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

FORM 10-Q

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

For the quarterly period ended **March 31, 2018**

OR

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

For the transition period from _____ to _____

Commission file number: 1-13165

CRYOLIFE, INC.

(Exact name of registrant as specified in its charter)

Florida	**59-2417093**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1655 Roberts Boulevard, NW, Kennesaw, Georgia	**30144**
(Address of principal executive offices)	(Zip Code)

(770) 419-3355
(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☒ No ☐

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

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	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 7(a)(2)(B) of the Securities Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	**Outstanding at April 26, 2018**
Common Stock, $.01 par value	36,632,356 Shares

Part I – FINANCIAL INFORMATION

Item 1. Financial Statements.

CRYOLIFE, INC. AND SUBSIDIARIES
SUMMARY CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	Three Months Ended March 31,	
	2018	**2017**
	(Unaudited)	
Revenues:		
Products	$ 43,598	$ 27,396
Preservation services	18,350	17,663
Total revenues	**61,948**	**45,059**
Cost of products and preservation services:		
Products	14,157	8,017
Preservation services	8,563	7,530
Total cost of products and preservation services	**22,720**	**15,547**
Gross margin	**39,228**	**29,512**
Operating expenses:		
General, administrative, and marketing	37,348	22,871
Research and development	5,370	4,093
Total operating expenses	**42,718**	**26,964**
Operating (loss) income	**(3,490)**	**2,548**
Interest expense	3,656	801
Interest income	(59)	(40)
Other (income) expense, net	(181)	43
(Loss) income before income taxes	**(6,906)**	**1,744**
Income tax benefit	(3,051)	(479)
Net (loss) income	**$ (3,855)**	**$ 2,223**
(Loss) income per common share:		
Basic	**$ (0.11)**	**$ 0.07**
Diluted	**$ (0.11)**	**$ 0.06**
Weighted-average common shares outstanding:		
Basic	36,146	32,439
Diluted	36,146	33,604
Net (loss) income	**$ (3,855)**	**$ 2,223**
Other comprehensive income:		
Foreign currency translation adjustments	7,139	236
Comprehensive income	**$ 3,284**	**$ 2,459**

See accompanying Notes to Summary Consolidated Financial Statements.

CRYOLIFE, INC. AND SUBSIDIARIES
SUMMARY CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS)

	March 31, 2018	December 31, 2017
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 26,584	$ 39,977
Restricted securities	808	776
Receivables, net	55,158	51,441
Inventories	44,586	46,684
Deferred preservation costs	34,996	35,671
Prepaid expenses and other	4,676	4,731
Total current assets	**166,808**	**179,280**
Property and equipment, net	34,408	33,579
Goodwill	193,145	188,305
Trademarks and other intangibles, net	178,425	178,637
Patents, net	741	793
Deferred income taxes	1,696	1,610
Other	7,952	7,489
Total assets	**$ 583,175**	**$ 589,693**
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 7,574	$ 9,767
Accrued compensation	7,087	10,208
Current portion of long-term debt	1,294	718
Taxes payable	1,070	4,020
Accrued expenses and other	15,863	18,227
Total current liabilities	**32,888**	**42,940**
Long-term debt	217,443	218,236
Deferred income taxes	30,186	30,431
Other	21,670	21,028
Total liabilities	**302,187**	**312,635**
Commitments and contingencies		
Shareholders' equity:		
Preferred stock	--	--
Common stock (issued shares of 38,116 in 2018 and 37,618 in 2017)	381	376
Additional paid-in capital	252,251	249,935
Retained earnings	33,951	37,609
Accumulated other comprehensive income	8,996	1,857
Treasury stock at cost (shares of 1,484 in 2018 and 1,387 in 2017)	(14,591)	(12,719)
Total shareholders' equity	**280,988**	**277,058**
Total liabilities and shareholders' equity	**$ 583,175**	**$ 589,693**

See accompanying Notes to Summary Consolidated Financial Statements.

CRYOLIFE, INC. AND SUBSIDIARIES
SUMMARY CONSOLIDATED STATEMENTS OF CASH FLOWS
(IN THOUSANDS)

