall not prevent it from exercising any other right or remedy.

ARTICLE ELEVEN' PROTECTION OF LENDERS

Section 11.01. Subordination. Landlord shall have the right to subordinate this Lease to any ground lease, deed of trust or mortgage encumbering the Property, any advances made on the security thereof and any renewals, modifications, consolidations, replacements or extensions thereof, whenever made or recorded. Tenant shall cooperate with Landlord and any lender, which is acquiring a security in the Property or the Lease. Tenant shall execute such further documents and assurances as such lender may require, provided that Tenant's obligations under this Lease shall not be increased in any material way (the performance of ministerial acts shall not be deemed material), and Tenant shall not be deprived of its rights under this Lease. Tenant's right to quiet possession of the Property during the Lease Term shall not be disturbed if Tenant pays the rent and performs all of Tenant's obligations under this Lease and is not otherwise in default. If any ground lessor, beneficiary or mortgagee elects to have this Lease prior to the lien of its ground lease, deed of trust of mortgage and gives written notice thereof to Tenant, this Lease shall be deemed prior to such ground lease, deed of trust or mortgage whether this Lease is dated prior or subsequent to the date of said ground lease, deed of trust or mortgage or the date of recording thereof.

Section 11.02. Attornment. If Landlord's interest in the Property is acquired by any ground lessor, beneficiary under a deed of trust, mortgagee, or purchaser at a foreclosure sale, Tenant shall attorn to the transferee of or successor to Landlord's interest in the Property and recognize such transferee or successor as Landlord under this Lease. Tenant waives the protection of any statute or rule of law which gives or purports to give Tenant any right to terminate this Lease or surrender possession of the Property upon the transfer of Landlord's interest.

Section 11.03. Signing of Documents. Tenant shall sign and deliver any instrument or documents necessary or appropriate to evidence any such attornment or subordination or agreement to do so. If Tenant fails to do so within ten (10) days after written request, Tenant hereby makes, constitutes and irrevocably appoints Landlord, or any transferee or successor of Landlord, the attorney-in-fact of Tenant to execute and deliver any such instrument or document.

Section 11.04. Estoppel Certificates.

(a) Upon Landlord's written request, Tenant shall execute, acknowledge and deliver to Landlord a written statement certifying, (i) that none of the terms or provisions of this Lease have been changed (or if they have been changed, stating how they have been changed); (ii) that this Lease has not been cancelled or terminated; (iii) the last date of payment of the Rent and other charges and the time period covered by such payment; (iv) that Landlord is not in default under this Lease (or, if Landlord is claimed to be in default, stating why); and (v) such other representations or information with respect to Tenant or the Lease as Landlord may reasonably request or which any prospective purchaser or encumbrancer of the Property may require. Tenant shall deliver such statement to Landlord within ten (10) days after Landlord's request Landlord may give any such statement by Tenant to any prospective purchaser or encumbrancer of the Property. Such purchaser or encumbrancer may rely conclusively upon such statement as true and correct. Should Tenant need such Estopptel Certificate Landlord will agree to deliver such statement to Tenant within ten (10) days after the Tenant's Request.

(b) If Tenant does not deliver such statement to Landlord within such ten (10) day period, Landlord, and any prospective purchaser or encumbrancer, may conclusively presume and rely upon the following facts:(i) that the terms and provisions of this Lease have not been changed except as otherwise represented by Landlord; (ii) that this Lease has not been cancelled or terminated except as otherwise represented by Landlord; (iii) that not more than one month's Rent or other charges have been paid in advance; and (iv) that Landlord is not in default under the Lease. In such event, Tenant shall be estopped from denying the truth of such facts.

Section 11.05. Tenant's Financial Condition. Landlord will be given a website where Tenant's financial statements can be viewed. If Tenant's financial statements cannot be viewed at given website then, within ten (10) days after written request from Landlord, Tenant shall deliver to Landlord such financial statements as Landlord reasonably requires to verify the net worth of Tenant or any assignee. subtenant or guarantor of Tenant. In addition, Tenant shall deliver to any lender designated by Landlord any financial statements required by such lender to facilitate the financing or refinancing of the Property. Tenant represents and warrants to Landlord that each such financial statement is a true and accurate statement as of the date of such statement. All financial statements shall be confidential and shall be used only for the purposes set forth in this Lease.

ARTICLE TWELVE: LEGAL COSTS

Section 12.01. Legal Proceedings. If Tenant or Landlord shall be in breach or default under this Lease, such party (the "Defaulting Party") shall reimburse the other party (the "Nondefaulting Party") upon demand for any costs or expenses that the Nondefaulting Party incurs in connection with any breach or default of the Defaulting Party under this Lease, whether or not suit is commenced or judgment entered. Such costs shall include legal fees and costs incurred for the negotiation of a settlement, enforcement of rights or otherwise. Furthermore, if any action for breach of or to enforce the provisions of this Lease is commenced, the court in such action shall award to the party in whose favor a judgment is entered, a reasonable sum as attorneys' fees and costs. The losing party in such action shall pay such attorneys' fees and costs. Tenant shall also indemnify Landlord against and hold Landlord harmless from all costs, expenses, demands and liability Landlord may incur if Landlord becomes or is made a party to any claim or action (a) instituted by Tenant against any third party, or by any third party against Tenant, or by or against any person holding any interest under or using the Property by license of or agreement with Tenant, (b) for foreclosure of any lien for labor or material furnished to or for Tenant or such other person; (c) otherwise arising out of or resulting from any act on transaction of Tenant or such other person; or (d) necessary to protect Landlord's interest under this Lease in a bankruptcy proceeding, or other proceeding under Title 11 of the United States Code, as amended. Tenant shall defend Landlord against any such claim or action at Tenant's expense with counsel reasonably acceptable to Landlord or, at Landlord's election. Tenant shall reimburse Landlord for any legal fees or costs Landlord incurs in any such clam or action.

Section 12.02. Landlord's Consent. Tenant shall pay Landlord's reasonable attorneys' fees incurred in connection with Tenant's request for Landlord's consent under Article Nine (Assignment or Subletting), or in connection with any other act which Tenant proposes to do and which requires Landlord's consent.

ARTICLE THIRTEEN: MISCELLANEOUS PROVISIONS

Section 13.01. Non-Discrimination. Tenant promises, and it is a condition to the continuance of this Lease, that there will be no discrimination against, or segregation of, any person or group of persons on the basis of race, color, sex, creed, national origin, or ancestry in the leasing, subleasing, transferring, occupancy, tenure or use of the Property or any portion thereof.

Section 13.02. Landlord's Liability: Certain Duties.

(a) As used in this Lease, the term "Landlord" means only the current owner or owners of the fee title to the Property or the leasehold estate under a ground lease of the Property at the time in question. Each Landlord is obligated to perform the obligations of Landlord under this Lease only during the time such Landlord owns such interest or title. Any Landlord who transfers its title or interest is relieved of all liability with respect to the obligations of Landlord under this Lease to be performed on or after the date of transfer. However, each Landlord shall deliver to its transferee all funds that Tenant previously paid if such funds have not yet been applied under the terms of this Lease.

(b) Tenant shall give written notice of any failure by Landlord to perform any of its obligations under this Lease to Landlord and to any ground lessor, mortgagee or beneficiary under any deed of trust encumbering the Property whose name and address have been furnished to Tenant in writing. Landlord shall not be in default under this Lease unless Landlord (or such ground lessor, mortgagee or beneficiary) fails to cure such non-performance within thirty (30) days after receipt of Tenant's notice. However, if such non-performance reasonably requires more than thirty (30) days to cure, Landlord shall not be in default if such cure is commenced within such thirty (30) day period and thereafter diligently pursued to completion.

(c) Notwithstanding any term or provision herein to the contrary the liability of the Landlord for the performance of its duties and obligations under this Lease is limited to Landlord's interest in the Property, and neither the Landlord nor its partners, shareholders, officers or other principals shall have any personal liability under this Lease.

Section 13.03. Severability. A determination by a court of competent jurisdiction that any provision of this Lease or any part thereof is illegal or unenforceable shall not cancel or invalidate the remainder of such provision of this Lease, which shall remain in full force and effect .

Section 13.04. Interpretation. The captions of the Articles or Sections of this Lease are to assist the parties in reading this Lease and are not part of the terms or provisions of this Lease Whenever required by the context of this Lease, the singular shall include the plural and the plural shall include the singular. The masculine, feminine and neuter genders shall each include the other. In any provision relating to the conduct, acts or omissions of Tenant, the term "Tenant' shall include Tenant's agents, employees, contractors, invitees, successors or others using the Property with Tenant's expressed or implied permission.

Section 13.05. Incorporation of Prior Agreements; Modifications. This Lease is the only agreement between the parties pertaining to the lease of the Property and no other agreements are effective. All amendments to this Lease shall be in writing and signed by all parties. Any other attempted amendment shall be void.

Section 13.06. Notices. All notices required or permitted under this Lease shall be in writing and shall be personally delivered or sent by certified mail, return receipt requested, postage paid. Notices to Tenant shall be delivered to the address specified in Section 1.03 above, except that upon Tenant's taking possession of the Property, the Property shall be Tenant's address for notice purposes. Notices to Landlord shall be delivered to the address specified in Section 1.02 above. All notices shall be effective upon delivery. Either party may change its notice address upon written notice to the other party.

Section 13.07. Waivers. All waivers must be in writing and signed by the waiving party. Landlord's failure to enforce any provision of this Lease or its acceptance of rent shall be a waiver and shall not prevent Landlord from enforcing that provision or any other provision of this Lease in the future. No statement on a payment check from Tenant or in a letter accompanying a payment check shall be binding on Landlord. Landlord may, with or without notice to Tenant, negotiate such check without being bound to the conditions of such statement.

Section 13.08. No Recordation. Tenant shall not record this Lease without prior written consent from Landlord. However, either Landlord or Tenant may require that a "Short Form" memorandum of this Lease executed by both parties be recorded. The party requiring such recording shall pay all transfer taxes and recording fees

Section 13.09. Binding Effect; Choice of Law. This Lease binds any party who legally acquires any rights or interest in this Lease from Landlord or Tenant. However, Landlord shall have no obligation to Tenant's successor unless the rights or interests of Tenant's successor are acquired in accordance with the terms of this Lease. The laws of the state in which the Property is located shall govern this Lease.

Section 13.10. Corporate Authority; Partnership Authority. If Tenant is a corporation, each person signing this Lease on behalf of Tenant represents and warrants that he has full authority to do so and that this Lease binds the corporation. Within thirty (30) days after this Lease is signed, Tenant shall deliver to Landlord a certified copy of a resolution of Tenant's Board of Directors authorizing the execution of this Lease or other evidence of such authority reasonably acceptable to Landlord. If Tenant is a partnership, each person or entity signing the lease for Tenant represents and warrants that he or it is a general partner of the partnership that he or it has full authority to sign for the partnership and that this Lease binds the partnership and all general partners of the partnership Tenant shall give written notice to Landlord of any general partner's withdrawal or addition. Within thirty (30) days after this Lease is signed, Tenant shall deliver to Landlord a copy of Tenant's recorded statement of partnership or certificate of limited partnership.

Section 13.11. Joint and Several Liability. All parties signing this Lease as Tenant shall be jointly and severally liable for all obligations of Tenant

Section 13.12. Force Majeure. If Landlord or Tenant cannot perform any of its obligations due to events beyond Landlord's or Tenant's control, the time provided for performing such obligations shall be extended by a period of time equal to the duration of such events. Events beyond Landlord's or Tenant's control include, but are not limited to, acts of God, war, civil commotion, labor disputes, strikes, fire, flood or other casualty, shortages of labor or material, government regulation or restriction and weather conditions.

Section 13.13. Execution of Lease. This Lease may be executed in counterparts and, when all counterpart documents are executed, the counterpart shall constitute a single binding instrument. Landlord's delivery of this Lease to Tenant shall not be deemed to be an offer to lease and shall not be binding upon either party until executed and delivered by both parties.

Section 13.14. Survival. All representations and warranties of Landlord and Tenant shall survive the termination of this Lease.

ARTICLE FOURTEEN: BROKERS

Section 14.01. Broker's Fee. Tenant represents and warrants to Landlord that it has not engaged any broker, finder or other person who would be entitled to any commission or fees for negotiation, execution, or delivery of the Lease. Landlord represents and warrants to Landlord that is has not engaged any broker, finder or other person who would be entitled to any commission or fees for negotiation, execution, or delivery of the Lease.

Section 14.02. Protection of Brokers. N/A

Section 14.03. Agency Disclosure; No Other Brokers. See Section 14.01 above.

ARTICLE FIFTEEN. COMPLIANCE

The parties here to agree to comply with all applicable federal, state and local laws, regulations, codes, ordinances and administrative orders having jurisdiction over the parties, property or the subject matter of this Agreement, including, but not limited to, the 1964 Civil Rights Act and all amendments thereto, the Foreign Investment in Real Property Tax Act, the Comprehensive Environmental Response Compensation and Liability Act, and The Americans With Disabilities Act.

ARTICLE SIXTEEN: LANDLORD COVENANTS

Landlord covenants and agrees as follows;

(a) Marketable Title. Landlord has marketable title to the Property, subject only to mortgage liens, easements and restrictions of record,

(b) Quiet Enjoyment. For so long as Tenant is not delinquent in the payment of any rent or is not in default of the performance of any other term or condition of this Lease to be performed by Tenant, then, during the term of this Lease, Tenant may peacefully hold and enjoy the Property without any interruptions by Landlord, its assigns, or any persons lawfully claiming through Landlord.

(c) Condition of Property. Landlord represents that, as of the date that Landlord delivers possession of the Property to Tenant, the Property shall be structurally sound and good condition, including, without limitation, the roof and mechanical elements. To the Landlord's knowledge, (i) there are no pollutants or other toxic or hazardous substances at the Property, (ii) no asbestos or asbestos containing materials have been installed, used, incorporated into, or disposed of on the Property: and (iii) there are no underground storage tanks located on the Property. Tenant shall have no liability or responsibility for any such materials on the Property as of the date of possession unless Tenant is directly responsible for such materials.

(d) Compliance with Laws. As of the date of delivery of possession to Tenant, the Property shall be in compliance with all federal, state and local laws, statutes, ordinances, rules and regulations applicable to the Property, including without limitation, the Americans With Disabilities Act and any state or local law similar thereto, and all zoning ordinances.

ADDITIONAL PROVISIONS MAY BE SET FORTH IN A RIDER OR RIDERS ATTACHED HERETO OR IN THE BLANK SPACE BELOW. IF NO ADDITIONAL PROVISIONS ARE INSERTED, PLEASE DRAW A LINE THROUGH THE SPACE BELOW.

CONFIDENTIALITY

Landlord and Tenant recognize that the Landlord is a public entity subject to the Public Records Act, in accordance with Ohio Revised Code Section 149.43. Confidentiality of Information for Landlord is further addressed in Ohio Revised Code Section 4582.091.

We confirm and agree that this and all future negotiations and disclosures between all parties subject to this agreement will be subject to the following confidentiality provisions:

(a) In the course of our discussions we will each have access to and will be entrusted with detailed confidential information relating to the other; and

(b) The right to maintain the confidentiality of this information constitutes a proprietary right which the other party is entitled to protect and which shall be respected and honored; and

(c) Neither party will at any time disclose any confidential information or use same for any purpose which would give it or any competitor or other interested party in advantage over its counterpart in these discussions;

(d) At the end of these discussions, and subject to any other agreement reached, all copies of any documentation or records referring to or containing confidential information belonging to the other party shall be returned or destroyed, to be confirmed by a statutory declaration if so requested; and

(e) The entering into of the Letter of Intent, and the potential completion of this transaction, will be kept strictly confidential and will not be disclosed to customers, suppliers, employees or other person without the consent of both parties, such consent not be to unreasonably delayed or withheld; this provision shall not apply to professional advisors, potential financiers, or appraisers; provided they agree to maintain the same level of confidentiality required by the parties.

CONFIDENTIALITY EXCLUSIONS

Confidential information does not include the following information that:

(a) Is developed by the receiving party independently and without use or concerning the disclosing party's confidential information;

(b) Is obtained by the receiving party from a third party without restriction on disclosure and without breach of a nondisclosure obligation;

(c) Is in or enters the public domain other than through the fault or negligence of the receiving party and without breach of this Agreement;

(d) The receiving party possesses before first receiving it from the disclosing party; or

(e) As legally required to be disclosed, at which point the disclosing party will notify the other party.

CONFIDENTIALITY OBLIGATIONS

Each party will maintain in strict confidence, and will not use or disclose, except as expressly permitted under this agreement or as required by the Public Records Act, any confidential information received from the other party. Each party further agrees to use the same degree of care to maintain the confidentiality of all confidential information received from the other party as it uses to maintain the confidentiality of its own information of similar importance, but in no event will it sue less than reasonable care.

Landlord and Tenant have signed this Lease at the place and on the dates specified adjacent to their signatures below and have initialed all Riders which are attached to or incorporated by reference in this Lease.

- THE REMAINDER OF PAGE LEFT INTENTIONALLY BLANK -

Athens County Port Authority

Signed on _____20__ _____
at_____ _____

By _____

Its _____

Global Cooling, Inc., a Delaware Corporation

Signed on _____20__ _____
at_____ _____

By _____

Its _____

Exhibit 10.25

LEASE EXTENSION AGREEMENT
To the Lease Agreement Between Athens
County Port Authority ("Landlord")
and
Global Cooling, Inc., A Delaware Corporation ("Tenant")

This Lease Extension is hereby made and entered into by and between the Athens County Port Authority (hereinafter referred to as "Landlord") and Global Cooling, Inc., A Delaware
Corporation (hereinafter referred to as "Tenant") on this 30 day of May 2018.

WHEREAS, Landlord and Tenant wish to extend the Lease Agreement, dated April 1, 2011, and further amended on 30 May 2018 (hereinafter referred to as "Lease") for premises commonly described as and located at 6000 Poston Road, The Plains, Ohio 45710 with approximately 50,000 rentable square feet for a period of ten (10) years.

WHEREAS, the Parties now desire to extend the term of the Lease Agreement as herein stated.

NOW THEREFORE, for an in consideration of the mutual covenants and promises herein contained, and other good and valuable consideration, the receipt and sufficiently of which are hereby acknowledge, the Parties hereto agrees to as follows:

Section 1.05: The Pat1ies hereby agree to extend the Lease for a term of seven (7) years as the Lease was set to expire on March 3 I, 2021. The Lease will now be extended until March 31, 2028.

Section I.12: BASE RENT. The Base Rent shall consist of a monthly rent as follows:

Year 2018:	$19,000.00
Year 2019:	$21,000.00
Year 2020:	$22,000.00
Year 2021:	$23,000.00
Year 2022:	$24,000.00
Year 2023:	$25,000.00
Year 2024:	$26,000.00
Year 2025:	$27,000.00
Year 2026:	$28,000.00
Year 2027:	$29,000.00

This remains a "Triple Net" lease. Tenant v. ill remain responsible for Taxes, Insurance, and Repairs and Maintenance unless provided in Section 6.05 below.

Section 6.05. ALTERATION, ADDITIONS, AND IMPROVEMENTS. Landlord will initially fund the repairs for the HVAC and Apron that is located on the premises commonly described as and located at 6000 Poston Road, The Plains, Ohio 45710 and Tenant will be responsible for the total amount pursuant to the final invoice that will provide itemized costs for the repairs. Tenant wit! be responsible for the final costs in sixty (60) equal installments that will be due to the Landlord in addition to the Base Rent set forth in Section I. The monthly installment will be due at the same time as the Base Rent set forth in Section I. The monthly installment shall commence on the month following Tenant's receipt of the final invoice for the repairs. Other than what is specifically stated above, the remaining terms and conditions set forth in Section 6.05 remain in full force and effect.

Except as specifically agreed hereinabove, the original terms and provisions of the Lease remain in full force and effect, and are incorporated herein, and the Parties hereby affirm and consent to the Lease as hereinabove extended and amended and agree to be bound by the same.

The parties have signed this Lease Extension at the place and on the dates specified adjacent to their signatures below.

LEASE EXTENSION

ATHENS COUNTY PORT AUTHORITY

Signed on June 13, 2018

At Athens, Ohio.

By: -_____

Its: _____

Global Cooling, Inc., a Delaware Corporation

Signed on 30 May, 2018 At Athens, Ohio.

By: -_____

Its: _____

Exhibit 10.26

LEASE

THIS LEASE (this "Lease") is executed effective as of October 1, 2019 ("Commencement Date"), by and between Cook Regentec, LLC, an Indiana limited liability company ("Landlord"), and Sexton Biotechnologies, Inc., a Delaware corporation ("Tenant").

ARTICLE 1 - LEASE OF PREMISES

Section 1.01. Basic Lease Provisions and Definitions.

(a) The "Leased Premises" is described on Exhibit A attached hereto (designated on such exhibit as the "CMS" and "Exclusive Space") and is a portion of a multi-tenant building (the "Building") with an address of 1102 Indiana Avenue, Indianapolis, IN 46202.

(b) "Monthly Rental Installments" shall be equal to the following amounts, commencing on the Commencement Date:

Lease Term

Months 1-60 $10,000 per month

(c) "Lease Term" shall mean the Term (as defined below), commencing on the Commencement Date, as more fully described in Section 2.01 below.

(d) "Permitted Use" shall mean daily operations of a commercial-stage biotechnology company, including general office activity, biologics research and manufacturing, engineering development, ambient and frozen storage, shipping and receiving, and related activities.

(e) Address for notices and payments are as follows:

Landlord's notice address:

Tenant's notice address:

1102 Indiana Avenue
Indianapolis, IN 46202 Attn: Rob Lyles

1102 Indiana Avenue
Indianapolis, IN 46202 Attn: Sean Werner

Section 1.02. Lease of Premises. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Leased Premises, under the terms and conditions herein, together with a non-exclusive right, in common with others, to use the following (collectively, the "Common Areas"), subject to the rights reserved to Landlord pursuant to Section 4.03: the areas of the Building and the underlying land and improvements thereto that are designed for use in common by all tenants of the Building and their respective employees, agents, customers, invitees and others, which such Common Areas shall include the areas designated as the "Shared Space" on Exhibit A. In addition, Tenant shall be permitted to use the outdoor patio adjacent to the Building if such outdoor patio is not in use by Landlord. Tenant agrees that it shall not have access to any other areas of the Building, including areas leased to other tenants, without permission from Landlord.