	Three Months Ended March 31,	
	2018	**2017**
	(Unaudited)	
Net cash flows from operating activities:		
Net (loss) income	$ (3,855)	$ 2,223
Adjustments to reconcile net (loss) income to net cash from operating activities:		
Depreciation and amortization	4,376	2,168
Non-cash compensation	1,248	1,796
Deferred income taxes	(1,283)	201
Other non-cash adjustments to (loss) income	810	424
Changes in operating assets and liabilities:		
Receivables	(3,346)	1,139
Inventories and deferred preservation costs	2,954	(1,402)
Prepaid expenses and other assets	(215)	(1,053)
Accounts payable, accrued expenses, and other liabilities	(10,416)	(1,627)
Net cash flows (used in) provided by operating activities	**(9,727)**	**3,869**
Net cash flows from investing activities:		
Proceeds from sale of business component	--	740
Capital expenditures	(2,116)	(2,034)
Other	(3)	(31)
Net cash flows used in investing activities	**(2,119)**	**(1,325)**
Net cash flows from financing activities:		
Repayment of term loan	(707)	(469)
Proceeds from exercise of stock options and issuance of common stock	606	1,287
Redemption and repurchase of stock to cover tax withholdings	(1,512)	(1,300)
Other	(341)	(1)
Net cash flows used in financing activities	**(1,954)**	**(483)**
Effect of exchange rate changes on cash	439	193
(Decrease) increase in cash, cash equivalents, and restricted securities	**(13,361)**	**2,254**
Cash, cash equivalents, and restricted securities beginning of period	40,753	57,341
Cash, cash equivalents, and restricted securities end of period	**$ 27,392**	**$ 59,595**

See accompanying Notes to Summary Consolidated Financial Statements.

1. Basis of Presentation

Overview

The accompanying summary consolidated financial statements include the accounts of CryoLife, Inc. and its subsidiaries ("CryoLife," the "Company," "we," or "us"). All significant intercompany accounts and transactions have been eliminated in consolidation. The accompanying Summary Consolidated Balance Sheet as of December 31, 2017 has been derived from audited financial statements. The accompanying unaudited summary consolidated financial statements as of, and for the three months ended, March 31, 2018 and 2017 have been prepared in accordance with (i) accounting principles generally accepted in the U.S. for interim financial information and (ii) the instructions to Form 10-Q and Rule 10-01 of Regulation S-X of the U.S. Securities and Exchange Commission ("SEC"). Accordingly, such statements do not include all of the information and disclosures required by accounting principles generally accepted in the U.S. for a complete presentation of financial statements. In the opinion of management, all adjustments (including those of a normal, recurring nature) considered necessary for a fair presentation have been included. Operating results for the three months ended March 31, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. These summary consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in CryoLife's Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 9, 2018.

New Accounting Standards

Recently Adopted

As of January 1, 2018 we adopted Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* and the additional related ASUs ("ASC 606"). These standards provide guidance on recognizing revenue, including a five-step model to determine when revenue recognition is appropriate. ASC 606 provides that we recognize revenue to depict the transfer of control of promised goods or services to our customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. We used the modified retrospective method applied to those contracts which were not substantially completed as of January 1, 2018. As a result of the adoption, we recorded an immaterial adjustment to increase retained earnings to recognize the impact of contract assets under the new revenue recognition guidance. See Note 11 for further discussion of revenue recognition.

In August 2016 the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* ("ASU 2016-18"). ASU 2016-18 is intended to address diversity in practice that exists in the classification and presentation of changes in restricted cash on the statement of cash flows. The guidance requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. The guidance is effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. We adopted ASU 2016-18 during the three months ended March, 2018 and disclosure revisions have been made for the periods presented on the Summary Consolidated Statement of Cash Flows. See related comments on changes in restricted cash included in Note 3.

Not Yet Effective

In February 2016 the FASB amended its Accounting Standards Codification ("ASC") and created a new Topic 842, *Leases*. The final guidance requires lessees to recognize a right-of-use asset and a lease liability for all leases (with the exception of short-term leases) at the commencement date and recognize expenses on their income statements similar to the current Topic 840, *Leases*. It is effective for fiscal years and interim periods beginning after December 15, 2018, and early adoption is permitted. We are evaluating the impact the adoption of this standard will have on our financial position, results of operations, and cash flows.

2. Financial Instruments

The following is a summary of our financial instruments measured at fair value (in thousands):

March 31, 2018	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$ 373	$ --	$ --	$ 373
Restricted securities:				
Money market funds	808	--	--	808
Total assets	$ 1,181	$ --	$ --	$ 1,181

December 31, 2017	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$ 372	$ --	$ --	$ 372
Restricted securities:				
Money market funds	776	--	--	776
Total assets	$ 1,148	$ --	$ --	$ 1,148

We used prices quoted from our investment advisors to determine the Level 1 valuation of our investments in money market funds.

3. Cash Equivalents and Restricted Securities

The following is a summary of cash equivalents and restricted securities (in thousands):

March 31, 2018	Cost Basis	Unrealized Holding Gains	Estimated Market Value
Cash equivalents:			
Money market funds	$ 373	$ --	$ 373
Restricted securities:			
Money market funds	808	--	808

December 31, 2017	Cost Basis	Unrealized Holding Gains	Estimated Market Value
Cash equivalents:			
Money market funds	$ 372	$ --	$ 372
Restricted securities:			
Money market funds	776	--	776

As of March 31, 2018 and December 31, 2017 $808,000 and $776,000, respectively, of our money market funds were designated as short-term restricted securities due to a contractual commitment to hold the securities as pledged collateral relating primarily to international tax obligations.

There were no gross realized gains or losses on cash equivalents in the three months ended March 31, 2018 and 2017. As of March 31, 2018 $246,000 of our restricted securities had a maturity date within three months and $562,000 had a maturity date between three months and one year. As of December 31, 2017 $537,000 of our restricted securities had a maturity date within three months and $239,000 had a maturity date between three months and one year.

4. Acquisition of JOTEC

Overview

On December 1, 2017 we acquired JOTEC AG, a Swiss entity that we converted to JOTEC GmbH ("JOTEC") and its subsidiaries (the "JOTEC Acquisition"), for approximately $225.0 million, subject to certain adjustments. JOTEC is being operated as a wholly-owned subsidiary of CryoLife. In connection with the closing of the JOTEC Acquisition, CryoLife entered into a senior secured credit facility in an aggregate principal amount of $255.0 million, which includes a $225.0 million term loan and a $30.0 million revolving credit facility. See Note 8 for further discussion of the senior secured credit facility.

Accounting for the Transaction

Based on our preliminary analysis, the purchase price of the JOTEC Acquisition totaled approximately $221.9 million, including debt and cash acquired as determined on the date of closing, consisting of $168.8 million in cash and 2,682,754 shares of CryoLife common stock, with an estimated value of $53.1 million as determined on the date of the closing. Upon closing of the JOTEC Acquisition, $22.5 million was paid into an escrow account for any amounts payable for indemnification claims or other payment obligations. Our preliminary allocation of the $221.9 million purchase consideration was allocated to JOTEC's tangible and identifiable intangible assets acquired and liabilities assumed, based on their estimated fair values as of December 1, 2017. Goodwill was preliminarily recorded based on the amount by which the purchase price exceeded the fair value of the net assets acquired and is not deductible for tax purposes. Goodwill from this transaction has been allocated to our Medical Devices segment. The estimated allocation of assets acquired and liabilities assumed is based on the information available to us. If new information regarding these values is received that would result in a material adjustment to the values recorded, we will recognize the adjustment, which may include the recognition of additional expenses, impairments, or other allocation adjustments, in the period this determination is made. As of March 31, 2018 goodwill was increased by $1.4 million resulting from adjustments made during the measurement period.

The preliminary purchase price allocation as of December 1, 2017, reflecting the measurement period adjustments is as follows (in thousands):

	Opening Balance Sheet
Cash and cash equivalents	$ 4,130
Receivables	13,337
Inventories	17,392
Intangible assets	115,820
Property and equipment	13,048
Goodwill	110,525
Other assets	4,005
Debt acquired	(3,808)
Liabilities assumed	(52,580)
Total purchase price	$ 221,869

We incurred transaction and integration costs of $3.4 million for the three months ended March 31, 2018 related to the JOTEC Acquisition, which included, among other costs, expenses related to the termination of international distribution agreements, severance costs, and legal, professional, and consulting costs. These costs were expensed as incurred and were primarily recorded as general, administrative, and marketing expenses on our Summary Consolidated Statements of Operations and Comprehensive Income.

Pro Forma Results - Unaudited

JOTEC revenues were $4.1 million and the net loss was $1.5 million from the date of the JOTEC Acquisition through December 31, 2017. Our unaudited pro forma results of operations for the years ended December 31, 2017 and 2016, assuming the JOTEC Acquisition had occurred as of January 1, 2016, are presented for comparative purposes below. These amounts are based on available information from the results of operations of JOTEC prior to the acquisition date and are not necessarily indicative of what the results of operations would have been had the JOTEC Acquisition been completed on January 1, 2016. Differences between the preliminary and final purchase price allocation could have an impact on the pro forma financial information presented below and that impact could be material. This unaudited pro forma information does not project operating results post JOTEC Acquisition.

A summary of this unaudited pro forma information is as follows (in thousands, except per share amounts):

	Twelve Months Ended December 31,	
	2017	2016
Total revenues	$ 236,209	$ 224,896
Net loss	(736)	(1,966)
Pro forma loss per common share - basic	$ (0.02)	$ (0.06)
Pro forma loss per common share - diluted	$ (0.02)	$ (0.06)

Pro forma net loss was calculated using a normalized tax rate of approximately 38%.

5. Inventories and Deferred Preservation Costs

Inventories at March 31, 2018 and December 31, 2017 were comprised of the following (in thousands):

	March 31, 2018	December 31, 2017
Raw materials and supplies	$ 15,990	$ 16,328
Work-in-process	5,934	5,504
Finished goods	22,662	24,852
Total inventories	$ 44,586	$ 46,684

Deferred preservation costs at March 31, 2018 and December 31, 2017 were comprised of the following (in thousands):

	March 31, 2018	December 31, 2017
Cardiac tissues	$ 16,875	$ 16,988
Vascular tissues	18,121	18,683
Total deferred preservation costs	$ 34,996	$ 35,671

We maintain consignment inventory of our On-X Life Technologies Holdings, Inc. (“On-X”) heart valves at domestic hospital locations and On-X heart valves and JOTEC products at international hospital locations to facilitate usage. We retain title to this consignment inventory until the device is implanted, at which time we invoice the hospital. As of March 31, 2018 we had $9.6 million in consignment inventory, with approximately 61% in domestic locations and 39% in foreign locations. As of December 31, 2017 we had $9.3 million in consignment inventory with approximately 58% in domestic locations and 42% in foreign locations.