ARTICLE 2 - LEASE TERM

Section 2.01. Term. The term of this Lease (the "Term") shall be for a period commencing on the Commencement Date and ending at 11:59 p.m. on the day before the date that is sixty (60) months following (i) the Commencement Date, if the Commencement Date is the first day of a calendar month, or (ii) the first day of the first full calendar month following the Commencement Date, if the Commencement Date is not the first day of a calendar month.

Section 2.02. Intentionally omitted.

Section 2.03. Surrender of the Leased Premises. Upon the expiration or earlier termination of this Lease, Tenant shall, at its sole cost and expense, immediately (a) surrender the Leased Premises to Landlord in broom-clean condition and in good order, condition and repair; (b) remove from the Leased Premises (i) Tenant's Property (as defined in Section 7.01 below), (ii) all signage, and (iii) any alterations required to be removed pursuant to Section 6.04 below; and (c) repair any damage caused by any such removal and restore the Leased Premises to the condition existing upon the Commencement Date, reasonable wear and tear and casualty excepted. All of Tenant's Property that is not removed within ten (10) days following Landlord's written demand therefor shall be conclusively deemed to have been abandoned and Landlord shall be entitled to dispose of such property at Tenant's cost without incurring any liability to Tenant. This Section 2.03 shall survive the expiration or any earlier termination of this Lease.

Section 2.04. Holding Over. If Tenant retains possession of the Leased Premises after the expiration or earlier termination of this Lease, Tenant shall be a tenant at sufferance at one hundred fifty percent (150%) of the Monthly Rental Installments for the Leased Premises in effect upon the date of such expiration or earlier termination, and otherwise upon the same terms, covenants and conditions herein specified, so far as applicable. Acceptance by Landlord of rent after such expiration or earlier termination shall not result in a renewal of this Lease, nor shall such acceptance create a month-to-month tenancy. In the event a month-to-month tenancy is created by operation of law, either party shall have the right to terminate such month-to-month tenancy upon thirty (30) days' prior written notice to the other, whether or not said notice is given on the rent paying date. This Section 2.04 shall in no way constitute consent by Landlord to any holding over by Tenant upon the expiration or earlier termination of this Lease, nor limit Landlord's remedies in such event, including, without limitation, Landlord's right to recover from Tenant any consequential or punitive damages resulting from a holdover by Tenant after the expiration or earlier termination of this Lease.

ARTICLE 3 - RENT

Section 3.01. Base Rent. Tenant shall pay to Landlord the Monthly Rental Installments (as set forth in Section 1.0 l(b) hereof) in advance, without demand, deduction or offset (except as otherwise provided in this Lease), on the Commencement Date and on or before the first day of each and every calendar month thereafter during the Lease Term. If the Commencement Date is not the first day of a calendar month, the first month's payment of Monthly Rental Installments shall be prorated on the basis of a thirty (30) day month, and shall be payable with the first full monthly payment of Monthly Rental Installments due hereunder.

Section 3.02. Intentionally omitted.

Section 3.03. Payment of Additional Rent. Any amount required to be paid by Tenant hereunder (in addition to Monthly Rental Installments) and any charges or expenses properly incurred by Landlord on behalf of Tenant under the terms of this Lease shall be considered "Additional Rent" payable in the same manner and upon the same terms and conditions as the Monthly Rental Installments reserved hereunder, except as set forth herein to the contrary. Any failure on the part of Tenant to pay such Additional Rent when and as the same shall become due (after written notice from Landlord) shall entitle Landlord to the remedies available to it for non-payment of Monthly Rental Installments.

Section 3.04. Late Charges. Tenant acknowledges that Landlord shall incur certain additional unanticipated administrative and legal costs and expenses if Tenant fails to pay timely any payment required hereunder. Therefore, in addition to the other remedies available to Landlord hereunder, if any payment required to be paid by Tenant to Landlord hereunder shall become overdue, such unpaid amount shall bear interest from the due date thereof to the date of payment at the prime rate of interest, as reported in the Wall Street Journal (the "Prime Rate") plus eight percent (8%) per annum; provided, however, such interest rate shall not exceed the highest rate permitted by applicable law.

Section 3.05. Business Taxes. Tenant shall pay, during the Lease Term, all license fees and occupation taxes applicable to the business conducted by Tenant on the Leased Premises, and all taxes on any and all personal property owned or placed by Tenant and located upon the Leased Premises.

Section 3.06. Quiet Possession. If Tenant pays each Monthly Rental Installment and Additional Rent, and timely complies with all other terms of this Lease, Tenant shall be entitled to occupy and enjoy the Leased Premises for the full Lease Term without molestation or disturbance by or from Landlord or anyone lawfully claiming by or through Landlord, subject, nevertheless, to the terms and conditions of this Lease.

ARTICLE 4 - OCCUPANCY AND USE

Section 4.01. Use. Tenant shall use the Leased Premises for the Permitted Use as provided in Section 1.0 I(d). and for no other purpose without the prior written consent of Landlord. In no event shall Tenant use the Leased Premises for any use other than Permitted Use without prior written approval of Landlord In addition, Tenant shall not permit the Leased Premises to be overloaded, damaged, stripped or defaced, suffer any waste of the Leased Premises.

Section 4.02. Covenants of Tenant Regarding Use.

(a) Tenant shall (i) use and maintain the Leased Premises and conduct its business thereon in a safe, careful, reputable and lawful manner, (ii) comply with all covenants that apply to Tenant's operations within or use of the Leased Premises and all laws, rules, regulations, orders, ordinances, directions and requirements of any governmental authority or agency, now in force or which may hereafter be in force, including, without limitation, those which shall impose upon Landlord or Tenant any duty with respect to or triggered by a change in the use or occupation of, or any improvement or alteration to, the Leased Premises, (iii) comply with and obey all reasonable directions, rules and regulations of Landlord, including the Building Rules and Regulations attached hereto as Exhibit B and made a part hereof, as may be reasonably modified from time to time by Landlord on reasonable written notice to Tenant, and (iv) comply with all of the terms and restrictions of the Security/Safety/Access Rider attached hereto as Exhibit C and made a part hereof, as may be reasonably modified from time to time by Landlord on reasonable written notice to Tenant. If any of the Building Rules and Regulations is inconsistent with any express provision of this Lease, the express provision of this Lease shall prevail and the Building Rules and Regulations shall not be applicable to Tenant to the extent of the inconsistency. During the Lease Term, Tenant shall be solely responsible to apply for and procure and maintain any and all permits and government authorizations for its installation, operation and use of any of the equipment and systems of Tenant; and shall indemnify the Landlord for any and all damages arising from its failure to do so.

(b) Tenant shall not do or permit anything to be done in or about the Leased Premises that will in any way cause a nuisance, injure, obstruct or interfere with the rights of Landlord or other tenants or occupants of the Building. Landlord shall not be responsible to Tenant for the non-performance by any other tenant or occupant of the Building of any of Landlord's directions, rules and regulations, but agrees that any enforcement thereof shall be done uniformly. Tenant shall not overload the floors of the Leased Premises. All damage to the floor structure or foundation of the Building due to improper positioning or storage of items or materials shall be repaired by Landlord at the sole expense of Tenant, who shall reimburse Landlord immediately therefor upon demand. Tenant shall not use the Leased Premises, nor allow the Leased Premises to be used, for any purpose or in any manner that would (i) invalidate any policy of insurance now or hereafter carried by Landlord on the Building, or (ii) increase the rate of premiums payable on any such insurance policy unless Tenant reimburses Landlord for any increase in premium charged.

Section 4.03. Landlord's Rights Regarding Use. Without limiting any of Landlord's rights specified elsewhere in this Lease (a) Landlord shall have the right at any time, without notice to Tenant, to control, change or otherwise alter the Common Areas in such manner as it deems necessary or proper and (b) Landlord, its agents, employees and contractors and any mortgagee of the Building shall have the right to enter any part of the Leased Premises at reasonable times upon reasonable notice (except in the event of an emergency when no notice shall be required) for the purposes of examining or inspecting the same (including, without limitation, testing to confirm Tenant's compliance with this Lease), showing the same to prospective purchasers, mortgagees or tenants, and making such repairs, alterations or improvements to the Leased Premises or the Building as Landlord may deem necessary or desirable. Landlord shall incur no liability to Tenant for such entry, nor shall such entry constitute an eviction of Tenant or a termination of this Lease, or entitle Tenant to any abatement of rent therefor. Notwithstanding the foregoing, (i) Landlord shall use commercially reasonable efforts to give Tenant at least twenty-four (24) hours' notice prior to any such entry (except in the event of an emergency) and shall use commercially reasonable efforts to minimize the interference to Tenant's operations within the Leased Premises; (ii) Tenant shall at all such times have continuing access to the Leased Premises; (iii) Tenant shall have the right to require that Landlord or Landlord's agents or employees be accompanied at all times by a representative of Tenant (except in the event of an emergency); and (iv) the Leased Premises shall be shown to prospective tenants only during the last six (6) months of the Lease Term.

Section 4.04. Relocation.

(a) Landlord may, upon at least one hundred eighty (180) days' prior written notice to Tenant, require Tenant to relocate a portion of the office part of the Leased Premises (the "Released Premises") to other office premises (the "New Premises") in the Building in accordance with the provisions contained in this Section. The New Premises shall be substantially equivalent space as the Released Premises. Tenant's direct, reasonable moving costs and expenses paid to third parties shall be reimbursed by Landlord within thirty (30) days from Landlord's receipt of paid invoices from Tenant. The amounts payable under this Lease shall not be adjusted as a result of any such relocation. Within thirty (30) days after Landlord provides its relocation notice to Tenant hereunder, Landlord and Tenant shall execute an amendment to this Lease providing for the relocation of Tenant to the New Premises as provided in this Section.

(b) In the event that Tenant does not vacate and surrender possession of the Released Premises to Landlord in the time period specified by Landlord's relocation notice, or cease its operations of business at the Released Premises, as the case may be, on the date and in the manner required pursuant to the preceding paragraph, in addition to all other liabilities and damages to which Tenant shall be subject by reason thereof, Tenant shall indemnify Landlord and hold Landlord harmless from and against any and all claims, demands, damages, expenses, fees, costs, fines, penalties, suits, proceedings, actions, causes of action and losses of any and every kind and nature (including, without limitation, sums paid in settlement of claims and for reasonable attorneys' fees and court costs) that may be imposed upon or incurred by or asserted against Landlord arising, directly or indirectly, out of or in connection with Tenant's failure to surrender possession of, or cease its operation of business at, the Released Premises. Landlord shall also have the right to specific performance with respect to Tenant's obligation to surrender possession of, and cease operation of its business at, the Released Premises. The election of Landlord to insist upon specific performance in such event shall not be construed as a waiver or relinquishment of any provision, covenant, agreement or condition on the part of Tenant to be performed or of any other remedy that Landlord may be entitled to under this Lease, at law, in equity or otherwise.

ARTICLE 5 - UTILITIES

Tenant acknowledges and agrees that the utilities are jointly metered with other property and that Landlord will pay for such utilities and Tenant shall reimburse Landlord for its share of such utilities in an amount equal to $11,000/month, payable in the same manner and time and upon the same terms and conditions as the Monthly Rental Installments reserved hereunder. Landlord shall not be liable in damages or otherwise for any failure or interruption of any utility or other building service and no such failure or interruption shall entitle Tenant to terminate this Lease or withhold sums due hereunder. Tenant acknowledges and agrees that Landlord may increase such monthly amount if the Tenant's scope of operations change during the Lease Term. In addition, Landlord shall have the right to separately meter the Leased Premises from the remainder of the Building and if it elects such separate metering, Tenant shall pay directly to the utility providers the actual amount of any such utilities utilized at the Leased Premises.

Tenant shall not, without Landlord's prior written consent, use heat-generating machines or equipment or lighting other than Building standard lights in the Leased Premises, which may affect the temperature otherwise maintained by the air conditioning system or increase the need for water normally furnished for the Leased Premises by Landlord. If such consent is given, Landlord shall have the right to install supplementary air conditioning systems or equipment in the Leased Premises, including supplementary or additional metering devices, and the cost thereof, including the cost of installation, operation and maintenance, increased wear and tear on existing equipment and other similar charges, shall be paid by Tenant to Landlord upon billing by Landlord. If Tenant desires to use heat, ventilation or air conditioning ("HVAC") during hours other than normal business hours, (i) Tenant shall give Landlord such prior notice, as Landlord shall from time to time establish as appropriate, of Tenant's desired use, (ii) Landlord shall supply such utilities to Tenant at such hourly cost to Tenant as Landlord shall from time to time establish, and (iii) Tenant shall pay such cost to Landlord within ten (10) days after billing, as additional rent.

ARTICLE 6 - REPAIRS, MAINTENANCE AND ALTERATIONS

Section 6.01. Repair and Maintenance of Building. Landlord shall make all necessary repairs, replacements and maintenance to the roof, fire suppression systems, exterior walls, foundation, concrete floor, structural frame and structural systems of the Building and the parking and landscaped areas and other Common Areas, provided that, to the extent any such repairs, replacements or maintenance are required because of the negligence, misuse or default of Tenant, its employees, agents, contractors, customers or invitees, Landlord shall make such repairs at Tenant's sole expense. Except as expressly provided in this Section 6.01, Landlord shall have no other maintenance or repair responsibilities for the Leased Premises or the Building.

Section 6.02. Repair and Maintenance of Leased Premises. Tenant shall, at its own cost and expense, maintain the Leased Premises (including, without limitation, any of Tenant's server rooms, clean rooms, freezers, or other specialty equipment) in good condition, regularly servicing and promptly making all repairs and replacements thereto, including but not limited to the items listed on Exhibit D attached hereto (the "Tenant Maintenance Items") which are not expressly required of Landlord under Section 6.01. In addition, Tenant shall provide, validate, qualify and certify the HEPA filters in the clean rooms for the Leased Premises (but Landlord shall be responsible for any related mechanical repairs and maintenance). Tenant acknowledges that Landlord is not keeping Veriteq and so any monitoring of space would be the responsibility of Tenant.

Section 6.03. Warranties. If, and to the extent, Landlord receives warranties from the manufacturers, contractors or installers of certain portions of the Leased Premises, or the systems, equipment or fixtures comprising the same ("Third Party Warranties"), Landlord will reasonably assist Tenant in connection with the administration and enforcement of any such Third Party Warranty to the extent they impact the Leased Premises.

LANDLORD AND TENANT ACKNOWLEDGE AND AGREE THAT ANY AND ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AS TO THE QUALITY OR CONDITION OF THE LEASED PREMISES, AND THE FIXTURES THERETO AND SYSTEMS THEREIN ARE HEREBY DISCLAIMED AND WAIVED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY THAT THE LEASED PREMISES WILL BE REASONABLY SUITED FOR ITS INTENDED USE OR FREE OF LATENT DEFECTS. TENANT ACKNOWLEDGES THAT LANDLORD IS LEASING THE LEASED PREMISES TO TENANT ON AN "AS-IS, WHERE-IS" BASIS, AND TENANT FURTHER ACKNOWLEDGES THAT IT IS ACCEPTING THE LEASED PREMISES ON SUCH BASIS WITH ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, BEING EXCLUDED.

Section 6.04. Alterations. Tenant shall not permit any alterations in or to the Leased Premises unless and until Landlord has approved the plans therefor in writing, which approval shall not be unreasonably withheld, conditioned or delayed. As a condition of such approval, Landlord may require Tenant, by written notice to Tenant at the time Landlord provides its approval with respect to such alterations in the event Tenant so requests such determination by Landlord in writing, to remove the alterations and restore the Leased Premises to its condition prior to the installation of the alterations, ordinary wear and tear excepted, upon termination of this Lease; otherwise, all such alterations (excluding Tenant's Property (as defined in Section 7.01 below)) shall at Landlord's option become a part of the realty and the property of Landlord, and shall not be removed by Tenant. Tenant shall ensure that all alterations shall be made in accordance with all applicable laws, regulations and building codes, in a good and workmanlike manner, of quality equal to or better than the original construction of the Building, and in a manner that will not adversely affect the validity or enforceability of any Third Party Warranty. In the event that Tenant desires to place any equipment or fixtures on the roof of the Building, (x) Tenant must provide to Landlord, at Tenant's sole cost and expense, written evidence (i) prior to the commencement of any such work, that Landlord's roofing contractor (or another contractor approved by the then-current issuer of Landlord's roof warranty) has confirmed that the proposed work will not void or adversely affect the coverage under Landlord's roof warranty; and (ii) upon completion of any such work, that the work has been inspected by Landlord's roofing contractor (or another contractor approved by the then-current issuer of Landlord's roof warranty) and that such work does not in any way void or adversely affect the coverage under Landlord's roof warranty; (y) Tenant shall be solely responsible for the installation, maintenance, repair, operation, and replacement of any such equipment or fixtures, including obtaining and maintaining any requisite permits and/or approvals for the installation and operation of such equipment or fixtures; and (z) Tenant shall be solely responsible for repairing any damage to the roof caused by Tenant's installation or operation of any equipment or fixtures on the roof of the Building. All alterations shall be at the sole cost and expense of Tenant and no person shall be entitled to any lien derived through or under Tenant for any labor or material furnished to the Leased Premises, and nothing in this Lease shall be construed to constitute Landlord's consent to the creation of any lien. If any lien is filed against the Leased Premises for work claimed to have been done for or material claimed to have been furnished to Tenant, Tenant shall cause such lien to be discharged of record within thirty (30) days after filing of such lien. Tenant shall indemnify Landlord from all costs, losses, expenses and attorneys' fees in connection with Tenant's exercise of its rights under this Section 6.04.

ARTICLE 7 - INDEMNITY AND INSURANCE

Section 7.01. Release. All of Tenant's trade fixtures, merchandise, inventory, special fire protection equipment, telecommunication and computer equipment, supplemental air conditioning equipment, kitchen equipment and all other personal property in or about the Leased Premises, the Building or the Common Areas, which is deemed to include the trade fixtures, merchandise, inventory and personal property of others located in or about the Leased Premises or Common Areas at the invitation, direction or acquiescence (express or implied) of Tenant (all of which property shall be referred to herein, collectively, as "Tenant's Property"), shall be and remain at Tenant's sole risk. Landlord shall not be liable to Tenant or to any other person for, and Tenant hereby releases Landlord (and its affiliates, property managers and mortgagees) from (a) any and all liability for theft or damage to Tenant's Property, and (b) any and all liability for any injury to Tenant or its employees, agents, contractors, guests and invitees in or about the· Leased Premises, the Building or the Common Areas, except to the extent of personal injury and/or property damage caused by the negligence or willful misconduct of Landlord, its agents, employees or contractors. Nothing contained in this Section 7.01 shall limit (or be deemed to limit) the waivers contained in Section 7.06 below. In the event of any conflict between the provisions of Section 7.06 below and this Section 7.01, the provisions of Section 7.06 shall prevail. This Section 7.01 shall survive the expiration or earlier termination of this Lease.

Section 7.02. Indemnification by Tenant. Tenant shall protect, defend, indemnify and hold Landlord, its agents, employees and contractors of all tiers harmless from and against any and all claims, damages, demands, penalties, costs, liabilities, losses, and expenses (including reasonable attorneys' fees and expenses at the trial and appellate levels) to the extent (a) arising out of or relating to any act, omission, negligence, or willful misconduct of Tenant or Tenant's agents, employees, contractors, customers or invitees in or about the Leased Premises, the Building or the Common Areas, (b) arising out of or relating to any of Tenant's Property, or (c) arising out of any other act or occurrence within the Leased Premises, in all such cases except to the extent of personal injury and/or property damage caused by the negligence or willful misconduct of Landlord, its agents, employees or contractors. Nothing contained in this Section 7.02 shall limit (or be deemed to limit) the waivers contained in Section 7.06 below. In the event of any conflict between the provisions of Section 7.06 below and this Section 7.02, the provisions of Section 7.06 shall prevail. This Section 7.02 shall survive the expiration or earlier termination of this Lease.

Section 7.03. Indemnification by Landlord. Landlord shall protect, defend, indemnify and hold Tenant, its agents, employees and contractors harmless from and against any and all claims, damages, demands, penalties, costs, liabilities, losses and expenses (including reasonable attorneys' fees and expenses at the trial and appellate levels) to the extent arising out of or relating to any act, omission, negligence or willful misconduct of Landlord or Landlord's agents, employees or contractors and except to the extent any such act or omission is reasonably caused by Tenant's failure to comply with its obligations under this Lease. Nothing contained in this Section 7.03 shall limit (or be deemed to limit) the waivers contained in Section 7.06 below. In the event of any conflict between the provisions of Section 7.06 below and this Section 7.03, the provisions of Section 7.06 shall prevail. This Section 7.03 shall survive the expiration or earlier termination of this Lease.

Section 7.04. Tenant's Insurance.

(a) During the Lease Term (and any period of early entry or occupancy or holding over by Tenant, if applicable), Tenant shall maintain the following types of insurance, in the amounts specified below:

(i) Liability Insurance. Commercial General Liability Insurance, ISO Form CG 00 01, or its equivalent, covering Tenant's use of the Leased Premises against claims for bodily injury or death or property damage, which insurance shall be primary and non-contributory and shall provide coverage on an occurrence basis with a per occurrence limit of not less than $2,000,000.00 for each policy year, which limits may be satisfied by any combination of primary and excess or umbrella per occurrence policies.

(ii) Property Insurance. Special Form Insurance in the amount of the full replacement cost of Tenant's Property (including, without limitation, alterations or additions performed by Tenant pursuant hereto), which insurance shall waive coinsurance limitations.

(iii) Worker's Compensation Insurance. Worker's Compensation insurance in amounts required by applicable law.

(iv) Business Interruption Insurance. Business Interruption Insurance with limits not less than an amount equal to one (1) year of rent hereunder.

(v) Automobile Insurance. Comprehensive Automobile Liability Insurance insuring bodily injury and property damage arising from all owned, non-owned and hired vehicles, if any, with minimum limits of liability of $1,000,000.00 combined single limit, per accident.