6. Goodwill and Other Intangible Assets

Indefinite Lived Intangible Assets

As of March 31, 2018 and December 31, 2017 the carrying values of our indefinite lived intangible assets were as follows (in thousands):

	March 31, 2018	December 31, 2017
Goodwill	$ 193,145	$ 188,305
In-process R&D	14,251	13,954
Procurement contracts and agreements	2,013	2,013
Trademarks	841	841

Based on our experience with similar agreements, we believe that our acquired procurement contracts and agreements have indefinite useful lives, as we expect to continue to renew these contracts for the foreseeable future. We believe that our trademarks have indefinite useful lives as we currently anticipate that our trademarks will contribute to our cash flows indefinitely.

As of March 31, 2018 and December 31, 2017 our entire goodwill balance was related to our Medical Devices segment.

	Medical Devices Segment
Balance as of December 31, 2017	$ 188,305
Additional goodwill from JOTEC Acquisition	1,359
Revaluation of goodwill denominated in foreign currency	3,481
Balance as of March 31, 2018	$ 193,145

Definite Lived Intangible Assets

As of March 31, 2018 and December 31, 2017 the gross carrying values, accumulated amortization, and approximate amortization period of our definite lived intangible assets were as follows (in thousands):

March 31, 2018	Gross Carrying Value	Accumulated Amortization	Amortization Period
Acquired technology	$ 141,213	$ 10,839	11 – 22 Years
Patents	3,556	2,815	17 Years
Distribution and manufacturing rights and know-how	4,059	1,892	11 – 15 Years
Customer lists and relationships	32,464	3,936	13 – 23 Years
Other	1,485	1,234	3 Years

December 31, 2017	Gross Carrying Value	Accumulated Amortization	Amortization Period
Acquired technology	$ 139,045	$ 8,685	11 – 22 Years
Patents	3,612	2,819	17 Years
Distribution and manufacturing rights and know-how	4,059	1,820	11 – 15 Years
Customer lists and relationships	32,419	3,552	13 – 23 Years
Other	1,439	1,076	3 Years

Amortization Expense

The following is a summary of amortization expense as recorded in general, administrative, and marketing expenses on our Summary Consolidated Statement of Operations and Comprehensive Income (in thousands):

	Three Months Ended March 31,	
	2018	2017
Amortization expense	$ 2,735	$ 1,142

As of March 31, 2018 scheduled amortization of intangible assets for the next five years is as follows (in thousands):

	Remainder of 2018	2019	2020	2021	2022	2023	Total
Amortization expense	$ 8,178	$ 10,603	$ 10,440	$ 10,419	$ 9,891	$ 9,575	$ 59,106

7. Income Taxes

Income Tax Expense

Our effective income tax rate was a benefit of 44% and 27% for the three months ended March 31, 2018 and 2017, respectively. Our income tax rate for the three months ended March 31, 2018 was favorably impacted by losses in high rate jurisdictions and excess tax benefit deductions related to stock compensation, partially offset by unfavorable impacts of non-deductible operating expenses and executive compensation expenses.

Our income tax rate for the three months ended March 31, 2017 was favorably affected by excess tax benefits, primarily related to the exercise of non-qualified stock options and the vesting of stock awards, which decreased income tax expense by approximately $1.1 million.

On December 22, 2017 the U.S. enacted tax reform legislation known as the H.R. 1, commonly referred to as the “Tax Cuts and Jobs Act” (the “Tax Act”), resulting in significant modifications to existing law. We have elected to follow the guidance in SEC Staff Accounting Bulletin 118 (“SAB 118”), which provides additional clarification regarding the application of ASC Topic 740 in situations where we do not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Act for the reporting period in which the Tax Act was enacted. SAB 118 provides for a measurement period beginning in the reporting period that includes the Tax Act’s enactment date and ending when we have obtained, prepared, and analyzed the information needed in order to complete the accounting requirements but the measurement period cannot extend beyond one year from the enactment date.

As of March 31, 2018 we have not completed our accounting for the income tax effects of all elements of the Tax Act. Where we could make reasonable estimates of the effects of elements for which our analysis is not yet complete, we recorded provisional adjustments. If we were not yet able to make reasonable estimates of the impact of certain elements, we have not recorded any adjustments related to those elements and have continued accounting for them in accordance with ASC Topic 740 based on the tax laws in effect before the Tax Act.