(b) All insurance required to be carried by Tenant hereunder shall (i) be issued by one or more insurance companies reasonably acceptable to Landlord, licensed to do business in the State in which the Leased Premises is located and having an AM Best's rating of A VII or better, and (ii) provide that said insurance shall not be materially changed, canceled or permitted to lapse on less than thirty (30) days' prior written notice to Landlord. In addition, Tenant's insurance shall protect Tenant and Landlord as their interests may appear, naming Landlord, and any mortgagee requested by Landlord, as additional insureds under its commercial general liability, excess and umbrella policies (but only to the extent of the limits required hereunder). On or before the Commencement Date (or the date of any earlier entry or occupancy by Tenant), and thereafter, within thirty (30) days prior to the expiration of each such policy, Tenant shall furnish Landlord with certificates of insurance in the form of ACORD 25 (or other evidence of insurance reasonably acceptable to Landlord), evidencing all required coverages, and that with the exception of Worker's Compensation insurance (if applicable), such insurance is primary and non-contributory. Upon Tenant's receipt of a request from Landlord, Tenant shall provide Landlord with copies of all insurance policies, including all endorsements, evidencing the coverages required hereunder. If Tenant fails to carry such insurance and furnish to Landlord not more than five (5) days after Landlord's written request therefor such certificates of insurance or copies of insurance policies (if applicable), Landlord may obtain such insurance on Tenant's behalf and Tenant shall reimburse Landlord upon demand for the cost thereof as Additional Rent. Landlord reserves the right from time to time to require Tenant to obtain higher minimum amounts or different types of insurance if it becomes customary for other landlords of similar buildings in the area to require similar sized tenants in similar industries to carry insurance of such higher minimum amounts or of such different types.

Section 7.05. Landlord’s Insurance. During the Lease Term, Landlord shall maintain the following types of insurance, in the amounts specified below:

(a) Liability Insurance. Commercial General Liability Insurance, ISO Form CG 00 01, or its equivalent, covering the Common Areas against claims for bodily injury or death and property damage, which insurance shall be primary and non-contributory and shall provide coverage on an occurrence basis with a per occurrence limit of not less than $1,000,000.00 for each policy year, which limit may be satisfied by any combination of primary and excess or umbrella per occurrence policies.

(b) Property Insurance. Special Form Insurance in the amount of the full replacement cost of the Building, but excluding Tenant's Property and any other items required to be insured by Tenant pursuant to Section 7.04 above.

Section 7.06. Waiver of Subrogation. Notwithstanding anything contained in this Lease to the contrary, Landlord (and its affiliates, property managers and mortgagees) and Tenant (and its affiliates) hereby waive any rights each may have against the other on account of any loss of or damage to their respective property, the Leased Premises, its contents, or other portions of the Building or Common Areas arising from any risk which is required to be insured against by Sections 7.04(a)(ii), 7.04(a)(iii) and 7.05(b) above. The special form property insurance policies and worker’s compensation insurance policies maintained by Landlord and Tenant as provided in this Lease shall include an endorsement containing an express waiver of any rights of subrogation by the insurance company against Landlord and Tenant, as applicable.

ARTICLE 8 - CASUALTY

In the event of total or partial destruction of the Building or the Leased Premises by fire or other casualty, Landlord agrees promptly to restore and repair same within one hundred eighty (180) days after such casualty (the "Scheduled Completion Date"); provided, however, Landlord's obligation hereunder with respect to the Leased Premises shall be limited to the reconstruction of such of the leasehold improvements as were originally in the Leased Premises on the Commencement Date. Notwithstanding the foregoing, Landlord shall not be in default for failing to timely complete such restoration and repair unless Tenant provides to Landlord written notice of default for such failure on or after the Scheduled Completion Date and Landlord fails to complete such restoration and repair within thirty (30) days of receiving such notice. The Monthly Rental Installments shall proportionately abate during the time that the Leased Premises or any part thereof are unusable because of any such damage. Notwithstanding the foregoing, if the Leased Premises are (a) so destroyed that they cannot be repaired or rebuilt within one hundred eighty (180) days from the casualty date; or (b) destroyed by a casualty that is not covered by the insurance required hereunder or, if covered, such insurance proceeds are not released by any mortgagee entitled thereto or are insufficient to rebuild the Building and the Leased Premises; then, in case of a clause (a) casualty, either Landlord or Tenant may, or, in the case of a clause (b) casualty, then Landlord may, upon thirty (30) days' written notice to the other party, terminate this Lease with respect to matters thereafter accruing; provided, however, that the Monthly Rental Installment shall proportionately abate during the time that the Leased Premises or any part thereof are unusable because of any such casualty.

ARTICLE 9 - EMINENT DOMAIN

If all or any substantial part of the Building or Common Areas shall be acquired by the exercise of eminent domain, Landlord may terminate this Lease by giving written notice to Tenant on or before the date possession thereof is so taken. If all or any part of the Leased Premises or Building or Common Areas shall be acquired by the exercise of eminent domain so that the Leased Premises shall become impractical for Tenant to use for the Permitted Use, Tenant may terminate this Lease by giving written notice to Landlord as of the date possession thereof is so taken. All damages awarded shall belong to Landlord; provided, however, that Tenant may claim dislocation damages if such amount is not subtracted from Landlord's award.

ARTICLE 10 - ASSIGNMENT AND SUBLEASE

Tenant shall not assign, mortgage, pledge or in any manner transfer this Lease or any interest therein, nor sublet the Leased Premises in whole or in part without Landlord’s prior written consent, which consent may be withheld in Landlord's sole discretion. In the event of any assignment or subletting of this Lease, Tenant shall remain primarily liable hereunder, and any extension, expansion, rights of first offer, rights of first refusal or other options granted to Tenant under this Lease shall be rendered void and of no further force or effect. The acceptance of rent from any other person shall not be deemed to be a waiver of any of the provisions of this Lease or to be consent to the assignment of this Lease or the subletting of the Leased Premises. Any assignment or sublease consented to by Landlord shall not relieve Tenant (or its assignee) from obtaining Landlord's consent to any subsequent assignment or sublease.

If Tenant shall make any assignment or sublease, with Landlord’s consent, for a rental in excess of the rent payable under this Lease, Tenant shall pay to Landlord fifty percent (50%) of any such excess rental (after deduction of Tenant's reasonable costs of subletting or assignment) upon receipt. Tenant agrees to pay Landlord Five Hundred and No/100 Dollars ($500.00) upon demand by Landlord for reasonable accounting and attorneys' fees incurred in conjunction with the processing and documentation of any requested assignment, subletting or any other hypothecation of this Lease or Tenant's interest in and to the Leased Premises as consideration for Landlord's consent.

In addition, upon any proposed assignment of this Lease by Tenant, or a request for Landlord's consent to an assignment of this Lease, Landlord shall be permitted to terminate this Lease upon notice to Tenant.

No assignment of this Lease by Tenant or subletting of all or any portion of the Leased Premises shall be effective unless and until Tenant shall deliver to Landlord (i) all information reasonably requested by Landlord in connection with evaluating a proposed assignee or subtenant, and (ii) an agreement, in form and substance reasonably satisfactory to Landlord, pursuant to which (i) in the case of an assignment, such assignee assumes and agrees to be bound by all of the provisions of this Lease and confirming the assignee's agreement to accept and be bound by all of the Tenant's obligations under this Lease; and (ii) in the case of a sublease, such subtenant acknowledges that its sublease is subject and subordinate to this Lease and agrees to be bound by the Lease.

ARTICLE 11 - TRANSFERS BY LANDLORD

Section 11.01. Sale of the Building. Landlord shall have the right to sell the Building at any time during the Lease Term, subject only to the rights of Tenant hereunder; and such sale shall operate to release Landlord from liability hereunder for matters first arising from and after the date of such conveyance.

Section 11.02. Estoppel Certificate. Within ten (10) days following receipt of a written request from Landlord, Tenant shall execute and deliver to Landlord, without cost to Landlord, an estoppel certificate in such form as Landlord may reasonably request certifying (a) that this Lease is in full force and effect and unmodified or stating the nature of any modification, (b) the date to which rent has been paid, (c) that there are not, to Tenant's knowledge, any uncured defaults or specifying such defaults if any are claimed, and (d) any other matters or state of facts reasonably required respecting the Lease. Such estoppel may be relied upon by Landlord and by any purchaser or mortgagee of the Building.

Section 11.03. Subordination. This Lease is and shall be expressly subject and subordinate at all times to the lien of any present or future mortgage or deed of trust encumbering fee title to the Leased Premises. If any such mortgage or deed of trust be foreclosed, upon request of the mortgagee or beneficiary ("Landlord's Mortgagee"), as the case may be, Tenant will attorn to the purchaser at the foreclosure sale. The foregoing provisions are declared to be self-operative and no further instruments shall be required to effect such subordination and/or attornment; provided, however, that subordination of this Lease to any present or future mortgage or trust deed shall be conditioned upon the mortgagee, beneficiary, or purchaser at foreclosure, as· the case may be agreeing that Tenant's occupancy of the Leased Premises and other rights under this Lease shall not be disturbed by reason of the foreclosure of such mortgage or trust deed, as the case may be, so long as Tenant is not in default under this Lease. Within ten (10) days following receipt of a written request from Landlord, Tenant shall execute and deliver to Landlord, without cost, any instrument that Landlord deems reasonably necessary or desirable to confirm the subordination of this Lease.

ARTICLE 12 - DEFAULT AND REMEDIES

Section 12.01. Default. The occurrence of any of the following shall be a "Default":

(a) Tenant fails to pay any Monthly Rental Installments or Additional Rent when due; provided, however, that Landlord agrees to give Tenant written notice of such failure twice during any calendar year during the Lease Term and from and after Landlord has given two (2) such notices during any calendar year, Tenant shall have committed a Default under this Lease in the event it fails to pay any further Monthly Rental Installments or Additional Rent during such calendar year when due and payable with no further notice required from Landlord during such calendar year. If notice is given as provided above, Tenant shall be in default if it fails to pay such delinquent Monthly Rental Installment or Additional Rent within five (5) business days after receipt of such notice.

(b) Tenant fails to perform or observe any other term, condition, covenant or obligation required under this Lease for a period of thirty (30) days after written notice thereof from Landlord; provided, however, that if the nature of Tenant's default is such that more than thirty (30) days are reasonably required to cure, then such default shall be deemed to have been cured if Tenant commences such performance within said thirty (30) day period and thereafter diligently completes the required action within a reasonable time.

(c) Tenant shall vacate or abandon the Leased Premises, or fail to occupy the Leased Premises or any substantial position thereof for a period of thirty (30) days without payment of rent.

(d) Tenant shall assign or sublet all or a portion of the Leased Premises in contravention of the provisions of Article 10 of this Lease.

(e) All or substantially all of Tenant's assets in the Leased Premises or Tenant's interest in this Lease are attached or levied under execution (and Tenant does not discharge the same within sixty (60) days thereafter); a petition in bankruptcy, insolvency or for reorganization or arrangement is filed by or against Tenant (and Tenant fails to secure a stay or discharge thereof within sixty (60) days thereafter); Tenant is insolvent and unable to pay its debts as they become due; Tenant makes a general assignment for the benefit of creditors; Tenant takes the benefit of any insolvency action or law; the appointment of a receiver or trustee in bankruptcy for Tenant or its assets if such receivership has not been vacated or set aside within thirty (30) days thereafter; or, dissolution or other termination of Tenant's corporate charter if Tenant is a corporation.

Section 12.02. Remedies. Upon the occurrence of any Default, Landlord shall have the following rights and remedies, in addition to those stated elsewhere in this Lease and those allowed by law or in equity, any one or more of which may be exercised without further notice to Tenant:

(a) Landlord may re-enter the Leased Premises and cure any Default of Tenant, and Tenant shall reimburse Landlord as Additional Rent for any costs and expenses that Landlord thereby incurs; and Landlord shall not be liable to Tenant for any loss or damage that Tenant may sustain by reason of Landlord's action, except to the extent such loss or damage resulted directly from the gross negligence or willful misconduct of Landlord.

(b) Landlord may terminate this Lease by giving Tenant notice of termination, in which event this Lease shall expire and terminate on the date specified in such notice of termination and all rights of Tenant under this Lease and in and to the Leased Premises shall terminate. Tenant shall remain liable for all obligations under this Lease arising up to the date of such termination, and Tenant shall surrender the Leased Premises to Landlord on the date specified in such notice.

(c) Without terminating this Lease, Landlord may terminate Tenant's right to possession of the Leased Premises, and thereafter, neither Tenant nor any person claiming under or through Tenant shall be entitled to possession of the Leased Premises. In such event, Tenant shall immediately surrender the Leased Premises to Landlord, and Landlord may re-enter the Leased Premises and dispossess Tenant and any other occupants of the Leased Premises by any lawful means and may remove their effects, without prejudice to any other remedy that Landlord may have. Upon termination of possession, Landlord may re-let all or any part thereof as the agent of Tenant for a term different from that which would otherwise have constituted the balance of the Lease Term and for rent and on terms and conditions different from those contained herein, whereupon Tenant shall be immediately obligated to pay to Landlord an amount equal to (i) the present value (discounted at the Prime Rate) of the difference between the rent provided for herein and (A) that provided for in any lease covering a subsequent re-letting of the Leased Premises, for the period which would otherwise have constituted the balance of the Lease Term had this Lease not been terminated (said period being referred to herein as the "Remaining Term"), or (B) if not relet, then the market rent that Landlord could reasonably expect to receive with respect to the Leased Premises for the remaining Lease Term (the "Accelerated Rent Difference"); (ii) the costs of recovering possession of the Leased Premises and all other reasonable expenses, loss or damage incurred by Landlord by reason of Tenant's Default ("Default Damages"), which shall include, without limitation, expenses of preparing the Leased Premises for re-letting (other than costs of tenant improvements for the buildout specific to the new tenant), demolition, repairs, brokers' commissions and attorneys' fees, and (iii) all unpaid

Monthly Rental Installments and Additional Rent that accrued prior to the date of termination of possession, plus any interest and late fees due hereunder (the "Prior Obligations"). Neither the filing of any dispossessory proceeding nor an eviction of personalty in the Leased Premises shall be deemed to terminate the Lease.

(d) Landlord may terminate this Lease and recover from Tenant all damages Landlord may incur by reason of Tenant's default, including, without limitation, an amount which, at the date of such termination is equal to the sum of the following: (i) the value of the excess, if any, discounted at the Prime Rate of interest, of (A) the Monthly Rental Installments, Additional Rent and all other sums that would have been payable hereunder by Tenant for the Remaining Term, less (B) the aggregate reasonable rental value of the Leased Premises for the Remaining Term, as determined by a real estate broker licensed in the State of Indiana who has at least ten (10) years of experience, (ii) all of Landlord's Default Damages, and (iii) all Prior Obligations. Landlord and Tenant acknowledge and agree that the payment of the amount set forth in clause (i) above shall not be deemed a penalty, but shall merely constitute payment of liquidated damages, it being understood that actual damages to Landlord are extremely difficult, if not impossible, to ascertain. It is expressly agreed and understood that all of Tenant's liabilities and obligations set forth in this Section 12.02(d) shall survive termination.

(e) Landlord may sue for injunctive relief or to recover damages for any loss resulting from the Default.

(f) If Landlord terminates this Lease or Tenant's right to possession, Landlord's duty to mitigate its damages under this Lease shall be as follows: (1) Landlord shall be required to use commercially reasonable efforts ·to mitigate, which shall not exceed such efforts as Landlord generally uses to lease other space in the Building, (2) Landlord will not be deemed to have failed to mitigate if Landlord leases any other portions of the Building before reletting all or any portion of the Leased Premises, and (3) Landlord shall not be deemed to have failed to mitigate if it reasonably incurs costs and expenses for repairs, maintenance, changes, alterations, and improvements to the Leased Premises (whether to prevent damage or to prepare the Leased Premises for reletting), brokerage commissions, advertising costs, attorneys' fees, any economic incentives given to replacement tenants, and costs of collecting rent from replacement tenants. In recognition that the value of the Building depends on the rental rates and terms of leases therein, Landlord's rejection of a prospective replacement tenant based on an offer of rentals substantially below Landlord's published rates for new leases of comparable space at the Building at the time in question, or at Landlord's option, below the rates provided in this Lease, containing terms less favorable than those contained herein, shall not give rise to a claim by Tenant that Landlord failed to mitigate Landlord's damages. Tenant shall bear the burden of proving Landlord's failure to mitigate.

Section 12.03. Landlord's Default and Tenant's Remedies. Landlord shall be in default if it fails to perform any term, condition, covenant or obligation required under this Lease, and such failure continues for a period of thirty (30) days after written notice thereof from Tenant to Landlord; provided, however, that such default shall be deemed to have been cured if Landlord commences such performance within said thirty-day period and thereafter diligently completes the same within a commercially reasonable period of time. Upon the occurrence of any such default, Tenant may sue for injunctive relief or to recover damages for any loss directly resulting from the breach; provided, however, in no event shall Landlord be liable for any consequential, exemplary, or punitive damages or lost profits as a result of a Landlord default hereunder, and Tenant shall not be entitled to terminate this Lease or withhold, offset, or abate any sums due hereunder.

Section 12.04. Limitation of Landlord's Liability. If Landlord shall fail to perform any term, condition, covenant or obligation required to be performed by it under this Lease (beyond any applicable notice and cure period) and if Tenant shall, as a consequence thereof, recover a money judgment against Landlord, Tenant agrees that it shall look solely to Landlord's right, title and interest in and to the Building and any income therefrom for the collection of such judgment; and Tenant further agrees that no other assets of Landlord shall be subject to levy, execution or other process for the satisfaction of Tenant's judgment.

Section 12.05. Non-waiver of Defaults. Neither party's failure or delay in exercising any of its rights or remedies or other provisions of this Lease shall constitute a waiver thereof or affect its right thereafter to exercise or enforce such right or remedy or other provision. No waiver of any default shall be deemed to be a waiver of any other default. Landlord's receipt of less than the full rent due shall not be construed to be other than a payment on account of rent then due, nor shall any statement on Tenant's check or any letter accompanying Tenant's check be deemed an accord and satisfaction. No act or omission by Landlord or its employees or agents during the Lease Term shall be deemed an acceptance of a surrender of the Leased Premises, and no agreement to accept such a surrender shall be valid unless in writing and signed by Landlord.

Section 12.06. Attorneys' Fees. If either party defaults in the performance or observance of any of the terms, conditions, covenants or obligations contained in this Lease and the non-defaulting party obtains a judgment against the defaulting patty, then the defaulting party agrees to reimburse the non-defaulting party for reasonable attorneys' fees incurred in connection therewith. In addition, if a monetary Default shall occur and Landlord engages outside counsel to exercise its remedies hereunder, and then Tenant cures such monetary Default, Tenant shall pay to Landlord, on demand, all expenses incurred by Landlord as a result thereof, including reasonable attorneys' fees, court costs and expenses actually incurred.

ARTICLE 13 - TENANT'S RESPONSIBILITY REGARDING ENVIRONMENTAL LAWS AND HAZARDOUS SUBSTANCES

Section 13.01. Environmental Definitions.

(a) "Environmental Laws" shall mean all present or future federal, state and municipal laws, ordinances, rules and regulations applicable to the environmental and ecological condition of the Leased Premises, and the rules and regulations of the Federal Environmental Protection Agency and any other federal, state or municipal agency or governmental board or entity having jurisdiction over the Leased Premises.

(b) "Hazardous Substances" shall mean those substances included within the definitions of "hazardous substances," "hazardous materials," "toxic substances," "solid waste" or "infectious waste" under Environmental Laws and petroleum products.

Section 13.02. Restrictions on Tenant. Tenant shall not cause or knowingly permit the use, generation, release, manufacture, refining, production, processing, storage or disposal of any Hazardous Substances on, under or about the Leased Premises, or the transportation to or from the Leased Premises of any Hazardous Substances, except as necessary and appropriate for its Permitted Use in which case the use, storage or disposal of such Hazardous Substances shall be performed in compliance with the Environmental Laws and the highest standards prevailing in the industry.

Tenant shall not be entitled, for research or testing purposes, to bring any animals (including without limitation laboratory mice, rats or other mammals or primates, reptiles or aquatic life); micro-organisms; or bacteriological, biological, or pathological agents; (collectively, "Biological Items") into the Building or the Leased Premises without prior written notice to Landlord and Landlord's express written consent. Tenant, at its sole cost and expense, shall comply with all Environmental Laws with respect to any of the foregoing Biological Items allowed under this Section. Landlord may condition its consent to the presence of such animals based on quantity, type, arrangements for storage, sanitation, transportation, and other physical and logistical considerations as Landlord may reasonably determine in each instance and from time to time as circumstances may require.

Tenant will (i) obtain and maintain in full force and effect all environmental permits that may be required from time to time under any Environmental Laws applicable to Tenant or the Leased Premises and (ii) be and remain in compliance with all terms and conditions of all such environmental permits and with all other limitations, restrictions, conditions, standards, prohibitions, requirements, obligations, schedules and timetables contained in all Environmental Laws applicable to Tenant or the Leased Premises. From time to time upon Landlord's written request, Tenant shall provide to Landlord all environmental permits pertaining to the Leased Premises and Tenant's business operations therein.

Section 13.03. Notices, Affidavits, Etc. Tenant shall immediately (a) notify Landlord of (i) any violation by Tenant, its employees, agents, representatives, customers, invitees or contractors of any Environmental Laws on, under or about the Leased Premises, or (ii) the presence or suspected presence of any Hazardous Substances on, under or about the Leased Premises, and (b) deliver to Landlord any notice received by Tenant relating to (a)(i) and (a)(ii) above from any source. Tenant shall execute affidavits, representations and the like within ten (10) days of Landlord's request therefor concerning Tenant's best knowledge and belief regarding the presence of any Hazardous Substances on, under or about the Leased Premises.

Section 13.04. Tenant's Indemnification. Tenant shall indemnify Landlord from any and all claims, losses, liabilities, costs, expenses and damages, including attorneys' fees, costs of testing and remediation costs, incurred by Landlord in connection with any breach by Tenant of its obligations under this Article 13. The covenants and obligations under this Article 13 shall survive the expiration or earlier termination of this Lease.