We recorded a one-time estimated deemed repatriation transition tax resulting in a nominal tax benefit to us based on the interplay of the transition tax and the foreign tax credit in 2017. The provisional amount is based on information currently available including information from our recent acquisition of JOTEC. We continue to gather and analyze information, including historical adjustments to earnings and profits of foreign subsidiaries, in order to complete the accounting for the effects of the estimated transition tax.

For our calendar year beginning in 2018, we are subject to several provisions of the Tax Act including computations under Global Intangible Low Taxed Income (“GILTI”), Foreign Derived Intangible Income (“FDII”), Base Erosion and Anti-Abuse Tax (“BEAT”), and Internal Revenue Code Section 163(j) interest limitation (“Interest Limitation”) rules. Based on preliminary information and analysis, we have not recorded a provisional estimate in our effective tax rate for the three months ended March 31, 2018 for these provisions because we currently estimate that these provisions of the Tax Act will not impact our 2018 effective rate. We will continue to refine our provisional estimates for our computations of the GILTI, FDII, BEAT, and Interest Limitation rules as we gather additional information.

As we complete our analysis of the Tax Act, further collect and analyze data, interpret any additional guidance issued by the U.S. Treasury Department, the Internal Revenue Service, and other standard-setting bodies, we may adjust our provisional amounts. Those adjustments may materially impact our provision for income taxes in the period in which the adjustments are made.

Deferred Income Taxes

We generate deferred tax assets primarily as a result of write-downs of inventory and deferred preservation costs; accruals for product and tissue processing liability claims; investment and asset impairments and due to operating losses. We acquired significant deferred tax assets, primarily net operating loss carryforwards, from our acquisitions of JOTEC in 2017, On-X in 2016, Hemosphere, Inc. in 2012, and Cardiogenesis Corporation in 2011. We recorded significant deferred tax liabilities in 2017 related to the intangible assets acquired in the JOTEC Acquisition.

As of March 31, 2018 we maintained a total of $2.5 million in valuation allowances against deferred tax assets, related to state net operating loss carryforwards, and had a net deferred tax liability of $28.5 million. As of December 31, 2017 we had a total of $2.5 million in valuation allowances against deferred tax assets, related to state net operating loss carryforwards, and a net deferred tax liability of $28.8 million.

8. Debt

Credit Agreement

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

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

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

The loans under the Term Loan Facility bear interest, at our option, at a floating annual rate equal to either, the base rate plus a margin of 3.00%, or LIBOR plus a margin of 4.00%. The loans under the Revolving Credit Facility bear interest, at our option, at a floating annual rate equal to either the base rate plus a margin of between 3.00% and 3.25%, depending on our consolidated leverage ratio, or LIBOR plus a margin of between 4.00% and 4.25%, depending on our consolidated leverage ratio. While a payment or bankruptcy event of default exists, we are obligated to pay a per annum default rate of interest of 2.00% in excess of the interest rate otherwise payable with respect to the overdue principal amount of any loans outstanding and overdue interest payments and other overdue fees and amounts. As of March 31, 2018 the aggregate interest rate was 6.30%. We are obligated to pay an unused commitment fee equal to 0.50% of the un-utilized portion of the revolving loans and are obligated to pay other customary fees for a credit facility of this size and type.

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

The Credit Agreement includes certain customary events of default that include, among other things, non-payment of principal, interest or fees, inaccuracy of representations and warranties, breach of covenants, cross-default to certain material indebtedness, bankruptcy and insolvency and change of control. Upon the occurrence and during the continuance of an event of default, the lenders may declare all outstanding principal and accrued but unpaid interest under the Credit Agreement immediately due and payable and may exercise the other rights and remedies provided under the Credit Agreement and related loan documents. As of March 31, 2018 and December 31, 2017 there were no outstanding balances on our revolving credit facility and the remaining availability was $30.0 million.

Government Supported Bank Debt

In June 2015 JOTEC GmbH obtained two loans of Sparkasse Zollernalb, which are government sponsored by the Kreditanstalt für Wiederaufbau Bank ("KFW"). Both KFW loans have a term of 9 years and the interest rates are 2.45% and 1.4%.

Loan Balances

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

	March 31, 2018	December 31, 2017
Term loan balance	$ 224,438	$ 225,000
2.45% Sparkasse Zollernalb (KFW Loan 1)	1,635	1,657
1.4% Sparkasse Zollernalb (KFW Loan 2)	2,292	2,312
Total loan balance	228,365	228,969
Less unamortized loan origination costs	(9,628)	(10,015)
Net borrowings	218,737	218,954
Less short-term loan balance	(1,294)	(718)
Long-term loan balance	$ 217,443	$ 218,236

Interest Expense

Interest expense was $3.7 million and $801,000 for the three months ended March 31, 2018 and 2017, respectively. Interest expense for three months ended March 31, 2018 and 2017 included interest on debt and uncertain tax positions. The increase in interest expense in 2018 was due to a full quarter of interest on borrowings under the $225.0 million secured term loan facility we entered into in December 2017 to finance, in part, the JOTEC Acquisition.