Section 13.05. Existing Conditions. Notwithstanding anything contained in this Article 13 to the contrary, Tenant shall not have any liability to Landlord under this Article 13 resulting from any conditions existing, or events occurring, or any Hazardous Substances existing or generated, at, in, on, under or in connection with the Leased Premises prior to the Commencement Date of this Lease (or any earlier occupancy of the Leased Premises by Tenant) except to the extent Tenant exacerbates the same.

Section 13.06. Testing. At any time during the Lease Term, Landlord shall have the right to conduct an environmental assessment of the Leased Premises (as well as any other areas Landlord reasonably believes may have been affected adversely by Tenant's use of the Leased Premises (collectively, the "Affected Areas") in order to confirm that the Leased Premises and the Affected Areas do not contain any Hazardous Substances in violation of applicable Environmental Laws or under conditions constituting or likely to constitute a release of Hazardous Substances. Such environmental assessment shall be a so-called "Phase I" assessment or such other level of investigation which shall be the standard of diligence in the purchase or lease of similar property at the time, together with any additional investigation and report which would customarily follow any discovery contained in such initial Phase 1 assessment (including, but not limited to, any so-called "Phase II" report). Such right to conduct such environmental assessment shall not be exercised more than once per calendar year unless Tenant is in default under this Article 13. Tenant shall reimburse Landlord for the cost of all environmental assessments of Affected Areas that indicate a conclusive and proximate connection between Tenant's use and occupancy of the Premises and the presence of Hazardous Materials in violation of applicable Environmental Laws.

Section 13.07. Liquid Nitrogen. Tenant acknowledges that it does not have access to use Landlord's liquid nitrogen tank at the Building. To the extent Tenant needs to use liquid nitrogen at the Leased Premises, it shall contract and coordinate for its own liquid nitrogen at its sole cost and expense and such usage shall be done by Tenant in compliance with all Environmental Laws.

ARTICLE 14 - MISCELLANEOUS

Section 14.01. Benefit of Landlord and Tenant. Benefit of Landlord and Tenant. This Lease and the rights and obligations of Landlord and Tenant herein contained shall inure to the benefit of and be binding upon Landlord and Tenant and their respective successors and permitted assigns. If this Agreement is executed by more than one party for Tenant, the obligations, covenants, representations, warranties, and indemnities of such persons or entities will be joint and several.

Section 14.02. Governing Law. This Lease shall be governed in accordance with the laws of the State where the Building is located.

Section 14.03. Force Majeure. Landlord and Tenant (except with respect to the payment of any monetary obligation) shall be excused for the period of any delay in the performance of any obligation hereunder when such delay is occasioned by causes beyond its control, including but not limited to work stoppages, boycotts, slowdowns or strikes; shortages of materials, equipment, labor or energy; unusual weather conditions; or acts or omissions of governmental or political bodies (collectively, "Force Majeure Events").

Section 14.04. Examination of Lease. Submission of this instrument by Landlord to Tenant for examination or signature does not constitute an offer by Landlord to lease the Leased Premises. This Lease shall become effective, if at all, only upon the execution by and delivery to both Landlord and Tenant.

Section 14.05. Indemnification for Leasing Commissions. The parties hereby represent and warrant that there are no real estate brokers involved in the negotiation and execution of this Lease and that no party is entitled, as a result of the actions of the respective party, to a commission or other fee resulting from the execution of this Lease. Each party shall indemnify the other from any and all liability for the breach of this representation and warranty on its part and shall pay any compensation to any broker or person who may be entitled thereto.

Section 14.06. Notices. Any notice required or permitted to be given under this Lease or by law shall be deemed to have been given if it is written and delivered in person or by overnight courier or mailed by certified mail, postage prepaid, to the party who is to receive such notice at the address specified in Section 1.0l(e). If sent by overnight courier, the notice shall be deemed to have been given one (1) day after sending. If mailed, the notice shall be deemed to have been given on the date that is three (3) business days following mailing. Either party may change its address by giving written notice thereof to the other party.

Section 14.07. Partial Invalidity; Complete Agreement. If any provision of this Lease shall be held to be invalid, void or unenforceable, the remaining provisions shall remain in full force and effect. This Lease represents the entire agreement between Landlord and Tenant covering everything agreed upon or understood in this transaction. There are no oral promises, conditions, representations, understandings, interpretations or terms of any kind as conditions or inducements to the execution hereof or in effect between the parties. No change or addition shall be made to this Lease except by a written agreement executed by Landlord and Tenant.

Section 14.08. Financial Statements. So long as they are not publicly available on sec.gov or similar resource during the Lease Term, Tenant shall provide to Landlord on an annual basis within ten (10) days following the end of Tenant's fiscal year copies of Tenant's current financial statement prepared in accordance with generally accepted accounting principles. In addition, upon request by Landlord in connection with any refinancing, sale, or other recapitalization event related to the Building, Tenant shall provide to Landlord, within five (5) days of Landlord's request, a copy of Tenant's most recent financial statements prepared as of the end of Tenant's fiscal year. All such financial statements shall be signed by Tenant or an officer of Tenant, if applicable, who shall attest to the truth and accuracy of the information set forth in such statements.

Section 14.09. Representations and Warranties.

(a) Tenant hereby represents and warrants that (i) Tenant is duly organized, validly existing and in good standing (if applicable) in accordance with the laws of the State under which it was organized; (ii) Tenant is authorized to do business in the State where the Building is located; and (iii) the individual(s) executing and delivering this Lease on behalf of Tenant has been properly authorized to do so, and such execution and delivery shall bind Tenant to its terms.

(b) Landlord hereby represents and warrants that (i) Landlord is duly organized, validly existing and in good standing (if applicable) in accordance with the laws of the State under which it was organized; (ii) Landlord is authorized to do business in the State where the Building is located; and (iii) the individual(s) executing and delivering this Lease on behalf of Landlord has been properly authorized to do so, and such execution and delivery shall bind Landlord to its terms.

Section 14.10. Intentionally omitted.

Section 14.11. Parking. Tenant shall be entitled to the non-exclusive use of the parking spaces designated for the Building by Landlord. Tenant agrees not to overburden the parking facilities and agrees to cooperate with Landlord and other tenants in the use of the parking facilities. Landlord reserves the right in its absolute discretion to determine whether parking facilities are becoming crowded and, in such event, to allocate parking spaces between Tenant and other tenants. There will be no assigned parking unless Landlord, in its sole discretion, deems such assigned parking advisable. No vehicle may be repaired or serviced in the parking area and any vehicle brought into the parking area by Tenant, or any of Tenant's employees, contractors or invitees, and deemed abandoned by Landlord will be towed and all actual costs thereof shall be borne by Tenant. All driveways, ingress and egress, and all parking spaces are for the joint use of all tenants. Tenant agrees that its employees will not park in the spaces designated visitor parking.

Section 14.12. Consent. Where the consent of a party is required, such consent will not be unreasonably withheld, unless otherwise provided.

Section 14.13. Time. Time is of the essence of each term and provision of this Lease.

Section 14.14. Patriot Act. Each of Landlord and Tenant, each as to itself, hereby represents its compliance and its agreement to continue to comply with all applicable anti-money laundering laws, including, without limitation, the USA Patriot Act, and the laws administered by the United States Treasury Department's Office of Foreign Assets Control, including, without limitation, Executive Order 13224 ("Executive Order"). Each of Landlord and Tenant further represents (such representation to be true throughout the Lease Term) (i) that it is not, and it is not owned or controlled directly or indirectly by any person or entity, on the SDN List published by the United States Treasury Department's Office of Foreign Assets Control and (ii) that it is not a person otherwise identified by government or legal authority as a person with whom a U.S. Person is prohibited from transacting business. As of the date hereof, a list of such designations and the text of the Executive Order are published under the internet website address www.ustreas.gov/offices/enforcement/ofac.

Section 14.15. Execution of Lease; Counterparts. This Lease may be executed in counterparts and, when all counterpart documents are executed and delivered, the counterparts shall constitute a single binding instrument.

[Remainder of page intentionally left blank; signature page follows.]

IN WITNESS WHEREOF, the parties hereto have executed this Lease to be effective as of the Commencement Date.

"Landlord:"

Cook Regentec, LLC, an
Indiana limited liability company

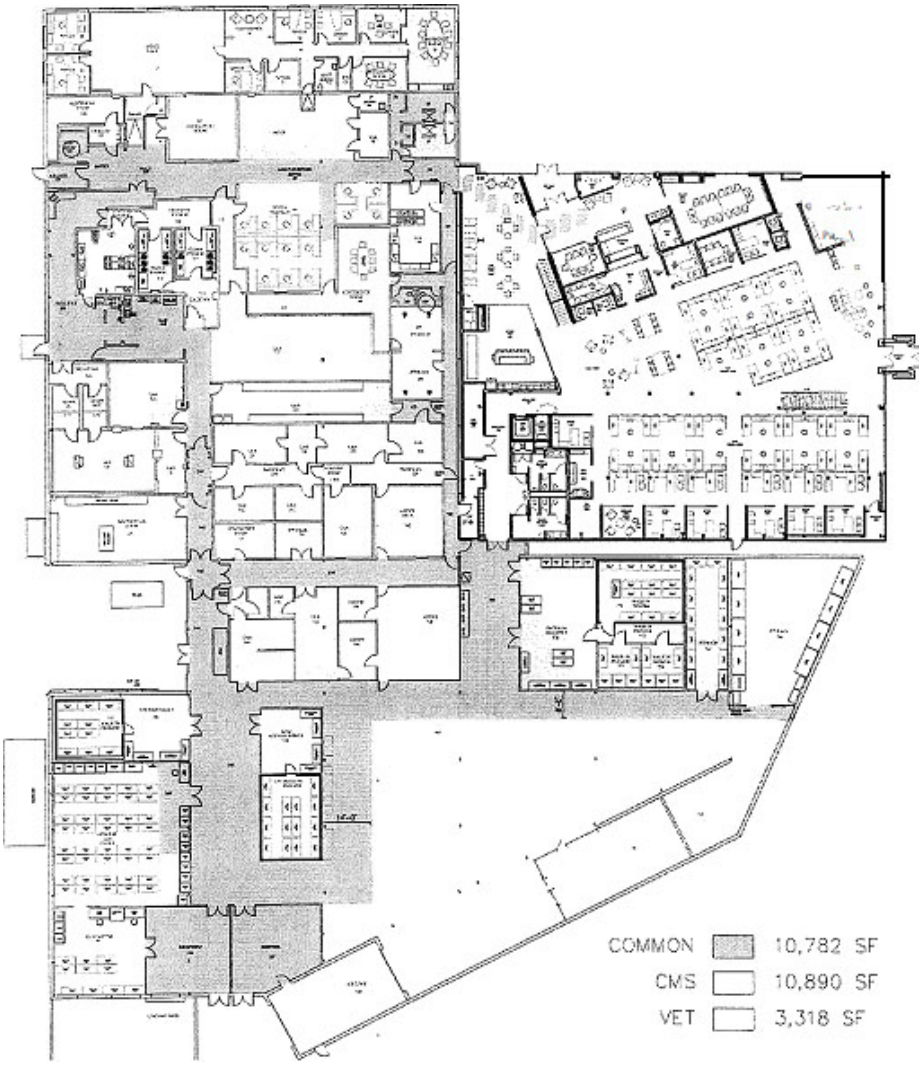
By: /s/ Robert Lyles/
Robert Lyles, President

"Tenant:"
Sexton Biotechnologies, Inc., a Delaware corporation

By: /s/ Robert Lyles/
Robert Lyles, President

EXHIBIT A

Leased Premises



FIRST FLOOR

COOK REGENTEC
Updated 2019 03 25

Space	Room Number	Square Footage	Area Type	Classification	CMS7
Shared Hallway (Clean Room 1/2, Tissue Lab, HPL, DI Water)	103	735	Hallway- Lab	CNC	Shared
Autoclave Area	113	165	Lab Open	CNC	Shared
HPL Pre-Gown	116	108	Clean Room	CNC	Exclusive
HPL Gowning	117	101	Clean Room	ISO 8	Exclusive
HPL Degowning	118	89	Clean Room	ISO 8	Exclusive
HPL Clean Room	119	554	Clean Room	ISO 7	Exclusive
HPL Labeling	120	426	MFG	CNC	Exclusive
HPL Other	121	154	MFG	CNC	Exclusive
QC3	122	628	Lab	CNC	Exclusive
Shared Hallway (QC2 / QC3)	123	94	Hallway- Lab	CNC	Shared
Shared Hallway (Demo Room, Catalyst, IT Storage)	135	560	hallway - Office		Shared
MSAT Storage	136	124	Lab Storage	CNC	Exclusive
MSAT Lab	137	362	Lab	CNC	Exclusive
Platelet Thawing	141	354	Lab	CNC	Exclusive
Shared Hallway (HPL, VET, Warehouse)	144	95	lab Open		Shared
Shared Hallway	146	68	Hallway· Lab		Shared
Shared Hallway (Supply Room, Accessioning, Shipping, Receiving	149	1690	Hallway - Warehouse		Shared
Accessioning 2	150	343	MFG Storage	CNC	Exclusive
Walk-in Freezer2	151	430	MFG Storage		Exclusive
Accessioning 1	152	383	MFG Storage	CNC	Exclusive
Walk-In Freezer 1	153	318	MFG Storage		Exclusive
Supply Room	154	1745	Warehouse		Shared
Receiving	156	650	Warehouse		Shared
Shipping	157	628	Warehouse		Shared
Cage	164	1286	Warehouse		Exclusive
CellSeal Finished Goods	165	485	Warehouse		Exclusive
Finished Goods/ Package Assembly	170	898	Warehouse		Exclusive
Finished Goods Walk-In Freezer Hallway	171	150	Warehouse		Exclusive
Finished Goods Walk-In Freezer	172	451	Warehouse		Exclusive
Finished Goods Walk-In Freezer	173	160	Warehouse		Exclusive
Finished Goods Walk-In Freezer	174	160	Warehouse		Exclusive
Shared Hallway (Storage, Training, Bad lab)	184	412	Hallway- lab	CNC	Shared
Shared Hallway (Autoclave/ Cryo/ HPl)	N/A	816	Lab Open	CNC	Shared
Collaboratory- Large Conference Room	10	348	Office		Exclusive
Collaboratory • Small Conference Room	11	163	Office		Exclusive
Collaboratory • Office 12	12	129	Office		Exclusive
Collaboratory • Office 14	14	124	Office		Exclusive
Collaboratory • Office 16	16	114	Office		Exclusive
Collaboratory • Office 17	17	90	Office		Exclusive
Collaboratory • Conference Lounge	18	113	Office		Exclusive
Collaboratory- Office 19	19	107	Office		Exclusive
Old Space Bathroom/locker Room Hallway	31		hallway• Office		Shared
Old Space Men's locker Room	33		Office		Exclusive
Old Space Women's Locker Room (Nursing Mother's Room)	35		Office		Shared
Collaboratory • Bathroom	15		Office		Exclusive
Old Space Bathroom 1	36		Office		Shared
Old Space Bathroom 2	32		Office		Shared
Back Dock Space	**N/A**		Warehouse		Shared
Bathroom 1 by Training Room	188		Office		Shared
Bathroom 2 by Training Room	189		Office		Shared

EXHIBIT B

Building Rules and Regulations

1. The sidewalks, entrances, driveways and roadways serving and adjacent to the Leased Premises shall not be obstructed or used for any purpose other than ingress and egress. Landlord shall control the Common Areas.

2. No awnings or other projections shall be attached to the outside walls of the Building. No curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Leased Premises other than Landlord standard window coverings without Landlord's prior written approval. All electric ceiling fixtures hung in offices or spaces along the perimeter of the Building must be fluorescent, of a quality, type, design and tube color approved by Landlord. Neither the interior nor the exterior of any windows shall be coated or otherwise sun screened without written consent of Landlord.

3. No sign, advertisement, notice or handbill shall be exhibited, distributed, painted or affixed by any tenant on, about or from any part of the Leased Premises, the Building or in the Common Areas including the parking area without the prior written consent of Landlord. In the event of the violation of the foregoing by any tenant, Landlord may remove or stop same without any liability, and may charge the expense incurred in such removal or stopping to such tenant.

4. The sinks and toilets and other plumbing fixtures shall not be used for any purpose other than those for which they were constructed, and no sweepings, rubbish, rags, or other substances shall be thrown therein. All damages resulting from any misuse of the fixtures shall be borne by the tenant who, or whose subtenants, assignees or any of their servants, employees, agents, visitors or licensees shall have caused the same.

5. No boring, cutting or stringing of wires or laying of any floor coverings shall be pe1mitted, except with the prior written consent of Landlord and as Landlord may direct. Landlord shall direct electricians as to where and how telephone or data cabling are to be introduced. The location of telephones, call boxes and other office equipment affixed to the Leased Premises shall be subject to the approval of Landlord.

6. No vehicles, birds, or animals of any kind (except seeing eye dogs) shall be brought into or kept in or about the Leased Premises, and no cooking shall be done or permitted by any tenant on the Leased Premises, except microwave cooking, and the preparation of coffee, tea, hot chocolate and similar items for tenants and their employees. No tenant shall cause or permit any unusual or objectionable odors to be produced in or permeate from the Leased Premises.

7. The Leased Premises shall not be used for manufacturing, unless such use conforms to the zoning applicable to the area, and Landlord provides written consent. No tenant shall occupy or permit any portion of the Leased Premises to be occupied as an office for the manufacture or sale of liquor, narcotics, or tobacco in any form, or as a medical office, or as a barber or manicure shop, or a dance, exercise or music studio, or any type of school or daycare or copy, photographic or print shop or an employment bureau without the express written consent of Landlord. The Leased Premises shall not be used for lodging or sleeping or for any immoral or illegal purpose.

8. No tenant shall make, or pe1mit to be made any unseemly, excessive or disturbing noises or disturb or interfere with occupants of this or neighboring buildings or premises or those having business with them, whether by the use of any musical instrument, radio, phonograph, unusual noise, or in any other way. No tenant shall throw anything out of doors, windows or down the passageways.

9. No tenant, subtenant or assignee nor any of its servants, employees, agents, visitors or licensees, shall at any time bring or keep upon the Leased Premises any flammable, combustible or explosive fluid, chemical or substance or firearm, except to the extent permitted by applicable laws.

10. No additional locks or bolts of any kind shall be placed upon any of the doors or windows by any tenant, nor shall any changes be made to existing locks or the mechanism thereof. Each tenant must upon the termination of his tenancy, restore to Landlord all keys of doors, offices, and toilet rooms, either furnished to, or otherwise procured by, such tenant and in the event of the loss of keys so furnished, such tenant shall pay to Landlord the cost of replacing the same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such changes.

11. No tenant shall overload the floors of the Leased Premises. All damage to the floor, structure or foundation of the Building due to improper positioning or storage of items or materials shall be repaired by Landlord at the sole cost and expense of Tenant, who shall reimburse Landlord immediately therefor upon demand.

12. Each tenant shall be responsible for all persons entering the Building at tenant's invitation, express or implied. Landlord shall in no case be liable for damages for any error with regard to the admission to or exclusion from the Building of any person. In case of an invasion, mob riot, public excitement or other circumstances rendering such action advisable in Landlord's opinion, Landlord reserves the right without any abatement of rent to require all persons to vacate the Building and to prevent access to the Building during the continuance of the same for the safety of the tenants and the protection of the Building and the property in the Building.

13. Canvassing, soliciting and peddling in the Building are prohibited, and each tenant shall report and otherwise cooperate to prevent the same.

14. All equipment of any electrical or mechanical nature shall be placed by tenant in the Leased Premises in settings that will, to the maximum extent practicable, absorb or prevent any vibration, noise and annoyance.

15. There shall not be used in any space, either by any tenant or others, any hand trucks except those equipped with rubber tires and rubber side guards.

16. The scheduling of tenant move-ins shall be before or after normal business hours and on weekends, subject to the reasonable discretion of Landlord.

17. The Building is a smoke-free Building. Smoking is strictly prohibited within the Building. Smoking shall only be allowed in areas designated as a smoking area by Landlord. Tenant and its employees, representatives, contractors or invitees shall not smoke within the Building or throw cigar or cigarette butts or other substances or litter of any kind in or about the Building, except in receptacles for that purpose.

18. Tenants will insure that all doors are securely locked, and water faucets, electric lights and electric machinery are turned off before leaving the Building.

19. Tenant, its employees, customers, invitees and guests shall, when using the parking facilities in and around the Building, observe and obey all signs regarding fire lanes and no-parking and driving speed zones and designated handicapped and visitor spaces, and when parking always park between the designated lines. Landlord reserves the right to tow away, at the expense of the owner, any vehicle which is improperly parked or parked in a no-parking zone or in a designated handicapped area, and any vehicle which is left in any parking lot in violation of the foregoing regulation. All vehicles shall be parked at the sole risk of the owner, and Landlord assumes no responsibility for any damage to or loss of vehicles.

20. Tenant shall be responsible for and cause the proper disposal of medical waste, including hypodermic needles, created by its employees.

21. No outside storage is permitted including without limitation the storage of trucks and other vehicles.

22. No tenant shall be allowed to conduct an auction from the Leased Premises without the prior written consent of Landlord.

It is Landlord's desire to maintain in the Building and Common Areas the highest standard of dignity and good taste consistent with comfort and convenience for tenants. Any action or condition not meeting this high standard should be reported directly to Landlord. Landlord reserves the right to make such other and further rules and regulations as in its judgment may from time to time be necessary for the safety, care and cleanliness of the Building and Common Areas, and for the preservation of good order therein. In the event of a conflict between the Lease terms and the terms of these rules and regulations, the terms of the Lease shall control.

EXHIBIT C

Security/Safety/Access Rider

Building Access

Employees (Cook *I* Tenant)

Employees will have a key fob issued to them which will allow them to access the gated parking lot and the building.

Each Employee should scan their key fob when entering the building. If entering with another employee - EACH employee must scan their key fob. This ensures that we have a record of who is in the building.

Visitors (Cook/ Tenant)

All Visitors to 1102 will enter through the Front Main Entrance. All visitors will be required to sign in using our Electronic Sign In Software (Sine). This will involve signing a confidentiality agreement on behalf of Cook and where applicable the Tenant being visited. Sine will be configured to send an email/text message to the person they are visiting. That person will be responsible for coming to retrieve the visitor and ensuring their safety and compliance to 1102 Safety and Security while on the premises.

Alarm System

1102 has a Security System monitored by Central Security Systems. The Alarm is set after hours and on the weekend.

Cook's cleaning crew are typically the last to leave around 8:30-9:00pm. They set the alarm on their way out.

Cook will have employees on site at 8am M-F (Business Days). At Cook's discretion, alarm code will be shared with appropriate Tenant employees.

Gated Employee Parking Lot

The Front Gate is locked via Key Fob at all times. Each Employee will be granted access to the gate with their Key Fob. The Back Gate will be open from 8am to 5pm M-F (Business Days). This will allow access for deliveries to our Dock Area.

Key Fob Access

Cook uses a Ticket Tracking System and a Ticket will need to be entered for Key Fob Access. Tenants will contact Facilities Management who can aid in entering the ticket. Cook Facilities will need to approve any access request. Tenant Management should justify the access request.

Lost Key Fobs should be reported to Cook Facilities Management right away.

Non-Smoking Facility

1102 is a Non-Smoking Campus. This includes the Building and the property. Guests should be made aware of this before visiting.

Emergency Response

Fire

Mustering Stations are posted around the Gated Parking Lot and the Grass Area beyond the Patio. In the event of a fire, employees and visitors should make their way quickly and safely to one of the Mustering Stations. Each Tenant will need a plan on how to account for their employees. That plan should be shared with Cook Facilities Management. The Cook Front Desk Administrative Assistant will have a list of Visitors in the building and will coordinate accounting for those people with the Tenants.

Fire Drills will be scheduled with advanced notification to Tenant Upper Management.

Severe Weather

When possible, Severe Weather Risk will be communicated out to Building Occupants. In the event of Severe Weather the Cook Office Space downstairs restrooms are a Severe Weather Location. There is also a Severe Weather Location using the Nursing Mother's Room, Old Men's Locker Room and 2 Restrooms by that area.

Cook run phones will be left in the Clean Room/ Lab Spaces leased by the Tenant(s) to aid in the communication of Severe Weather. Cell Phones for Tenant Management that is shared with Cook Facilities can also be texted in the event of Severe Weather to aid in the communication.

EXHIBIT D

Tenant Maintenance Items

Clean Room / Lab HEPA Filters

Clean rooms and labs are part of the Leased Premise. These rooms are supplied clean air/pressure through HEPA filter units. These Units have an average life span of 10+ years. In the event of a HEPA filter failure or replacement needed, it will be the responsibility of Landlord to cover the cost of that replacement/repair.

Clean room certification and ongoing environmental monitoring will be the responsibility of the Tenant. Any costs associated with the certification of the clean room or lab, including HEPA filter annual certifications, will be the cost of the Tenant.

Air Handling Systems

The Leased Premise requires air handling units to support the clean rooms. Landlord will be responsible for the scheduling and cost of routine preventive maintenance. Scheduling will be coordinated with Tenant so as to avoid disruption of any work in the clean room or other leased space.

In the event Tenant requires modifications or additions to the air handling systems, a proposal will be submitted to Landlord. Any approved modifications or additions will be at the Tenant's cost unless otherwise agreed upon by the Parties.

Large Walk-In Freezers

The Leased Premise includes walk-in freezer units. Tenant will be responsible for the cost of routine preventative maintenance and any necessary repair of these units.

In the event that Tenant requires modifications or additions to freezer units, a proposal will be submitted to Landlord for approval. Any approved modifications or additions will be at the Tenant's cost.

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "**Amendment**") is made as of the date of last execution hereof by both parties ("**Effective Date**"), by and between COOK REGENTEC, LLC, an Indiana limited liability company ("**Landlord**"), and SEXTON BIOTECHNOLOGIES, INC., a Delaware corporation ("**Tenant**").

RECITALS:

A. Landlord and Tenant entered into a certain Lease dated as of October 1, 2019 ("**Existing Lease**"), whereby Landlord leased to Tenant certain premises ("**Existing Premises**") as more particularly described in the Lease within a building (the "**Building**") located at 1102 Indiana Avenue, Indianapolis, Indiana 46202.

B. Landlord and Tenant desire to amend certain provisions of the Lease to remove certain rooms from the Premises, add additional rooms to the Premises, provide for an option to extend the Term, and to make certain other amendments to the provisions of the Lease as hereinafter provided, subject to and upon the terms and conditions hereinafter set forth.

NOW THEREFORE, the parties agree to the foregoing and in consideration of the mutual promises herein, agree to amend the Lease as follows, as of the Effective Date unless otherwise noted.

1. Each initially capitalized word or term used as a defined term in this Amendment but not otherwise defined herein shall have the same meaning as is ascribed to such initially capitalized word or term in the Existing Lease. From and after the date of this Amendment the term “Lease” shall be deemed to mean and refer to, collectively, the Existing Lease as amended by this Amendment. The Recitals described above are hereby incorporated into this Amendment by this reference as if fully set forth herein.

2. Tenant hereby acknowledges, confirms and agrees that (a) Landlord has performed all of Landlord's obligations under the Lease through the date of Tenant's execution hereof and is not in default of any term or condition of the Lease and that Tenant has no rights or offsets against Landlord, and (b) Tenant is not in default under any of the terms or conditions of the Lease as of the date of Tenant's execution hereof.

3. As of the Effective Date of this Amendment, Landlord and Tenant hereby agree that:

   (a) Rooms 136, 137, and 141 located in the Building shall be surrendered by Tenant (the portion of the Premises that is being surrendered by Tenant is hereinafter referred to as the “**Surrendered Space**”). Tenant shall surrender full and complete possession of the Surrendered Space to Landlord on or before the Effective Date, and Tenant shall remain responsible for all obligations or liabilities of Tenant under the Lease with respect to the Surrendered Space as provided for the Premises until Tenant surrenders full and complete possession of the Surrendered Space to Landlord. Tenant shall surrender full and complete possession of the Surrendered Space to Landlord vacant, broom-clean, in good order and condition, and otherwise

in accordance with the requirements of Section 2.03 of the Lease, and thereafter the Surrendered Space shall be free and clear of all leases, tenancies, and rights of occupancy of any entity claiming by or through Tenant. If Tenant does not vacate the Surrendered Space on or before the Effective Date in accordance with the requirements of Section 2.03 of the Lease, then Tenant shall be in default of the Lease, Landlord shall have all remedies with respect to the Surrendered Space as provided for the Premises in Section 2.03 of the Lease for a tenancy at sufferance, and Tenant shall be liable to Landlord for all damages occasioned by such holding over in the Surrendered Space, including, without limitation, all consequential, direct and indirect damages and losses sustained by Landlord. Tenant acknowledges and agrees that nothing in this section is intended to limit any other remedies available to Landlord at law or in equity for a default of this section. Tenant's vacating of the Surrendered Space shall be at Tenant's sole cost and expense.

(b) The Existing Premises are hereby expanded to include rooms 103, 107, 108, 109, 110, 111, 112, and 113 located in the Building, as more particularly shown on Exhibit A attached hereto and made a part hereof (the "**Expansion Premises**", the Existing Premises, as reduced by the Surrendered Space and increased by the Expansion Premises is referred to as the "**Premises**"). As of the Effective Date, "Exhibit A" of the Lease is hereby deleted in its entirety and replaced with Exhibit A, attached hereto and made a part hereof.

4. The Term for the Expansion Premises shall be conterminous with the Term for the Existing Premises. All terms and conditions of the Existing Lease will apply to the Expansion Premises, except as otherwise described in this Amendment.

5. As of the Effective Date, the Monthly Rental Installments are hereby amended to be $13,485.00 per month.

6. As of the Effective Date, Tenant's utility payments pursuant to Article 5 of the Lease are hereby amended to be $13,198.00 per month.

7. As of the Effective Date, Section 6.01 of the Lease is hereby amended to add the following: "For purposes of clarification related to Landlord's maintenance, repair and replacement obligations, Landlord is only responsible for structural and mechanical (including HVAC) maintenance and repair with respect to the Premises; Tenant is responsible for all other maintenance and repair of the Premises, including but not limited to, routine cleaning, routine maintenance and/or repair of damage caused by typical day-to-day wear-and-tear, maintenance of the interior walls and the interior surfaces of exterior walls (including painting and other treatment thereof), store fronts, all plate glass, windows, doors, door closure devices, window and door frames, molding, locks and hardware, floors, floor coverings and ceiling, light bulbs, tubes and tube casings, non structural or mechanical HVAC maintenance and repair issues, and fixtures within or serving the Premises and all areas, improvements and systems exclusively serving the Premises, in each case, in good operating order and condition and in accordance with all applicable laws and the equipment manufacturer's suggested service programs."

8. As of the Effective Date, the second sentence of Section 6.02 of the Lease is hereby deleted in its entirety and replaced with the following:

> "In addition, Tenant shall provide, validate, qualify, maintain, replace, repair and certify the HEPA filters in the clean rooms for the Leased Premises (including and related mechanical repairs and maintenance)."

9. Tenant is in possession of the Existing Premises pursuant to the Lease and hereby acknowledges that, except to the extent otherwise expressly provided in the Lease, Tenant is occupying and will occupy the Existing Premises and the Expansion Premises in an "as- is" condition, without any representations or warranties of any kind (including, without limitation, any express or implied warranties of merchantability, fitness or habitability and including that Landlord does not make any representations regarding the EMPQ process), further acknowledges that Landlord shall not have any obligation to (i) alter, remodel, improve, repair, or decorate the Existing Premises or Expansion Premises or any part thereof, or (ii) provide any allowance to Tenant for any alteration, remodeling, improvement, repairing or decorating thereof. Landlord has provided Tenant with the operational history of the Expansion Premises. Tenant acknowledges it has reviewed the "Clean Room Viability" report dated February 8, 2019, 11:30 AM, and understands that they are taking possession of the Expansion Premises, including the clean rooms, in its current, "as-is" state.

10. In the event that Tenant desires to make changes or alterations to the Expansion Premises, Tenant shall provide to Landlord for its approval plans and specifications for the Expansion Premises (the "**Plans**"). Landlord shall notify Tenant of whether it approves of the Plans within ten (10) business days after Tenant's submission thereof. If Landlord disapproves of such Plans, then Landlord shall notify Tenant thereof specifying in reasonable detail the reasons for such disapproval, in which case Tenant shall, within three (3) business days after such notice, revise such Plans in accordance with Landlord's objections and submit the revised Plans to Landlord for its review and approval. Landlord shall notify Tenant in writing whether it approves of the resubmitted Plans within five (5) business days after its receipt thereof. This process shall be repeated until the Plans have been finally approved by Landlord (the "**Approved Plans**").

11. As used herein, the "**Work**" means all improvements to be constructed, at Tenant's sole cost and expense, in accordance with and as indicated on Approved Plans, together with any work required by governmental authorities to be made to other areas of the Building as a result of the improvements indicated by the Plans. The Work shall be performed only by licensed contractors and subcontractors approved in writing by Landlord, which approval shall not be unreasonably withheld. All contractors and subcontractors shall be required to procure and maintain insurance against such risks, in such amounts, and with such companies as Landlord may reasonably require. Certificates of such insurance, with

paid receipts therefor, must be received by Landlord before the Work is commenced. The Work shall be performed in a good, workmanlike, and expeditious manner, free of defects, shall conform strictly with the Approved Plans, and shall be performed in such a manner and at such times as not to interfere with or delay Landlord's other contractors, the operation of the Building, and the occupancy thereof by other tenants. Landlord or its agent may inspect and/or manage the Work and coordinate the relationship between the Work and the Building's systems. Any third-party fees incurred by Landlord in conjunction with its construction management/supervision/coordination shall be paid by Tenant.

12. As of the Effective Date, the last sentence of the first paragraph of the "Clean Room / Lab HEPA Filters" section of Exhibit D of the Lease is deleted in its entirety and replaced with the following:

"Tenant is responsible, at its sole cost and expense, for all maintenance, repair and replacement of HEPA filters in the Premises."

13. Notwithstanding any provision in the Lease to the contrary, Tenant shall have one (1) option to extend the Term for an additional twelve (12) months (the "**Renewal Option**"), provided that (a) no event of Default has occurred and remains uncured at the time of the exercise of the Renewal Option, and (b) Tenant gives written notice of its exercise of the Renewal Option at least three hundred sixty five (365) days prior to the expiration of the initial Term. All terms and conditions of the Lease shall apply to the Renewal Option, if exercised.

14. Each party represents and warrants to the other party that, insofar as it knows, no broker or other person, including the Brokers, is entitled to any commission or fee in connection with the transactions contemplated by this Amendment. Each party shall indemnify and hold harmless the other party against any loss, liability, damage or claim incurred by reason of any commission or fee alleged to be payable to anyone because of any act, omission or statement of the indemnifying party. Such indemnity obligation shall be deemed to include payment of reasonable attorneys' fees and court costs incurred in defending any such claim and shall survive the cancellation, termination or expiration of the Term of the Lease.

15. This Amendment shall be governed by and construed in accordance with the internal laws of the State of Indiana. The parties hereby agree that the exclusive jurisdiction and venue for any action arising out of, involving or in any way related to this Amendment or the Lease shall be the Indiana Commercial Court located in Marion County, Indiana or, if the Commercial Court does not exist, in a state court located in Marion County, Indiana or a Federal Court located in the Southern District of Indiana. If any provision of this Amendment or the application thereof to any person or circumstance shall, for any reason and to any extent, be invalid or unenforceable, the remainder of this Amendment and the application of that provision to other persons or circumstances shall not be affected but rather shall be enforced to the extent permitted by law. The captions, headings, and titles contained in this Amendment are solely for convenience of reference and shall not affect its interpretation. This Amendment shall be construed without regard to any presumption or other rule requiring construction against the party causing this Amendment to be drafted.

All prior representations, undertakings, and agreements by or between the parties with respect to the subject matter of this Amendment are merged into, and expressed in, this Amendment, and any and all prior representations, undertakings, and agreements by and between such parties with respect thereto hereby are canceled.

16. This Amendment may be executed in separate counterparts, each of which when executed shall be an original, but all of which together shall constitute a single instrument.

17. This Amendment shall have no binding force or effect on either party unless and until each of the parties shall have executed this Amendment and submitted fully-executed counterparts hereof, bearing their respective signatures, to one another.

18. Except as otherwise modified or amended by this Amendment, the Lease is ratified and confirmed and shall remain in full force and effect. In the event of a conflict between the terms hereof and the terms of the Lease, the terms hereof shall control.

19. Landlord and Tenant hereby represent and warrant to one another that this Amendment is being executed by their duly authorized representatives.

[Signatures begin on following page.]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment to be effective as of the Effective Date,

"Landlord:"

Cook Regentec, LLC

By: /s/Robert I. Lyles
Robert I. Lyles, President

"Tenant:"

Sexton Biotechnologies, Inc.

By: /s/ Sean Werner
Sean Werner, President

Exhibit A

Updated Site Plan of Leased Premises

[to be attached]

Exhibit 10.33

AMENDED EXECUTIVE EMPLOYMENT AGREEMENT

THIS EXECUTIVE EMPLOYMENT AGREEMENT ("Agreement") is made between BioLife Solutions Inc., a Delaware corporation ("Employer" or the "Company"), and Roderick de Greef ("Executive"). Executive and the Company are sometimes referred to herein as the "Parties." The effective date is November 4, 2021. This Agreement supersedes and replaces all prior employment agreements between Company and Executive, including any amendments thereto.

RECITALS

A. Employer is in the business (the "Business") of manufacturing and marketing biopreservation media and cold chain products for cells, tissues, and organs.

B. Employer desires to obtain the services of Executive, in which capacity Executive has access to Employer's Confidential Information (as hereinafter defined), and to obtain assurance that Executive will protect Employer's Confidential Information and will not compete with Employer or solicit its customers or its other employees during the term of employment and for a reasonable period of time after termination of employment pursuant to this Agreement, and Executive is willing to agree to these terms.

C. Executive desires to be assured of the salary and other benefits provided for in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties agree as follows:

1. **Employment**.

a. Employer hereby employs Executive, and Executive agrees to be employed as President and Chief Operating Officer ("President/COO"), in accordance with the terms and conditions set forth in this Agreement. Changes may be made from time to time by Employer and/or the Board in its sole discretion to the duties, authorities, reporting relationships and title of Executive.

b. Executive will devote full time, attention, and best efforts to achieving the purposes and discharging the responsibilities of the President/COO. Executive will comply with all rules, policies and procedures of Employer as modified from time to time, including without limitation, rules and procedures set forth in the Employer's employee handbook, supervisor's manuals and operating manuals. Executive will perform all of Executive's responsibilities in compliance with all applicable laws and will ensure that the operations that Executive manages are in compliance with all applicable laws. During Executive's employment, Executive will not engage in any other business activity which, in the reasonable judgment of the Employer, conflicts with the duties of Executive under this Agreement, whether or not such activity is pursued for gain, profit or other pecuniary advantage.

c. Nothing herein shall preclude Executive from: (1) continuing to serve on the board of directors or trustees of any business corporation or any charitable organization on which Executive currently serves and which is identified on Exhibit A hereto, or (2) subject to the prior approval of the Board, appointment to any additional directorships or trusteeships, or (3) serving in an advisory role for other business entities, provided in each case, and in the aggregate, that such activities do not interfere with the performance of Executive's duties hereunder or conflict with Section 7 of this Agreement.

2. **Term of Employment**. The term of employment ("Term") will not be for a definite period, but rather continue indefinitely until terminated in accordance with the terms and conditions of this Agreement.

3. **Compensation**. For the duration of Executive's employment hereunder, the Executive will be entitled to compensation which will be computed and paid pursuant to the following subparagraphs.

a. **Base Salary**. Employer will pay to Executive a base salary ("Base Salary") at an annual rate of four hundred fifty thousand dollars ($450,000), payable in such installments (but in no event less than monthly), subject to withholdings and deductions as required or permitted by law, as is Employer's policy with respect to other employees. Executive's Base Salary will be reviewed periodically by the Board of Directors of Employer during the term of Executive's employment and may be adjusted in the sole discretion of the Board of Directors based on such review, but will not be reduced by Employer unless a material adverse change in the financial condition or operations of Employer has occurred or unless Executive's responsibilities are altered to reflect less responsibility.

b. **Performance Bonus**. Employer under direction of its Board may pay or cause to be paid to Executive such Bonus as it from time to time determines appropriate.

4. **Other Benefits**.

a. **Certain Benefits.** Executive will be eligible to participate in all employee benefit programs established by Employer that are applicable to management personnel such as medical, pension, disability and life insurance plans on a basis commensurate with Executive's position and in accordance with Employer's policies from time to time, but nothing herein shall require the adoption or maintenance of any such plan.

b. **Vacations, Holidays and Expenses**. Executive will be provided accrued paid vacation of four (4) weeks each calendar year, which shall be the maximum number of days Executive may accrue at any time, and which shall be taken at such times as are consistent with Executive's responsibilities hereunder. Executive will be provided such holidays and vacation as Executive makes available to its management level employees generally. Employer will reimburse Executive in accordance with company policies and procedures for reasonable expenses necessarily incurred in the performance of duties hereunder against appropriate receipts and vouchers indicating the specific business purpose for each such expenditure. In no case shall any reimbursement be made later than December 31st of the year following the calendar year in which such expense is incurred.

c. **Right of Set-off**. By accepting this Agreement, Executive consents to a deduction from any amounts Employer owes Executive from time to time (including amounts owed to Executive as wages or other compensation, fringe benefits, or vacation pay, as well as any other amounts owed to Executive by Employer), to the extent of the amounts Executive owes to Employer. Whether or not Employer elects to make any set-off in whole or in part, if Employer does not recover by means of set-off the full amount Executive owes it, calculated as set forth above, Executive agrees to pay immediately the unpaid balance to Employer.

5. **Termination, Discharge**.

a. **For Cause.** Employer will have the right to immediately terminate Executive's services and this Agreement for Cause. "Cause" means the Employer's belief that any of the following has occurred:

(i) any breach of this Agreement by Executive, including, without limitation, breach of Executive's covenants in Sections 7, 8, 9, 10, 11 or 12;

(ii) any failure to perform assigned job responsibilities that continues unremedied for a period of ten (10) days after written notice to Executive by Employer;

(iii) Executive's malfeasance or misconduct in connection with Executive's duties hereunder or any act or omission of Executive which is materially injurious to the financial condition or business reputation of the Company or any of its subsidiaries or affiliates,

(iv) commission or conviction of a felony or misdemeanor (other than a misdemeanor traffic violation), including a plea of guilty or failure to contest prosecution for a felony or misdemeanor;

(v) the Employer's reasonable belief that Executive engaged in a violation of any statute, rule or regulation, any of which in the judgment of Employer is harmful to the Business or to Employer's reputation;

(vi) the Employer's reasonable belief that Executive engaged in unethical practices, dishonesty or disloyalty, unless Executive has evidence establishing that Employer directed Executive to commit such practice or act;

(vii) or any reason that would constitute Cause under the laws the State of Washington.

Upon termination of Executive's employment hereunder for Cause, the Company shall pay the Executive no later than fourteen (14) days from the termination date in a lump sum: (x) Executive's salary through the date of termination, (y) for any unused vacation time, and (z) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses. Executive will have no rights to any unvested benefits or any other compensation or payments after the termination date.

b. **Due to Death or Disability.** Employer will have the right to immediately terminate Executive's services and this Agreement due to death or disability. For purposes of this Agreement, "disability" means the incapacity or inability of Executive, whether due to accident, sickness or otherwise, as determined by a medical doctor acceptable to the Board of Directors of Employer and confirmed in writing by such doctor, to perform the essential functions of Executive's position under this Agreement, with or without reasonable accommodation (provided that no accommodation that imposes undue hardship on Employer will be required) for a period of sixty (60) consecutive days or for an aggregate of ninety (90) days during any period of twelve (12) months, or such longer period as may be required under disability law.