9. Commitments and Contingencies

Liability Claims

Our estimated unreported loss liability was $1.8 million as of both March 31, 2018 and December 31, 2017. As of March 31, 2018 and December 31, 2017, the related recoverable insurance amounts were $719,000 and $692,000, respectively. We accrue our estimate of unreported product and tissue processing liability claims as a component of other long-term liabilities and record the related recoverable insurance amount as a component of other long-term assets, as appropriate. Further analysis indicated that the estimated liability as of March 31, 2018 could have been as high as $3.0 million, after including a reasonable margin for statistical fluctuations calculated based on actuarial simulation techniques.

Employment Agreements

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

PerClot Technology

On September 28, 2010 we entered into a worldwide distribution agreement (the “Distribution Agreement”) and a license and manufacturing agreement (the “License Agreement”) with Starch Medical, Inc. (“SMI”), for PerClot, a polysaccharide hemostatic agent used in surgery. The Distribution Agreement has a term of 15 years, but can be terminated for any reason before the expiration date by us by providing 180 days’ notice. The Distribution Agreement also contains minimum purchase requirements that expire upon the termination of the Distribution Agreement or following U.S. regulatory approval for PerClot. Separate and apart from the terms of the Distribution Agreement, pursuant to the License Agreement, as amended by a September 2, 2011 technology transfer agreement, we can manufacture and sell PerClot, assuming appropriate regulatory approvals, in the U.S. and certain other jurisdictions and may be required to pay royalties to SMI at certain rates on net revenues of products.

We may make contingent payments to SMI of up to $1.0 million if certain U.S. regulatory and certain commercial milestones are achieved.

We are conducting our pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S. We resumed enrollment into the PerClot U.S. clinical trial in the fourth quarter of 2016, and assuming enrollment proceeds as anticipated, we could receive Premarket Approval (“PMA”) from the U.S. Food and Drug Administration (“FDA”) between the second half of 2019 and the first half of 2020.

As of March 31, 2018 we had $1.5 million in prepaid royalties, $2.5 million in net intangible assets, and $1.4 million in property and equipment, net on our Summary Consolidated Balance Sheets related to the PerClot product line. If we do not ultimately pursue or receive FDA approval to commercialize PerClot in the U.S., these assets could be materially impaired in future periods.

10. Shareholders' Equity

Common Shares Issued

In December 2017 we issued 2,682,754 shares of CryoLife common stock, as part of the consideration for the acquisition of JOTEC. The stock had a value of $53.1 million as determined on the date of the closing. See Note 4 for further discussion of the JOTEC Acquisition.

11. Revenue Recognition

Contracts with Customers

We have adopted ASC 606, *Revenue from Contracts with Customers* effective January 1, 2018 using the modified retrospective method applied to those contracts which were not substantially completed as of January 1, 2018. These standards provide guidance on recognizing revenue, including a five-step model to determine when revenue recognition is appropriate. The standard requires that an entity recognize revenue to depict the transfer of control of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Revenues for 2018 are reported under ASC 606, while prior period amounts are not adjusted and continue to be reported under ASC 605, *Revenue Recognition*.

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

Revenues for products, including: BioGlue® Surgical Adhesive, On-X products, JOTEC products, PerClot®, PhotoFix ™ and other medical devices, are typically recognized at the time the product is shipped, at which time the title passes to the customer, and there are no further performance obligations. Revenues from consignment are recognized when the medical device is implanted. We recognize revenues for preservation services when services are completed and tissue is shipped to the customer.

Our E-xtra DESIGN ENGINEERING products are specifically designed to meet specifications of a particular patient, and therefore do not create an asset with an alternative use. We evaluate open orders for these products each reporting period, and when material we recognize the revenue and related contract asset based on the amount of payment we believe we are entitled to at that time.

In certain circumstances, CardioGenesis cardiac laser consoles are loaned to a customer for a trial period. We have determined a portion of the revenue for the handpieces purchased during these trial periods constitute revenue associated with the use of the laser console, but these are immaterial to reported revenues.

Sources of Revenue

We have identified the following revenues disaggregated by revenue source:

1. Domestic Hospitals – direct sales of products and preservation services.
2. International Hospitals – direct sales of products and preservation services.

3. CardioGenesis Cardiac Laser Console Trials and Sales – CardioGenesis cardiac trialed laser consoles are delivered under separate agreements.
4. International Distributors – generally these contracts specify a geographic area that the distributor will service, terms and conditions of the relationship, and purchase targets for the next calendar year.

As of March 31, 2018 and 2017 the sources of revenue were as follows (in thousands):

	Three Months Ended March 31,	
	2018	**2017**
	(Unaudited)	
Domestic hospitals	$ 33,543	$ 31,949
International hospitals	13,803	4,415
CardioGenesis	1,345	1,585
International distributors	13,257	7,110
Total sources of revenue	**$ 61,948**	**$ 45,059**

Also see Segment and Geographic disaggregation information in Note 14 below.

Contract Balances

We may generate contract assets during the pre-delivery design and manufacturing stage of E-xtra DESIGN ENGINEERING product order fulfillment. We assess the balance related to any arrangements in process and determine if the enforceable right to payment creates a material contract asset requiring disclosure.

We also incur contract obligations on general customer purchase orders that have been accepted but unfulfilled. Due to the short duration of time between order acceptance and delivery of the related product or service, we have determined that the balance related to these contract obligations is generally immaterial at any point in time. We monitor the value of orders accepted but unfulfilled at the close of each reporting period to determine if disclosure is appropriate.

Warranty

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

Significant Judgments in the Application of the Guidance in ASC 606

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

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

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

Commissions and Contract Costs

Sales commissions are earned upon completion of each performance obligation, and therefore are expensed when incurred. These costs are included in general, administrative, and marketing expenses in the Summary Statement of Operations and

Comprehensive Income. We generally do not incur incremental charges associated with securing agreements with customers which would require capitalization and recovery over the life of the agreement.

Practical Expedients

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

Shipping and Handling Charges

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

Taxes Collected from Customers

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

Effective Date and Transition Disclosures

Adoption of the new standards related to revenue recognition did not have a material impact on our consolidated financial statements, and is not expected to have a material impact in future periods. During our evaluation of the impact of adopting the new revenue standard, which included a detailed review of performance obligations for all material revenue streams, we identified two noteworthy items:

- Certain distributor agreements have historically included inventory buyback provisions under defined change of business conditions. Transactions under these terms would not qualify as a completed revenue transaction until sale through to the end customer, resulting in a revenue deferral until the proper criteria were satisfied. These agreements were modified or replaced to remove the buyback provisions effective on or before January 1, 2018 which eliminated any retrospective adjustment requirements.

- Certain JOTEC products discussed above are manufactured to order, have no alternative use, and contain an enforceable right to receive payment for the performance completed. These factors qualify the transactions for revenue recognition over time. Upon adoption of the new standard, we evaluated all appropriate contracts in progress to determine the value of unbilled revenues representing outstanding contract assets. We recorded an immaterial cumulative effect adjustment to recognize the impact of contract assets.

12. Stock Compensation

Overview

We have stock option and stock incentive plans for employees and non-employee Directors that provide for grants of restricted stock awards (“RSAs”), performance stock awards (“PSAs”), restricted stock units (“RSUs”), performance stock units (“PSUs”), and options to purchase shares of our common stock at exercise prices generally equal to the fair value of such stock at the dates of grant. We also maintain a shareholder-approved Employee Stock Purchase Plan (the “ESPP”) for the benefit of our employees. The ESPP allows eligible employees to purchase common stock on a regular basis at the lower of 85% of the market price at the beginning or end of each offering period.

Equity Grants

During the three months ended March 31, 2018 the Compensation Committee of our Board of Directors (the “Committee”) authorized awards from approved stock incentive plans of RSUs to certain employees and RSAs and PSUs to certain Company officers, which, assuming that performance under the PSUs were to be achieved at target levels, together totaled 273,000 shares and had an aggregate grant date market value of $5.9 million. The PSUs granted in 2018 represent the right to receive from 60% to 150% of the target number of shares of common stock. The performance component of PSU awards granted in 2018 is based on attaining specified levels of adjusted EBITDA, as defined in the PSU grant documents, for the 2018 calendar year. We currently believe that achievement of the performance component is probable, and we reevaluate this likelihood on a quarterly basis.

During the three months ended March 31, 2017 the Committee authorized awards from approved stock incentive plans of RSUs to certain employees and RSAs and PSUs to certain Company officers, which, including PSUs at target levels, together totaled 239,000 shares of common stock and had an aggregate grant date market value of $4.0 million. The PSUs granted in 2017 represented the right to receive from 60% to 150% of the target number of shares of common stock. The performance component of PSU awards granted in 2017 was based on attaining specified levels of adjusted EBITDA, adjusted inventory levels, and trade accounts receivable days' sales outstanding, each as defined in the PSU grant documents, for the 2017 calendar year. The PSUs granted in 2017 earned 90% of the target number of shares.

The Committee authorized, from approved stock incentive plans, grants of stock options to purchase a total of 219,000 and 260,000 shares to certain Company officers during the three months ended March 31, 2018 and 2017, respectively. The exercise prices of the options were equal to the closing stock prices on their respective grant dates.