Upon termination of Executive's employment hereunder due to death or disability, the Company shall pay the Executive no later than fourteen (14) days from the termination date in a lump sum: (i) Executive's salary through the date of termination, (ii) a prorated portion of any incentive bonus opportunity previously approved by the Board, (iii) for any unused vacation time, and (iv) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses. Upon termination of Executive's employment hereunder due to death or disability, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest for the benefit of Executive's estate. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

c. **Without Cause.** Employer may terminate Executive's employment under this Agreement without cause and without advance notice; provided, however, that Employer will pay (unless subparagraph 5(d) of this Agreement applies, in which case the provisions therein shall govern), no later than fourteen (14) days from the termination date in a lump sum:

(i) (x) Executive's salary through the date of termination, (y) for any unused vacation time, and (z) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses.

(ii) severance pay of twelve (12) months' worth of Executive's salary at the rate in effect on the termination date.

(iii) the amount equal to the cost of twelve (12) months' medical insurance premiums at a monthly amount equal to the amount of COBRA coverage in effect as of the termination date; and

(iv) an additional tax gross up payment in an amount necessary so that the amount received by Executive to cover COBRA premiums under Section 5(c)(iii) after all applicable withholding tax is deducted (using applicable supplemental wage withholding rates) is the full amount Executive would have received under Section 5(c)(iii) if no tax withholding was made.

Such payments will be subject to all appropriate deductions and withholdings. Upon termination of Executive's employment hereunder due to termination without cause, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

Executive shall only be entitled to such severance pay if, within thirty (30) days following the date of termination, both Employer and Executive have signed (and then Executive does not rescind, as may be permitted by law) a mutual general release of claims in a form mutually acceptable to both parties (provided, however, that such release of claims shall only require each party to release the other party from claims relating directly to Executive's employment and the termination thereof, and shall not require Executive to release claims relating to vested employee benefits or relating to other matters, including, but not limited to, claims relating to Executive's status as a shareholder of the Company.

d. **Change in Control**.

(i) For purposes of this Agreement, Change in Control shall mean (x) the consummation of a merger or consolidation of the Company with or into another entity, (y) the dissolution, liquidation or winding up of the Company or (z) the sale of all or substantially all of the Company's assets. The foregoing notwithstanding, a merger or consolidation of the Company shall not constitute a "Change in Control" if immediately after such merger or consolidation a majority of the voting power of the capital stock of the continuing or surviving entity, or any direct or indirect parent corporation of such continuing or surviving entity, will be owned by the persons who were the Company's stockholders immediately prior to such merger or consolidation in substantially the same proportions as their ownership of the voting power of the Company's capital stock immediately prior to such merger or consolidation.

(ii) Employer may terminate Executive's employment under this Agreement upon or within 90 days following a Change in Control without advance notice; provided, however, that Employer will pay, no later than sixty (60) days from the termination date in a lump sum:

(A) (i) Executive's salary through the date of termination,
(ii) for any unused vacation time, and (iii) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses;

(B) as severance pay, eighteen (18) months' worth of Executive's salary at the rate in effect on the termination date;

(C) 100% of any incentive cash and/or stock bonus opportunity for the current year;

(D) the amount equal to the cost of eighteen (18) months' medical insurance premiums at a monthly amount equal to the amount of COBRA coverage in effect as of the termination date; and

(E) an additional tax gross up payment in an amount necessary so that the amount received by Executive to cover COBRA premiums under Section 5(d)(ii)(D) after all applicable withholding tax is deducted (using applicable supplemental wage withholding rates) is the full amount Executive would have received under Section 5(d)(ii)(D) if no tax withholding was made.

(iii) Executive shall only be entitled to such severance pay if, within thirty (30) days following the date of termination, both Employer and Executive have signed (and then Executive does not rescind, as may be permitted by law) a mutual general release of claims in a form mutually acceptable to both parties (provided, however, that such release of claims shall only require each party to release the other party from claims relating directly to Executive's employment and the termination thereof, and shall not require Executive to release claims relating to vested employee benefits or relating to other matters, including, but not limited to, claims relating to Executive's status as a shareholder of the Company.

(iv) Upon termination of Executive's employment hereunder due to a Change in Control, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

e. **No Fault Termination By Executive.** Executive may terminate Executive's employment under this Agreement for any reason provided that Executive gives Employer at least ninety (90) days' notice in writing. Employer may, at its option, accelerate such termination date to any date at least two weeks after Executive's notice of termination. Employer may also, at its option, relieve Executive of all duties and authority after notice of termination has been provided. Upon termination of Executive's employment in accordance with this Section, Company shall pay the Executive no later than fourteen (14) days from the termination date in a lump sum: (i) Executive's salary through the date of termination, (ii) for any unused vacation time, and (iii) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses. Such payments will be subject to all appropriate deductions and withholdings. Upon termination, Executive will have no rights to any unvested benefits or any other compensation.

f. **Termination By Executive for Good Reason**. Executive's employment pursuant to this Agreement shall terminate in the event Executive shall determine that there is "Good Reason" to terminate Executive's employment, which shall mean the following:

(i) Employer's material breach of the terms of this Agreement or any other written agreement between Executive and Employer; or

(ii) The occurrence of any of the following conditions, without Executive's consent:

(A) a significant diminution in the nature or scope of Executive's authority, title, function or duties;

(B) a ten percent (10%) reduction in Executive's base salary or a twenty-five percent (25%) reduction in Executive's target bonus opportunity (unless such reduction is part of a Company officer-wide program to reduce expenses);

(C) the Company's requiring Executive to be based and work out of an office or location more than 50 miles from the office where Executive is currently employed;

(D) any material breach of the terms of this Agreement by the Company; or

(E) failure of any successor or assignee to the Company to assume this Agreement.

Provided that Executive has provided with notice of the existence of a condition giving rise to "Good Reason" to terminate within ninety (90) days following the initial existence of such a condition, Employer shall have thirty (30) days to cure any such alleged breach, assignment, reduction or requirement referenced above, after Executive provides Employer written notice of the actions or omissions constituting such breach, assignment, reduction or requirement.

If Executive resigns Executive's employment for Good Reason, Executive shall be paid no later than fourteen (14) days from the termination date in a lump sum:

I. (i) Executive's salary through the date of termination, (ii) for any unused vacation time, and (iii) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses.

II. severance pay of twelve (12) months' worth of Executive's salary at the rate in effect on the termination date.

III. the amount equal to the cost of twelve (12) months' medical insurance premiums at a monthly amount equal to the amount of COBRA coverage in effect as of the termination date; and

IV. an additional tax gross up payment in an amount necessary so that the amount received by Executive to cover COBRA premiums under Section 5(f)(III) after all applicable withholding tax is deducted (using applicable supplemental wage withholding rates) is the full amount Executive would have received under Section 5(f)(III) if no tax withholding was made.

Such payments will be subject to all appropriate deductions and withholdings. Upon termination of Executive's employment hereunder due to resignation for good reason, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

Executive shall only be entitled to such severance pay if, within thirty (30) days following the date of termination, both Employer and Executive have signed (and then Executive does not rescind, as may be permitted by law) a mutual general release of claims in a form mutually acceptable to both parties (provided, however, that such release of claims shall only require each party to release the other party from claims relating directly to Executive's employment and the termination thereof, and shall not require Executive to release claims relating to vested employee benefits or relating to other matters, including, but not limited to, claims relating to Executive's status as a shareholder of the Company.

6. **Return of Company Property.** Upon termination of this Agreement or upon request of the Company, Executive shall deliver to the Corporation all property, documents and materials pertaining to the Company's business including, but not limited to, memoranda, notes, records, drawings, manuals, disks, copies, representations, extracts, summaries and analyses, all inventory, demonstration units, and any other property, documents or media of the Corporation, and all equipment belonging to the company, including but not limited to corporate cards, access cards, office keys, office equipment, laptop and desktop computers, cell phones and other wireless devices, thumb drives, zip drives and all other media storage devices.

7. **Covenant Not To Compete.** During Executive's employment by Employer and for a period expiring one (1) year after the termination of Executive's employment for any reason, Executive covenants and agrees that Executive will not:

a. Directly, indirectly, or otherwise, own, manage, operate, control, serve as a consultant to, be employed by, participate in, or be connected, in any manner, with the ownership, management, operation or control of any business that competes with the Business or that competes with Employer or any of its affiliates or that is engaged in any type of business which, at any time during Executive's employment with Employer, Employer or any of its affiliates planned to develop;

b. Hire, offer to hire, entice away or in any other manner persuade or attempt to persuade any officer, employee or agent of Employer or any of its affiliates to alter or discontinue a relationship with Employer or to do any act that is inconsistent with the interests of Employer or any of its affiliates;

c. Directly or indirectly solicit, divert, take away or attempt to solicit, divert or take away any customers of Employer or any of its affiliates; or

d. Directly or indirectly solicit, divert, or in any other manner persuade or attempt to persuade any supplier of Employer or any of its affiliates to alter or discontinue its relationship with Employer or any of its affiliates.

For the purposes of this Section 7, businesses that are deemed to compete with Employer include, without limitation, businesses engaged in manufacturing and marketing biopreservation media for cells, tissues, and organs or cold chain management products and/or services. The geographic scope of the prohibitions in this Section 7 shall be any city, town or county in which the Company conducts or does any business as of or within one (1) year of Executive's last day of employment with the Company. Notwithstanding Executive's obligations under this Section 7, Executive will be entitled to own, as a passive investor, up to five percent (5%) of any publicly traded company without violating this provision.

Employer and Executive agree that: this provision does not impose an undue hardship on Executive and is not injurious to the public; that this provision is necessary to protect the business of Employer and its affiliates; the nature of Executive's responsibilities with Employer under this Agreement require Executive to have access to confidential information which is valuable and confidential to all of the Business; the scope of this Section 7 is reasonable in terms of length of time and geographic scope; and adequate consideration supports this Section 7, including consideration herein.

8. **Confidential Information**. Executive recognizes that Employer's business and continued success depend upon the use and protection of confidential and proprietary business information, including, without limitation, the information and technology developed by or available through licenses to Employer, to which Executive has access (all such information being "Confidential Information"). For purposes of this Agreement, the phrase "Confidential Information" includes, for Employer and its current or future subsidiaries and affiliates, without limitation, and whether or not specifically designated as confidential or proprietary: all business plans and marketing strategies; information concerning existing and prospective markets and customers; financial information; information concerning the development of new products and services; information concerning any personnel of Employer (including, without limitation, skills and compensation information); intellectual property; and technical and non-technical data related to software programs, designs, specifications, compilations, inventions, improvements, methods, processes, procedures and techniques; provided, however, that the phrase does not include information that (a) was lawfully in Executive's possession prior to disclosure of such information by Employer; (b) was, or at any time becomes, available in the public domain other than through a violation of this Agreement; (c) is documented by Executive as having been developed by Executive outside the scope of Executive's employment and independently; or (d) is furnished to Executive by a third party not under an obligation of confidentiality to Employer. Executive agrees that during Executive's employment and after termination of employment irrespective of cause, Executive will use Confidential Information only (i) while employed by the Company, in the business of and for the benefit of the Company, or (ii) when required to do so by a court of competent jurisdiction, by any governmental agency having supervisory authority over the business of the Company, or by any administrative body or legislative body (including a committee thereof) with jurisdiction to order Executive to divulge, disclose or make accessible such information, and then only after providing written notice to Employer that such a demand has been made. Executive's obligation under this Agreement is in addition to any obligations Executive has under state or federal law. Executive agrees to deliver to Employer immediately upon termination of Executive's employment, or at any time Employer so requests, all tangible items containing any Confidential Information (including, without limitation, all memoranda, photographs, records, reports, manuals, drawings, blueprints, prototypes, notes taken by or provided to Executive, and any other documents or items of a confidential nature belonging to Employer), together with all copies of such material in Executive's possession or control. Executive agrees that in the course of Executive's employment with Employer, Executive will not violate in any way the rights that any entity has with regard to trade secrets or proprietary or confidential information. Executive's obligations under this Section 8 are indefinite in term and shall survive the termination of this Agreement.

9. **Work Product and Copyrights.** Executive agrees that all right, title and interest in and to the materials resulting from the performance of Executive's duties at Employer and all copies thereof, including works in progress, in whatever media, (the "Work"), will be and remain in Employer upon their creation. Executive will mark all Work with Employer's copyright or other proprietary notice as directed by Employer. Executive further agrees:

a. To the extent that any portion of the Work constitutes a work protectable under the copyright laws of the United States (the "Copyright Law"), that all such Work will be considered a "work made for hire" as such term is used and defined in the Copyright Law, and that Employer will be considered the "author" of such portion of the Work and the sole and exclusive owner throughout the world of copyright therein; and

b. If any portion of the Work does not qualify as a "work made for hire" as such term is used and defined in the Copyright Law, that Executive hereby assigns and agrees to assign to Employer, without further consideration, all right, title and interest in and to such Work or in any such portion thereof and any copyright therein and further agrees to execute and deliver to Employer, upon request, appropriate assignments of such Work and copyright therein and such other documents and instruments as Employer may request to fully and completely assign such Work and copyright therein to Employer, its successors or nominees, and that Executive hereby appoints Employer as attorney-in-fact to execute and deliver any such documents on Executive's behalf in the event Executive should fail or refuse to do so within a reasonable period following Employer's request.

10. **Inventions and Patents.** For purposes of this Agreement, "Inventions" includes, without limitation, information, inventions, contributions, improvements, ideas, or discoveries, whether protectable or not, and whether or not conceived or made during work hours. Executive agrees that all Inventions conceived or made by Executive during the period of employment with Employer belong to Employer, provided they grow out of Executive's work with Employer or are related in some manner to the Business, including, without limitation, research and product development, and projected business of Employer or its affiliated companies. Accordingly, Executive will:

a. Make adequate written records of such Inventions, which records will be Employer's property;

b. Assign to Employer, at its request, any rights Executive may have to such Inventions for the U.S. and all foreign countries;

c. Waive and agree not to assert any moral rights Executive may have or acquire in any Inventions and agree to provide written waivers from time to time as requested by Employer; and

d. Assist Employer (at Employer's expense) in obtaining and maintaining patents or copyright registrations with respect to such Inventions.

Executive understands and agrees that Employer or its designee will determine, in its sole and absolute discretion, whether an application for patent will be filed on any Invention that is the exclusive property of Employer, as set forth above, and whether such an application will be abandoned prior to issuance of a patent. Employer will pay to Executive, either during or after the term of this Agreement, the following amounts if Executive is sole inventor, or Executive's proportionate share if Executive is joint inventor: $750 upon filing of the initial application for patent on such Invention; and $1,500 upon issuance of a patent resulting from such initial patent application, provided Executive is named as an inventor in the patent.

Executive further agrees that Executive will promptly disclose in writing to Employer during the term of Executive's employment and for one (1) year thereafter, all Inventions whether developed during the time of such employment or thereafter (whether or not Employer has rights in such Inventions) so that Executive's rights and Employer's rights in such Inventions can be determined. Except as set forth on the initialed Exhibit B (List of Inventions) to this Agreement, if any, Executive represents and warrants that Executive has no Inventions, software, writings or other works of authorship useful to Employer in the normal course of the Business, which were conceived, made or written prior to the date of this Agreement and which are excluded from the operation of this Agreement.

NOTICE: In accordance with Washington law, this Section 10 does not apply to Inventions for which no equipment, supplies, facility, or trade secret information of Employer was used and which was developed entirely on Executive's own time, unless: (a) the Invention relates (i) directly to the business of Employer or (ii) to Employer's actual or demonstrably anticipated research or development, or (b) the Invention results from any work performed by Executive for Employer.

11. **Cooperation.** The parties agree that certain matters in which Executive will be involved during the Term may necessitate Executive's cooperation in the future. Accordingly, following the termination of Executive's employment for any reason, to the extent reasonably requested by the Board, Executive shall cooperate with the Employer in connection with matters arising out of Executive's service to the Employer; provided that, the Employer shall make reasonable efforts to minimize disruption of Executive's other activities. The Employer shall reimburse Executive for reasonable expenses incurred in connection with such cooperation.

12. **Non-Disparagement.** Executive agrees and covenants that Executive will not at any time make, publish or communicate to any person or entity or in any public forum any defamatory or disparaging remarks, comments, or statements concerning the Employer or its businesses, or any of its employees, officers, and existing and prospective customers, suppliers, investors and other associated third parties. This Section 12 does not, in any way, restrict or impede Executive from exercising protected rights to the extent that such rights cannot be waived by agreement or from complying with any applicable law or regulation or a valid order of a court of competent jurisdiction or an authorized government agency, provided that such compliance does not exceed that required by the law, regulation, or order. The Executive shall promptly provide written notice of any such order to the Chief Executive Officer.

13. **Remedies**. Notwithstanding other provisions of this Agreement regarding dispute resolution, Executive agrees that Executive's violation of any of Sections 7, 8, 9, 10, 11 or 12 of this Agreement would cause Employer irreparable harm which would not be adequately compensated by monetary damages and that an injunction may be granted by any court or courts having jurisdiction, restraining Executive from violation of the terms of this Agreement, upon any breach or threatened breach of Executive of the obligations set forth in any of Sections 7, 8, 9, 10, 11 or 12. The preceding sentence shall not be construed to limit Employer from any other relief or damages to which it may be entitled as a result of Executive's breach of any provision of this Agreement, including Sections 7, 8, 9, 10, 11 or 12. Executive also agrees that a violation of any of Sections 7, 8, 9, 10, 11 or 12 would entitle Employer, in addition to all other remedies available at law or equity, to recover from Executive any and all funds, including, without limitation, wages, salary and profits, which will be held by Executive in constructive trust for Employer, received by Executive in connection with such violation.

14. **Dispute Resolution.** Except for the right of Employer and Executive to seek injunctive relief in court, any controversy, claim or dispute of any type arising out of or relating to Executive's employment or the provisions of this Agreement shall be resolved in accordance with this Section 144 regarding resolution of disputes, which will be the sole and exclusive procedure for the resolution of any disputes. This Agreement shall be enforced in accordance with the Federal Arbitration Act, the enforcement provisions of which are incorporated by this reference. Matters subject to these provisions include, without limitation, claims or disputes based on statute, contract, common law and tort and will include, for example, matters pertaining to termination, discrimination, harassment, compensation and benefits. Matters to be resolved under these procedures also include claims and disputes arising out of statutes such as the Fair Labor Standards Act, Title VII of the Civil Rights Act, the Age Discrimination in Employment Act, the Washington Minimum Wage Act, and the Washington Law Against Discrimination. Nothing in this provision is intended to restrict Executive from submitting any matter to an administrative agency with jurisdiction over such matter.

a. **Mediation.** Employer and Executive will make a good faith attempt to resolve any and all claims and disputes by submitting them to mediation in Snohomish County, Washington before resorting to arbitration or any other dispute resolution procedure. The mediation of any claim or dispute must be conducted in accordance with the then-current JAMS procedures for the resolution of employment disputes by mediation, by a mediator who has had both training and experience as a mediator of general employment and commercial matters. If the parties to this Agreement cannot agree on a mediator, then the mediator will be selected by JAMS in accordance with JAMS' strike list method. Within thirty (30) days after the selection of the mediator, Employer and Executive and their respective attorneys will meet with the mediator for one mediation session of at least four hours. If the claim or dispute cannot be settled during such mediation session or mutually agreed continuation of the session, either Employer or Executive may give the mediator and the other party to the claim or dispute written notice declaring the end of the mediation process. All discussions connected with this mediation provision will be confidential and treated as compromise and settlement discussions. Nothing disclosed in such discussions, which is not independently discoverable, may be used for any purpose in any later proceeding. The mediator's fees will be paid in equal portions by Employer and Executive, unless Employer agrees to pay all such fees.

b. **Arbitration.** If any claim or dispute has not been resolved in accordance with Section 14.a., then the claim or dispute will be determined by arbitration in accordance with the then-current JAMS employment arbitration rules and procedures, except as modified herein. The arbitration will be conducted by a sole neutral arbitrator who has had both training and experience as an arbitrator of general employment and commercial matters and who is and for at least ten (10) years has been, a partner, a shareholder, or a member in a law firm. The arbitration shall be held in Snohomish County, Washington. If Employer and Executive cannot agree on an arbitrator, then the arbitrator will be selected by JAMS in accordance with Rule 15 of the JAMS employment arbitration rules and procedures. No person who has served as a mediator under the mediation provision, however, may be selected as the arbitrator for the same claim or dispute. Reasonable discovery will be permitted and the arbitrator may decide any issue as to discovery. The arbitrator may decide any issue as to whether or as to the extent to which any dispute is subject to the dispute resolution provisions in Section 14 and the arbitrator may award any relief permitted by law. The arbitrator must base the arbitration award on the provisions of Section 14 and applicable law and must render the award in writing, including an explanation of the reasons for the award. Judgment upon the award may be entered by any court having jurisdiction of the matter, and the decision of the arbitrator will be final and binding. The statute of limitations applicable to the commencement of a lawsuit will apply to the commencement of an arbitration under Section 14.b. The arbitrator's fees will be paid in equal portions by Employer and Executive, unless Employer agrees to pay all such fees.

15. **Fees Related to Dispute Resolution**. Unless otherwise agreed, the prevailing party will be entitled to its costs and attorneys' fees incurred in any litigation or dispute relating to the interpretation or enforcement of this Agreement.

16. **409A.** It is intended that any payment or benefit that is provided pursuant to or in connection with this Agreement that is considered to be deferred compensation subject to Section 409A of the Internal Revenue Code of 1986, as amended ("Code") shall be paid and provided in a manner, and at such time and form, as complies with the applicable requirements of Section 409A of the Code to avoid the unfavorable tax consequences provided therein for non-compliance. It is further intended that the payments hereunder shall, to the maximum extent permissible under Section 409A of the Code, be exempt from Section 409A of the Code under either (i) the exception for involuntary separation pay to the extent that all payments are payable within the limitations described in Treasury Regulation Section 1.409A-1(b)(9), or (ii) the short-term deferral exception described in Treasury Regulation Section 1.409A-1(b)(4) to the extent that all payments are payable no later than two and a half months after the end of the first taxable year in which the right to the payment is no longer subject to a substantial risk of forfeiture.

a. If the Executive is a "specified employee" for purposes of Section 409A(a)(2)(B)(i) of the Code at such time, any payments to be made or benefits to be delivered in connection with the Executive's "Separation from Service" (as defined below) that constitute deferred compensation subject to Section 409A of the Code shall not be made until the later of (i) eighteen months following the Effective Date or (ii) six months plus one day after the Executive's Separation from Service (the "409A Deferral Period") as required by Section 409A of the Code, provided that the payment of any such deferred compensation may be paid immediately following the Executive's death. Payments of any such deferred compensation otherwise due to be made in installments or periodically during the 409A Deferral Period shall be accumulated and paid in a lump sum as soon as the 409A Deferral Period ends, and the balance of the payment shall be made as otherwise scheduled.

b. For purposes of this Agreement, all rights to payments and benefits hereunder shall be treated as rights to receive a series of separate payments and benefits to the fullest extent allowed by Section 409A of the Code.

c. For purposes of this Agreement, with respect to the timing of any amounts that constitute deferred compensation subject to Section 409A of the Code that depends on termination of employment or separation from service, termination of employment or separation from service shall mean a "separation from service" within the meaning of Section 409A of the Code where it is reasonably anticipated that no further services would be performed after such date or that the level of bona fide services the Executive would perform after that date (whether as an employee or independent contractor) would permanently decrease to a level less than or equal to twenty percent (20%) of the average level of bona fide services the Executive performed over the immediately preceding thirty-six (36) month period.

17. **Disclosure**. Executive agrees fully and completely to reveal the terms of this Agreement to any future employer or potential employer of Executive and authorizes Employer, at its election, to make such disclosure.

18. **Representation of Executive**. Executive represents and warrants to Employer that Executive is free to enter into this Agreement and has no contract, commitment, arrangement or understanding to or with any party that restrains or is in conflict with Executive's performance of the covenants, services and duties provided for in this Agreement, and is not contravene the terms of any statute, law, or regulation to which Executive is subject. Executive agrees to indemnify Employer and to hold it harmless against any and all liabilities or claims arising out of any unauthorized act or acts by Executive that, the foregoing representation and warranty to the contrary notwithstanding, are in violation, or constitute a breach, of any such contract, commitment, arrangement or understanding.

19. **Conditions of Employment.** Employer's obligations to Executive under this Agreement are conditioned upon Executive's timely compliance with requirements of the United States immigration laws.

20. **Assignability**. This Agreement shall not be assignable by Executive. This Agreement may be assigned by the Company to a company which is a successor in interest to substantially all of the business operations of the Company. Such assignment shall become effective when the Company notifies the Executive of such assignment or at such later date as may be specified in such notice. Upon such assignment, the rights and obligations of the Company hereunder shall become the rights and obligations of such successor company, provided that any assignee expressly assumes the obligations, rights and privileges of this Agreement.

21. **Notices.** Any notices required or permitted to be given hereunder are sufficient if in writing and delivered by hand, by facsimile, by registered or certified mail, postage prepaid, or by overnight courier, to Executive at Executive's home address as most recently updated in Executive's Human Resources records, or to BioLife Solutions, Inc., 3303 Monte Villa Parkway, #310, Bothell, WA 98021, Attention: Chief Executive Officer. Notices shall be deemed to have been given (i) upon delivery, if delivered by hand or by email, (ii) seven days after mailing, if mailed, (iii) one business day after delivery, if delivered by courier, and (iv) one business day following receipt of an appropriate electronic confirmation, if by facsimile.

22. **Severability**. If any provision of this Agreement or compliance by any of the parties with any provision of this Agreement constitutes a violation of any law, or is or becomes unenforceable or void, then such provision, to the extent only that it is in violation of law, unenforceable or void, shall be deemed modified to the extent necessary so that it is no longer in violation of law, unenforceable or void, and such provision will be enforced to the fullest extent permitted by law. The Parties shall engage in good faith negotiations to modify and replace any provision which is declared invalid or unenforceable with a valid and enforceable provision, the economic effect of which comes as close as possible to that of the invalid or unenforceable provision which it replaces. If such modification is not possible, said provision, to the extent that it is in violation of law, unenforceable or void, shall be deemed severable from the remaining provisions of this Agreement, which provisions will remain binding on the parties.

23. **Waivers.** No failure on the part of either party to exercise, and no delay in exercising, any right or remedy hereunder will operate as a waiver thereof; nor will any single or partial waiver of a breach of any provision of this Agreement operate or be construed as a waiver of any subsequent breach; nor will any single or partial exercise of any right or remedy hereunder preclude any other or further exercise thereof or the exercise of any other right or remedy granted hereby or by law.

24. **Governing Law.** Except as provided in Section 14 above, the validity, construction and performance of this Agreement shall be governed by the laws of the State of Washington without regard to the conflicts of law provisions of such laws. The parties hereto expressly recognize and agree that the implementation of this Section 2424 is essential in light of the fact that Employer has its corporate headquarters and its principal executive offices within the State of Washington, and there is a critical need for uniformity in the interpretation and enforcement of the employment agreements between Employer and its key employees. Aside from any disputes that must be resolved by arbitration as provided for in Section 14, the Snohomish County Superior Court in Washington shall have exclusive jurisdiction of any lawsuit arising from or relating to Executive's employment with, or termination from, Employer, or arising from or relating to this Agreement. Executive consents to such venue and personal jurisdiction.

25. **Counterparts.** This Agreement may be executed in counterpart in different places, at different times and on different dates, and in that case all executed counterparts taken together collectively constitute a single binding agreement.

26. **Costs and Fees Related to Negotiation and Execution of Agreement.** Each Party shall be responsible for the payment of its own costs and expenses, including legal fees and expenses, in connection with the negotiation and execution of this Agreement. Neither Party will be liable for the payment of any commissions or compensation in the nature of finders' fees or brokers' fees, gratuity or other similar thing or amount in consideration of the other Party entering into this Agreement to any broker, agent or third party acting on behalf of the other Party.

27. **Entire Agreement**. This instrument contains the entire agreement of the parties with respect to the relationship between Executive and Employer and supersedes all prior agreements and understandings, and there are no other representations or agreements other than as stated in this Agreement related to the terms and conditions of Executive's employment. This Agreement may be changed only by an agreement in writing signed by the party against whom enforcement of any waiver, change, modification, extension or discharge is sought, and any such modification will be signed by an authorized representative of Employer.

IN WITNESS WHEREOF, the parties have duly signed and delivered this Agreement as of the day and year first above written.

EMPLOYER

By _____

Title: _____

EXECUTIVE

_____

Roderick de Greef

EXHIBIT B

LIST OF INVENTIONS

Exhibit 10.36

AMENDED EXECUTIVE EMPLOYMENT AGREEMENT

THIS EXECUTIVE EMPLOYMENT AGREEMENT ("Agreement") is made between BioLife Solutions Inc., a Delaware corporation ("Employer" or the "Company"), and Troy Wichterman ("Executive"). Executive and the Company are sometimes referred to herein as the "Parties." The effective date is November 4, 2021. This Agreement supersedes and replaces all prior employment agreements between Company and Executive, including any amendments thereto.

RECITALS

A. Employer is in the business (the "Business") of manufacturing and marketing biopreservation media and cold chain products for cells, tissues, and organs.

B. Employer desires to obtain the services of Executive, in which capacity Executive has access to Employer's Confidential Information (as hereinafter defined), and to obtain assurance that Executive will protect Employer's Confidential Information and will not compete with Employer or solicit its customers or its other employees during the term of employment and for a reasonable period of time after termination of employment pursuant to this Agreement, and Executive is willing to agree to these terms.

C. Executive desires to be assured of the salary and other benefits provided for in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties agree as follows:

1. **Employment**.

a. Employer hereby employs Executive, and Executive agrees to be employed as Chief Financial Officer ("CFO"), reporting to the Chief Executive Officer, in accordance with the terms and conditions set forth in this Agreement. Changes may be made from time to time by Employer and/or the Board in its sole discretion to the duties, authorities, reporting relationships and title of Executive.

b. Executive will devote full time, attention, and best efforts to achieving the purposes and discharging the responsibilities of the CFO. Executive will comply with all rules, policies and procedures of Employer as modified from time to time, including without limitation, rules and procedures set forth in the Employer's employee handbook, supervisor's manuals and operating manuals. Executive will perform all of Executive's responsibilities in compliance with all applicable laws and will ensure that the operations that Executive manages are in compliance with all applicable laws. During Executive's employment, Executive will not engage in any other business activity which, in the reasonable judgment of the Employer, conflicts with the duties of Executive under this Agreement, whether or not such activity is pursued for gain, profit or other pecuniary advantage.

c. Nothing herein shall preclude Executive from: (1) continuing to serve on the board of directors or trustees of any business corporation or any charitable organization on which Executive currently serves and which is identified on Exhibit A hereto, or (2) subject to the prior approval of the Board, appointment to any additional directorships or trusteeships, or (3) serving in an advisory role for other business entities, provided in each case, and in the aggregate, that such activities do not interfere with the performance of Executive's duties hereunder or conflict with Section 7 of this Agreement.

2. **Term of Employment**. The term of employment ("Term") will not be for a definite period, but rather continue indefinitely until terminated in accordance with the terms and conditions of this Agreement.

3. **Compensation**. For the duration of Executive's employment hereunder, the Executive will be entitled to compensation which will be computed and paid pursuant to the following subparagraphs.

a. **Base Salary**. Employer will pay to Executive a base salary ("Base Salary") at an annual rate of three hundred twenty five thousand dollars ($325,000), payable in such installments (but in no event less than monthly), subject to withholdings and deductions as required or permitted by law, as is Employer's policy with respect to other employees. Executive's Base Salary will be reviewed periodically by the Board of Directors of Employer during the term of Executive's employment and may be adjusted in the sole discretion of the Board of Directors based on such review, but will not be reduced by Employer unless a material adverse change in the financial condition or operations of Employer has occurred or unless Executive's responsibilities are altered to reflect less responsibility.

b. **Performance Bonus**. Employer under direction of its Board may pay or cause to be paid to Executive such Bonus as it from time to time determines appropriate.

4. **Other Benefits**.

a. **Certain Benefits.** Executive will be eligible to participate in all employee benefit programs established by Employer that are applicable to management personnel such as medical, pension, disability and life insurance plans on a basis commensurate with Executive's position and in accordance with Employer's policies from time to time, but nothing herein shall require the adoption or maintenance of any such plan.

b. **Vacations, Holidays and Expenses**. Executive will be provided accrued paid vacation of four (4) weeks each calendar year, which shall be the maximum number of days Executive may accrue at any time, and which shall be taken at such times as are consistent with Executive's responsibilities hereunder. Executive will be provided such holidays and vacation as Executive makes available to its management level employees generally. Employer will reimburse Executive in accordance with company policies and procedures for reasonable expenses necessarily incurred in the performance of duties hereunder against appropriate receipts and vouchers indicating the specific business purpose for each such expenditure. In no case shall any reimbursement be made later than December 31st of the year following the calendar year in which such expense is incurred.

c. **Right of Set-off**. By accepting this Agreement, Executive consents to a deduction from any amounts Employer owes Executive from time to time (including amounts owed to Executive as wages or other compensation, fringe benefits, or vacation pay, as well as any other amounts owed to Executive by Employer), to the extent of the amounts Executive owes to Employer. Whether or not Employer elects to make any set-off in whole or in part, if Employer does not recover by means of set-off the full amount Executive owes it, calculated as set forth above, Executive agrees to pay immediately the unpaid balance to Employer.

5. **Termination, Discharge**.

a. **For Cause.** Employer will have the right to immediately terminate Executive's services and this Agreement for Cause. "Cause" means the Employer's belief that any of the following has occurred:

(i) any breach of this Agreement by Executive, including, without limitation, breach of Executive's covenants in Sections 7, 8, 9, 10, 11 or 12;

(ii) any failure to perform assigned job responsibilities that continues unremedied for a period of ten (10) days after written notice to Executive by Employer;

(iii) Executive's malfeasance or misconduct in connection with Executive's duties hereunder or any act or omission of Executive which is materially injurious to the financial condition or business reputation of the Company or any of its subsidiaries or affiliates,

(iv) commission or conviction of a felony or misdemeanor (other than a misdemeanor traffic violation), including a plea of guilty or failure to contest prosecution for a felony or misdemeanor;

(v) the Employer's reasonable belief that Executive engaged in a violation of any statute, rule or regulation, any of which in the judgment of Employer is harmful to the Business or to Employer's reputation;

(vi) the Employer's reasonable belief that Executive engaged in unethical practices, dishonesty or disloyalty, unless Executive has evidence establishing that Employer directed Executive to commit such practice or act;

(vii) or any reason that would constitute Cause under the laws the State of Washington.

Upon termination of Executive's employment hereunder for Cause, the Company shall pay the Executive no later than fourteen (14) days from the termination date in a lump sum: (x) Executive's salary through the date of termination, (y) for any unused vacation time, and (z) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses. Executive will have no rights to any unvested benefits or any other compensation or payments after the termination date.

b. **Due to Death or Disability.** Employer will have the right to immediately terminate Executive's services and this Agreement due to death or disability. For purposes of this Agreement, "disability" means the incapacity or inability of Executive, whether due to accident, sickness or otherwise, as determined by a medical doctor acceptable to the Board of Directors of Employer and confirmed in writing by such doctor, to perform the essential functions of Executive's position under this Agreement, with or without reasonable accommodation (provided that no accommodation that imposes undue hardship on Employer will be required) for a period of sixty (60) consecutive days or for an aggregate of ninety (90) days during any period of twelve (12) months, or such longer period as may be required under disability law.

Upon termination of Executive's employment hereunder due to death or disability, the Company shall pay the Executive no later than fourteen (14) days from the termination date in a lump sum: (i) Executive's salary through the date of termination, (ii) a prorated portion of any incentive bonus opportunity previously approved by the Board, (iii) for any unused vacation time, and (iv) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses. Upon termination of Executive's employment hereunder due to death or disability, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest for the benefit of Executive's estate. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

c. **Without Cause.** Employer may terminate Executive's employment under this Agreement without cause and without advance notice; provided, however, that Employer will pay (unless subparagraph 5(d) of this Agreement applies, in which case the provisions therein shall govern), no later than fourteen (14) days from the termination date in a lump sum:

(i) (x) Executive's salary through the date of termination, (y) for any unused vacation time, and (z) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses.

(ii) severance pay of nine (9) months' worth of Executive's salary at the rate in effect on the termination date.

(iii) the amount equal to the cost of nine (9) months' medical insurance premiums at a monthly amount equal to the amount of COBRA coverage in effect as of the termination date; and

(iv) an additional tax gross up payment in an amount necessary so that the amount received by Executive to cover COBRA premiums under Section 5(c)(iii) after all applicable withholding tax is deducted (using applicable supplemental wage withholding rates) is the full amount Executive would have received under Section 5(c)(iii) if no tax withholding was made.

Such payments will be subject to all appropriate deductions and withholdings. Upon termination of Executive's employment hereunder due to termination without cause, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

Executive shall only be entitled to such severance pay if, within thirty (30) days following the date of termination, both Employer and Executive have signed (and then Executive does not rescind, as may be permitted by law) a mutual general release of claims in a form mutually acceptable to both parties (provided, however, that such release of claims shall only require each party to release the other party from claims relating directly to Executive's employment and the termination thereof, and shall not require Executive to release claims relating to vested employee benefits or relating to other matters, including, but not limited to, claims relating to Executive's status as a shareholder of the Company.

d. **Change in Control**.

(i) For purposes of this Agreement, Change in Control shall mean (x) the consummation of a merger or consolidation of the Company with or into another entity, (y) the dissolution, liquidation or winding up of the Company or (z) the sale of all or substantially all of the Company's assets. The foregoing notwithstanding, a merger or consolidation of the Company shall not constitute a "Change in Control" if immediately after such merger or consolidation a majority of the voting power of the capital stock of the continuing or surviving entity, or any direct or indirect parent corporation of such continuing or surviving entity, will be owned by the persons who were the Company's stockholders immediately prior to such merger or consolidation in substantially the same proportions as their ownership of the voting power of the Company's capital stock immediately prior to such merger or consolidation.

(ii) Employer may terminate Executive's employment under this Agreement upon or within 90 days following a Change in Control without advance notice; provided, however, that Employer will pay, no later than sixty (60) days from the termination date in a lump sum:

(A) (i) Executive's salary through the date of termination, (ii) for any unused vacation time, and (iii) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses;

(B) as severance pay, twelve (12) months' worth of Executive's salary at the rate in effect on the termination date;

(C) 100% of any incentive cash and/or stock bonus opportunity for the current year;

(D) the amount equal to the cost of twelve (12) months' medical insurance premiums at a monthly amount equal to the amount of COBRA coverage in effect as of the termination date; and

(E) an additional tax gross up payment in an amount necessary so that the amount received by Executive to cover COBRA premiums under Section 5(d)(ii)(D) after all applicable withholding tax is deducted (using applicable supplemental wage withholding rates) is the full amount Executive would have received under Section 5(d)(ii)(D) if no tax withholding was made.

(iii) Executive shall only be entitled to such severance pay if, within thirty (30) days following the date of termination, both Employer and Executive have signed (and then Executive does not rescind, as may be permitted by law) a mutual general release of claims in a form mutually acceptable to both parties (provided, however, that such release of claims shall only require each party to release the other party from claims relating directly to Executive's employment and the termination thereof, and shall not require Executive to release claims relating to vested employee benefits or relating to other matters, including, but not limited to, claims relating to Executive's status as a shareholder of the Company.

(iv) Upon termination of Executive's employment hereunder due to a Change in Control, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

e. **No Fault Termination By Executive.** Executive may terminate Executive's employment under this Agreement for any reason provided that Executive gives Employer at least ninety (90) days' notice in writing. Employer may, at its option, accelerate such termination date to any date at least two weeks after Executive's notice of termination. Employer may also, at its option, relieve Executive of all duties and authority after notice of termination has been provided. Upon termination of Executive's employment in accordance with this Section, Company shall pay the Executive no later than fourteen (14) days from the termination date in a lump sum: (i) Executive's salary through the date of termination, (ii) for any unused vacation time, and (iii) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses. Such payments will be subject to all appropriate deductions and withholdings. Upon termination, Executive will have no rights to any unvested benefits or any other compensation.

f. **Termination By Executive for Good Reason**. Executive's employment pursuant to this Agreement shall terminate in the event Executive shall determine that there is "Good Reason" to terminate Executive's employment, which shall mean the following:

(i) Employer's material breach of the terms of this Agreement or any other written agreement between Executive and Employer; or

(ii) The occurrence of any of the following conditions, without Executive's consent:

(A) a significant diminution in the nature or scope of Executive's authority, title, function or duties;

(B) a ten percent (10%) reduction in Executive's base salary or a twenty-five percent (25%) reduction in Executive's target bonus opportunity (unless such reduction is part of a Company officer-wide program to reduce expenses);

(C) the Company's requiring Executive to be based and work out of an office or location more than 50 miles from the office where Executive is currently employed;

(D) any material breach of the terms of this Agreement by the Company; or

(E) failure of any successor or assignee to the Company to assume this Agreement.

Provided that Executive has provided with notice of the existence of a condition giving rise to "Good Reason" to terminate within ninety (90) days following the initial existence of such a condition, Employer shall have thirty (30) days to cure any such alleged breach, assignment, reduction or requirement referenced above, after Executive provides Employer written notice of the actions or omissions constituting such breach, assignment, reduction or requirement.

If Executive resigns Executive's employment for Good Reason, Executive shall be paid no later than fourteen (14) days from the termination date in a lump sum:

I. (i) Executive's salary through the date of termination, (ii) for any unused vacation time, and (iii) for any unreimbursed business expenses that are subject to reimbursement under Employer's then current policy on business expenses.

II. severance pay of nine (9) months' worth of Executive's salary at the rate in effect on the termination date.

III. the amount equal to the cost of nine (9) months' medical insurance premiums at a monthly amount equal to the amount of COBRA coverage in effect as of the termination date; and

IV. an additional tax gross up payment in an amount necessary so that the amount received by Executive to cover COBRA premiums under Section 5(f)(III) after all applicable withholding tax is deducted (using applicable supplemental wage withholding rates) is the full amount Executive would have received under Section 5(f)(III) if no tax withholding was made.

Such payments will be subject to all appropriate deductions and withholdings. Upon termination of Executive's employment hereunder due to resignation for good reason, all unvested stock options, awards, or other equity grants or awards shall immediately fully vest. Executive or Executive's estate (as the case may be) shall be entitled to receive any vested benefits required to be paid by law and any vested compensation required to be paid by law.

Executive shall only be entitled to such severance pay if, within thirty (30) days following the date of termination, both Employer and Executive have signed (and then Executive does not rescind, as may be permitted by law) a mutual general release of claims in a form mutually acceptable to both parties (provided, however, that such release of claims shall only require each party to release the other party from claims relating directly to Executive's employment and the termination thereof, and shall not require Executive to release claims relating to vested employee benefits or relating to other matters, including, but not limited to, claims relating to Executive's status as a shareholder of the Company.

6. **Return of Company Property.** Upon termination of this Agreement or upon request of the Company, Executive shall deliver to the Corporation all property, documents and materials pertaining to the Company's business including, but not limited to, memoranda, notes, records, drawings, manuals, disks, copies, representations, extracts, summaries and analyses, all inventory, demonstration units, and any other property, documents or media of the Corporation, and all equipment belonging to the company, including but not limited to corporate cards, access cards, office keys, office equipment, laptop and desktop computers, cell phones and other wireless devices, thumb drives, zip drives and all other media storage devices.

7. **Covenant Not To Compete.** During Executive's employment by Employer and for a period expiring one (1) year after the termination of Executive's employment for any reason, Executive covenants and agrees that Executive will not:

a. Directly, indirectly, or otherwise, own, manage, operate, control, serve as a consultant to, be employed by, participate in, or be connected, in any manner, with the ownership, management, operation or control of any business that competes with the Business or that competes with Employer or any of its affiliates or that is engaged in any type of business which, at any time during Executive's employment with Employer, Employer or any of its affiliates planned to develop;

b. Hire, offer to hire, entice away or in any other manner persuade or attempt to persuade any officer, employee or agent of Employer or any of its affiliates to alter or discontinue a relationship with Employer or to do any act that is inconsistent with the interests of Employer or any of its affiliates;

c. Directly or indirectly solicit, divert, take away or attempt to solicit, divert or take away any customers of Employer or any of its affiliates; or

d. Directly or indirectly solicit, divert, or in any other manner persuade or attempt to persuade any supplier of Employer or any of its affiliates to alter or discontinue its relationship with Employer or any of its affiliates.

For the purposes of this Section 7, businesses that are deemed to compete with Employer include, without limitation, businesses engaged in manufacturing and marketing biopreservation media for cells, tissues, and organs or cold chain management products and/or services. The geographic scope of the prohibitions in this Section 7 shall be any city, town or county in which the Company conducts or does any business as of or within one (1) year of Executive's last day of employment with the Company. Notwithstanding Executive's obligations under this Section 7, Executive will be entitled to own, as a passive investor, up to five percent (5%) of any publicly traded company without violating this provision.

Employer and Executive agree that: this provision does not impose an undue hardship on Executive and is not injurious to the public; that this provision is necessary to protect the business of Employer and its affiliates; the nature of Executive's responsibilities with Employer under this Agreement require Executive to have access to confidential information which is valuable and confidential to all of the Business; the scope of this Section 7 is reasonable in terms of length of time and geographic scope; and adequate consideration supports this Section 7, including consideration herein.

8. **Confidential Information**. Executive recognizes that Employer's business and continued success depend upon the use and protection of confidential and proprietary business information, including, without limitation, the information and technology developed by or available through licenses to Employer, to which Executive has access (all such information being "Confidential Information"). For purposes of this Agreement, the phrase "Confidential Information" includes, for Employer and its current or future subsidiaries and affiliates, without limitation, and whether or not specifically designated as confidential or proprietary: all business plans and marketing strategies; information concerning existing and prospective markets and customers; financial information; information concerning the development of new products and services; information concerning any personnel of Employer (including, without limitation, skills and compensation information); intellectual property; and technical and non-technical data related to software programs, designs, specifications, compilations, inventions, improvements, methods, processes, procedures and techniques; provided, however, that the phrase does not include information that (a) was lawfully in Executive's possession prior to disclosure of such information by Employer; (b) was, or at any time becomes, available in the public domain other than through a violation of this Agreement; (c) is documented by Executive as having been developed by Executive outside the scope of Executive's employment and independently; or (d) is furnished to Executive by a third party not under an obligation of confidentiality to Employer. Executive agrees that during Executive's employment and after termination of employment irrespective of cause, Executive will use Confidential Information only (i) while employed by the Company, in the business of and for the benefit of the Company, or (ii) when required to do so by a court of competent jurisdiction, by any governmental agency having supervisory authority over the business of the Company, or by any administrative body or legislative body (including a committee thereof) with jurisdiction to order Executive to divulge, disclose or make accessible such information, and then only after providing written notice to Employer that such a demand has been made. Executive's obligation under this Agreement is in addition to any obligations Executive has under state or federal law. Executive agrees to deliver to Employer immediately upon termination of Executive's employment, or at any time Employer so requests, all tangible items containing any Confidential Information (including, without limitation, all memoranda, photographs, records, reports, manuals, drawings, blueprints, prototypes, notes taken by or provided to Executive, and any other documents or items of a confidential nature belonging to Employer), together with all copies of such material in Executive's possession or control. Executive agrees that in the course of Executive's employment with Employer, Executive will not violate in any way the rights that any entity has with regard to trade secrets or proprietary or confidential information. Executive's obligations under this Section 8 are indefinite in term and shall survive the termination of this Agreement.

9. **Work Product and Copyrights.** Executive agrees that all right, title and interest in and to the materials resulting from the performance of Executive's duties at Employer and all copies thereof, including works in progress, in whatever media, (the "Work"), will be and remain in Employer upon their creation. Executive will mark all Work with Employer's copyright or other proprietary notice as directed by Employer. Executive further agrees:

a. To the extent that any portion of the Work constitutes a work protectable under the copyright laws of the United States (the "Copyright Law"), that all such Work will be considered a "work made for hire" as such term is used and defined in the Copyright Law, and that Employer will be considered the "author" of such portion of the Work and the sole and exclusive owner throughout the world of copyright therein; and

b. If any portion of the Work does not qualify as a "work made for hire" as such term is used and defined in the Copyright Law, that Executive hereby assigns and agrees to assign to Employer, without further consideration, all right, title and interest in and to such Work or in any such portion thereof and any copyright therein and further agrees to execute and deliver to Employer, upon request, appropriate assignments of such Work and copyright therein and such other documents and instruments as Employer may request to fully and completely assign such Work and copyright therein to Employer, its successors or nominees, and that Executive hereby appoints Employer as attorney-in-fact to execute and deliver any such documents on Executive's behalf in the event Executive should fail or refuse to do so within a reasonable period following Employer's request.

10. **Inventions and Patents.** For purposes of this Agreement, "Inventions" includes, without limitation, information, inventions, contributions, improvements, ideas, or discoveries, whether protectable or not, and whether or not conceived or made during work hours. Executive agrees that all Inventions conceived or made by Executive during the period of employment with Employer belong to Employer, provided they grow out of Executive's work with Employer or are related in some manner to the Business, including, without limitation, research and product development, and projected business of Employer or its affiliated companies. Accordingly, Executive will:

a. Make adequate written records of such Inventions, which records will be Employer's property;

b. Assign to Employer, at its request, any rights Executive may have to such Inventions for the U.S. and all foreign countries;

c. Waive and agree not to assert any moral rights Executive may have or acquire in any Inventions and agree to provide written waivers from time to time as requested by Employer; and

d. Assist Employer (at Employer's expense) in obtaining and maintaining patents or copyright registrations with respect to such Inventions.

Executive understands and agrees that Employer or its designee will determine, in its sole and absolute discretion, whether an application for patent will be filed on any Invention that is the exclusive property of Employer, as set forth above, and whether such an application will be abandoned prior to issuance of a patent. Employer will pay to Executive, either during or after the term of this Agreement, the following amounts if Executive is sole inventor, or Executive's proportionate share if Executive is joint inventor: $750 upon filing of the initial application for patent on such Invention; and $1,500 upon issuance of a patent resulting from such initial patent application, provided Executive is named as an inventor in the patent.

Executive further agrees that Executive will promptly disclose in writing to Employer during the term of Executive's employment and for one (1) year thereafter, all Inventions whether developed during the time of such employment or thereafter (whether or not Employer has rights in such Inventions) so that Executive's rights and Employer's rights in such Inventions can be determined. Except as set forth on the initialed Exhibit B (List of Inventions) to this Agreement, if any, Executive represents and warrants that Executive has no Inventions, software, writings or other works of authorship useful to Employer in the normal course of the Business, which were conceived, made or written prior to the date of this Agreement and which are excluded from the operation of this Agreement.

NOTICE: In accordance with Washington law, this Section 10 does not apply to Inventions for which no equipment, supplies, facility, or trade secret information of Employer was used and which was developed entirely on Executive's own time, unless: (a) the Invention relates (i) directly to the business of Employer or (ii) to Employer's actual or demonstrably anticipated research or development, or (b) the Invention results from any work performed by Executive for Employer.

11. **Cooperation.** The parties agree that certain matters in which Executive will be involved during the Term may necessitate Executive's cooperation in the future. Accordingly, following the termination of Executive's employment for any reason, to the extent reasonably requested by the Board, Executive shall cooperate with the Employer in connection with matters arising out of Executive's service to the Employer; provided that, the Employer shall make reasonable efforts to minimize disruption of Executive's other activities. The Employer shall reimburse Executive for reasonable expenses incurred in connection with such cooperation.

12. **Non-Disparagement.** Executive agrees and covenants that Executive will not at any time make, publish or communicate to any person or entity or in any public forum any defamatory or disparaging remarks, comments, or statements concerning the Employer or its businesses, or any of its employees, officers, and existing and prospective customers, suppliers, investors and other associated third parties. This Section 12 does not, in any way, restrict or impede Executive from exercising protected rights to the extent that such rights cannot be waived by agreement or from complying with any applicable law or regulation or a valid order of a court of competent jurisdiction or an authorized government agency, provided that such compliance does not exceed that required by the law, regulation, or order. The Executive shall promptly provide written notice of any such order to the Chief Executive Officer.

13. **Remedies**. Notwithstanding other provisions of this Agreement regarding dispute resolution, Executive agrees that Executive's violation of any of Sections 7, 8, 9, 10, 11 or 12 of this Agreement would cause Employer irreparable harm which would not be adequately compensated by monetary damages and that an injunction may be granted by any court or courts having jurisdiction, restraining Executive from violation of the terms of this Agreement, upon any breach or threatened breach of Executive of the obligations set forth in any of Sections 7, 8, 9, 10, 11 or 12. The preceding sentence shall not be construed to limit Employer from any other relief or damages to which it may be entitled as a result of Executive's breach of any provision of this Agreement, including Sections 7, 8, 9, 10, 11 or 12. Executive also agrees that a violation of any of Sections 7, 8, 9, 10, 11 or 12 would entitle Employer, in addition to all other remedies available at law or equity, to recover from Executive any and all funds, including, without limitation, wages, salary and profits, which will be held by Executive in constructive trust for Employer, received by Executive in connection with such violation.

14. **Dispute Resolution.** Except for the right of Employer and Executive to seek injunctive relief in court, any controversy, claim or dispute of any type arising out of or relating to Executive's employment or the provisions of this Agreement shall be resolved in accordance with this Section 14 regarding resolution of disputes, which will be the sole and exclusive procedure for the resolution of any disputes. This Agreement shall be enforced in accordance with the Federal Arbitration Act, the enforcement provisions of which are incorporated by this reference. Matters subject to these provisions include, without limitation, claims or disputes based on statute, contract, common law and tort and will include, for example, matters pertaining to termination, discrimination, harassment, compensation and benefits. Matters to be resolved under these procedures also include claims and disputes arising out of statutes such as the Fair Labor Standards Act, Title VII of the Civil Rights Act, the Age Discrimination in Employment Act, the Washington Minimum Wage Act, and the Washington Law Against Discrimination. Nothing in this provision is intended to restrict Executive from submitting any matter to an administrative agency with jurisdiction over such matter.

a. **Mediation.** Employer and Executive will make a good faith attempt to resolve any and all claims and disputes by submitting them to mediation in Snohomish County, Washington before resorting to arbitration or any other dispute resolution procedure. The mediation of any claim or dispute must be conducted in accordance with the then-current JAMS procedures for the resolution of employment disputes by mediation, by a mediator who has had both training and experience as a mediator of general employment and commercial matters. If the parties to this Agreement cannot agree on a mediator, then the mediator will be selected by JAMS in accordance with JAMS' strike list method. Within thirty (30) days after the selection of the mediator, Employer and Executive and their respective attorneys will meet with the mediator for one mediation session of at least four hours. If the claim or dispute cannot be settled during such mediation session or mutually agreed continuation of the session, either Employer or Executive may give the mediator and the other party to the claim or dispute written notice declaring the end of the mediation process. All discussions connected with this mediation provision will be confidential and treated as compromise and settlement discussions. Nothing disclosed in such discussions, which is not independently discoverable, may be used for any purpose in any later proceeding. The mediator's fees will be paid in equal portions by Employer and Executive, unless Employer agrees to pay all such fees.

b. **Arbitration.** If any claim or dispute has not been resolved in accordance with Section 14.a., then the claim or dispute will be determined by arbitration in accordance with the then-current JAMS employment arbitration rules and procedures, except as modified herein. The arbitration will be conducted by a sole neutral arbitrator who has had both training and experience as an arbitrator of general employment and commercial matters and who is and for at least ten (10) years has been, a partner, a shareholder, or a member in a law firm. The arbitration shall be held in Snohomish County, Washington. If Employer and Executive cannot agree on an arbitrator, then the arbitrator will be selected by JAMS in accordance with Rule 15 of the JAMS employment arbitration rules and procedures. No person who has served as a mediator under the mediation provision, however, may be selected as the arbitrator for the same claim or dispute. Reasonable discovery will be permitted and the arbitrator may decide any issue as to discovery. The arbitrator may decide any issue as to whether or as to the extent to which any dispute is subject to the dispute resolution provisions in Section 14 and the arbitrator may award any relief permitted by law. The arbitrator must base the arbitration award on the provisions of Section 14 and applicable law and must render the award in writing, including an explanation of the reasons for the award. Judgment upon the award may be entered by any court having jurisdiction of the matter, and the decision of the arbitrator will be final and binding. The statute of limitations applicable to the commencement of a lawsuit will apply to the commencement of an arbitration under Section 14.b. The arbitrator's fees will be paid in equal portions by Employer and Executive, unless Employer agrees to pay all such fees.

15. **Fees Related to Dispute Resolution**. Unless otherwise agreed, the prevailing party will be entitled to its costs and attorneys' fees incurred in any litigation or dispute relating to the interpretation or enforcement of this Agreement.

16. **409A.**It is intended that any payment or benefit that is provided pursuant to or in connection with this Agreement that is considered to be deferred compensation subject to Section 409A of the Internal Revenue Code of 1986, as amended ("Code") shall be paid and provided in a manner, and at such time and form, as complies with the applicable requirements of Section 409A of the Code to avoid the unfavorable tax consequences provided therein for non-compliance. It is further intended that the payments hereunder shall, to the maximum extent permissible under Section 409A of the Code, be exempt from Section 409A of the Code under either (i) the exception for involuntary separation pay to the extent that all payments are payable within the limitations described in Treasury Regulation Section 1.409A-1(b)(9), or (ii) the short-term deferral exception described in Treasury Regulation Section 1.409A-1(b)(4) to the extent that all payments are payable no later than two and a half months after the end of the first taxable year in which the right to the payment is no longer subject to a substantial risk of forfeiture.

a. If the Executive is a "specified employee" for purposes of Section 409A(a)(2)(B)(i) of the Code at such time, any payments to be made or benefits to be delivered in connection with the Executive's "Separation from Service" (as defined below) that constitute deferred compensation subject to Section 409A of the Code shall not be made until the later of (i) eighteen months following the Effective Date or (ii) six months plus one day after the Executive's Separation from Service (the "409A Deferral Period") as required by Section 409A of the Code, provided that the payment of any such deferred compensation may be paid immediately following the Executive's death. Payments of any such deferred compensation otherwise due to be made in installments or periodically during the 409A Deferral Period shall be accumulated and paid in a lump sum as soon as the 409A Deferral Period ends, and the balance of the payment shall be made as otherwise scheduled.

b. For purposes of this Agreement, all rights to payments and benefits hereunder shall be treated as rights to receive a series of separate payments and benefits to the fullest extent allowed by Section 409A of the Code.

c. For purposes of this Agreement, with respect to the timing of any amounts that constitute deferred compensation subject to Section 409A of the Code that depends on termination of employment or separation from service, termination of employment or separation from service shall mean a "separation from service" within the meaning of Section 409A of the Code where it is reasonably anticipated that no further services would be performed after such date or that the level of bona fide services the Executive would perform after that date (whether as an employee or independent contractor) would permanently decrease to a level less than or equal to twenty percent (20%) of the average level of bona fide services the Executive performed over the immediately preceding thirty-six (36) month period.

17. **Disclosure**. Executive agrees fully and completely to reveal the terms of this Agreement to any future employer or potential employer of Executive and authorizes Employer, at its election, to make such disclosure.

18. **Representation of Executive**. Executive represents and warrants to Employer that Executive is free to enter into this Agreement and has no contract, commitment, arrangement or understanding to or with any party that restrains or is in conflict with Executive's performance of the covenants, services and duties provided for in this Agreement, and is not contravene the terms of any statute, law, or regulation to which Executive is subject. Executive agrees to indemnify Employer and to hold it harmless against any and all liabilities or claims arising out of any unauthorized act or acts by Executive that, the foregoing representation and warranty to the contrary notwithstanding, are in violation, or constitute a breach, of any such contract, commitment, arrangement or understanding.

19. **Conditions of Employment.** Employer's obligations to Executive under this Agreement are conditioned upon Executive's timely compliance with requirements of the United States immigration laws.

20. **Assignability**. This Agreement shall not be assignable by Executive. This Agreement may be assigned by the Company to a company which is a successor in interest to substantially all of the business operations of the Company. Such assignment shall become effective when the Company notifies the Executive of such assignment or at such later date as may be specified in such notice. Upon such assignment, the rights and obligations of the Company hereunder shall become the rights and obligations of such successor company, provided that any assignee expressly assumes the obligations, rights and privileges of this Agreement.

21. **Notices.** Any notices required or permitted to be given hereunder are sufficient if in writing and delivered by hand, by facsimile, by registered or certified mail, postage prepaid, or by overnight courier, to Executive at Executive's home address as most recently updated in Executive's Human Resources records, or to BioLife Solutions, Inc., 3303 Monte Villa Parkway, #310, Bothell, WA 98021, Attention: Chief Executive Officer. Notices shall be deemed to have been given (i) upon delivery, if delivered by hand or by email, (ii) seven days after mailing, if mailed, (iii) one business day after delivery, if delivered by courier, and (iv) one business day following receipt of an appropriate electronic confirmation, if by facsimile.

22. **Severability**. If any provision of this Agreement or compliance by any of the parties with any provision of this Agreement constitutes a violation of any law, or is or becomes unenforceable or void, then such provision, to the extent only that it is in violation of law, unenforceable or void, shall be deemed modified to the extent necessary so that it is no longer in violation of law, unenforceable or void, and such provision will be enforced to the fullest extent permitted by law. The Parties shall engage in good faith negotiations to modify and replace any provision which is declared invalid or unenforceable with a valid and enforceable provision, the economic effect of which comes as close as possible to that of the invalid or unenforceable provision which it replaces. If such modification is not possible, said provision, to the extent that it is in violation of law, unenforceable or void, shall be deemed severable from the remaining provisions of this Agreement, which provisions will remain binding on the parties.

23. **Waivers.** No failure on the part of either party to exercise, and no delay in exercising, any right or remedy hereunder will operate as a waiver thereof; nor will any single or partial waiver of a breach of any provision of this Agreement operate or be construed as a waiver of any subsequent breach; nor will any single or partial exercise of any right or remedy hereunder preclude any other or further exercise thereof or the exercise of any other right or remedy granted hereby or by law.

24. **Governing Law.** Except as provided in Section 14 above, the validity, construction and performance of this Agreement shall be governed by the laws of the State of Washington without regard to the conflicts of law provisions of such laws. The parties hereto expressly recognize and agree that the implementation of this Section 24 is essential in light of the fact that Employer has its corporate headquarters and its principal executive offices within the State of Washington, and there is a critical need for uniformity in the interpretation and enforcement of the employment agreements between Employer and its key employees. Aside from any disputes that must be resolved by arbitration as provided for in Section 14, the Snohomish County Superior Court in Washington shall have exclusive jurisdiction of any lawsuit arising from or relating to Executive's employment with, or termination from, Employer, or arising from or relating to this Agreement. Executive consents to such venue and personal jurisdiction.

25. **Counterparts.** This Agreement may be executed in counterpart in different places, at different times and on different dates, and in that case all executed counterparts taken together collectively constitute a single binding agreement.

26. **Costs and Fees Related to Negotiation and Execution of Agreement.** Each Party shall be responsible for the payment of its own costs and expenses, including legal fees and expenses, in connection with the negotiation and execution of this Agreement. Neither Party will be liable for the payment of any commissions or compensation in the nature of finders' fees or brokers' fees, gratuity or other similar thing or amount in consideration of the other Party entering into this Agreement to any broker, agent or third party acting on behalf of the other Party.

27. **Entire Agreement**. This instrument contains the entire agreement of the parties with respect to the relationship between Executive and Employer and supersedes all prior agreements and understandings, and there are no other representations or agreements other than as stated in this Agreement related to the terms and conditions of Executive's employment. This Agreement may be changed only by an agreement in writing signed by the party against whom enforcement of any waiver, change, modification, extension or discharge is sought, and any such modification will be signed by an authorized representative of Employer.

IN WITNESS WHEREOF, the parties have duly signed and delivered this Agreement as of the day and year first above written.

EMPLOYER

By_____

Title: _____

EXECUTIVE

_____
Troy Wichterman

EXHIBIT A

DISCLOSURE OF OUTSIDE BOARD OF DIRECTORS AND TRUSTEE POSITIONS

Finance Committee Member – Mountaineer (nonprofit)

EXHIBIT B

LIST OF INVENTIONS

Exhibit 21.1

SUBSIDIARIES OF THE REGISTRANT

Subsidiaries	Place of Incorporation
SAVSU Technologies, Inc.	Delaware
Arctic Solutions, Inc. dba Custom Biogenic Systems	Delaware
SciSafe Holdings, Inc.	Delaware
Global Cooling, Inc.	Delaware
Sexton Biotechnologies, Inc.	Delaware
BioLife B.V.	Netherlands

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

BioLife Solutions, Inc.
Bothell, Washington

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-233912, 33-222433 and 333-208912) and Form S-8 (Nos. 333-222437, 333-205101, and 333-189551) of BioLife Solutions, Inc. of our reports dated March 31, 2022, relating to the consolidated financial statements, and the effectiveness of BioLife Solutions, Inc.'s internal control over financial reporting, which appear in this Form 10-K. Our report on the effectiveness of internal control over financial reporting expresses an adverse opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2021.

/s/ BDO USA, LLP

Seattle, Washington
March 31, 2022

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULE 13a-14(a) or RULE 13d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934

I, Michael Rice, certify that:

1. I have reviewed this annual report on Form 10-K of BioLife Solutions, 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 controls over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer 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: March 31, 2022

/s/ Michael Rice
Michael Rice

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULE 13a-14(a) or RULE 13d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934

I, Troy Wichterman, certify that:

1. I have reviewed this annual report on Form 10-K of BioLife Solutions, 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 controls over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

5. The registrant's other certifying officer 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: March 31, 2022

/s/ Troy Wichterman
Troy Wichterman

Exhibit 32.1

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 BioLife Solutions, Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Rice, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Dated: March 31, 2022

/s/ Michael Rice
Michael Rice
Chief Executive Officer and Chairman of the Board of Directors

Exhibit 32.2

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 BioLife Solutions, Inc. (the "Company") on Form 10-K for the fiscal year ended December 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Troy Wichterman, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Dated: March 31, 2022

/s/ Troy Wichterman
Troy Wichterman
Chief Financial Officer