Employees purchased common stock totaling 36,000 and 45,000 shares in the three months ended March 31, 2018 and 2017, respectively, through the ESPP.

Stock Compensation Expense

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

	Three Months Ended March 31, 2018		Three Months Ended March 31, 2017	
	Stock Options	**ESPP Options**	**Stock Options**	**ESPP Options**
Expected life of options	5.0 Years	0.5 Years	4.8 Years	0.5 Years
Expected stock price volatility	0.40	0.35	0.40	0.35
Risk-free interest rate	2.64%	1.53%	1.87%	0.62%

The following table summarizes total stock compensation expenses prior to the capitalization of amounts into deferred preservation and inventory costs (in thousands):

	Three Months Ended March 31,	
	2018	**2017**
RSA, PSA, RSU, and PSU expense	$ 948	$ 1,346
Stock option and ESPP option expense	406	518
Total stock compensation expense	$ 1,354	$ 1,864

Included in the total stock compensation expense, as applicable in each period, were expenses related to RSAs, RSUs, PSUs, and stock options issued in each respective year, as well as those issued in prior periods that continue to vest during the period, and compensation related to the ESPP. The total stock compensation expense also included expenses related to PSAs during the three months ended March 31, 2017. These amounts were recorded as stock compensation expense and were subject to our normal allocation of expenses to inventory costs and deferred preservation costs. We capitalized $106,000 and $68,000 in the three months ended March 31, 2018 and 2017, respectively, of the stock compensation expense into our inventory costs and deferred preservation costs.

As of March 31, 2018 we had total unrecognized compensation costs of $10.4 million related to RSUs, RSAs, and PSUs and $3.1 million related to unvested stock options. As of March 31, 2018 this expense is expected to be recognized over a weighted-average period of 2.2 years for RSUs, 2.1 years for stock options, 1.5 years for RSAs, and 1.5 years for PSUs.

13. (Loss) Income Per Common Share

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

	Three Months Ended March 31,	
Basic (loss) income per common share	**2018**	**2017**
Net (loss) income	$ (3,855)	$ 2,223
Net loss (income) allocated to participating securities	38	(44)
Net (loss) income allocated to common shareholders	$ (3,817)	$ 2,179
Basic weighted-average common shares outstanding	36,146	32,439
Basic (loss) income per common share	$ (0.11)	$ 0.07

	Three Months Ended March 31,	
Diluted (loss) income per common share	**2018**	**2017**
Net (loss) income	$ (3,855)	$ 2,223
Net loss (income) allocated to participating securities	38	(43)
Net (loss) income allocated to common shareholders	$ (3,817)	$ 2,180
Basic weighted-average common shares outstanding	36,146	32,439
Effect of dilutive stock options and awards	--	1,165
Diluted weighted-average common shares outstanding	36,146	33,604
Diluted (loss) income per common share	$ (0.11)	$ 0.06

We excluded stock options from the calculation of diluted weighted-average common shares outstanding if the per share value, including the sum of (i) the exercise price of the options and (ii) the amount of the compensation cost attributed to future services and not yet recognized, was greater than the average market price of the shares because the inclusion of these stock options would be antidilutive to (loss) income per common share. Accordingly, as of March 31, 2018 all stock options and awards were excluded from the calculation of diluted weighted-average common shares outstanding as these would be anti-dilutive due to the net loss. For the three months ended March 31, 2017 stock options to purchase a weighted-average 116,000 shares were antidilutive and excluded from the calculation of diluted weighted-average common shares outstanding.

14. Segment Information

We have two reportable segments organized according to our products and services: Medical Devices and Preservation Services. The Medical Devices segment includes external revenues from product sales of BioGlue; BioFoam® Surgical Matrix; JOTEC products, since the acquisition of JOTEC; On-X products; CardioGenesis cardiac laser therapy; PerClot; and PhotoFix. The Preservation Services segment includes external services revenues from the preservation of cardiac and vascular tissues. There are no intersegment revenues.

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

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

	Three Months Ended March 31,	
	2018	2017
Revenues:		
Medical devices	$ 43,598	$ 27,396
Preservation services	18,350	17,663
Total revenues	61,948	45,059
Cost of products and preservation services:		
Medical devices	14,157	8,017
Preservation services	8,563	7,530
Total cost of products and preservation services	22,720	15,547
Gross margin:		
Medical devices	29,441	19,379
Preservation services	9,787	10,133
Total gross margin	$ 39,228	$ 29,512

The following table summarizes net revenues by product and service (in thousands):

	Three Months Ended March 31,	
	2018	2017
Products:		
BioGlue and BioFoam	$ 15,970	$ 15,681
JOTEC	14,460	--
On-X	10,309	8,860
CardioGenesis cardiac laser therapy	1,346	1,585
PerClot	972	819
PhotoFix	541	451
Total products	43,598	27,396
Preservation services:		
Cardiac tissue	8,103	7,502
Vascular tissue	10,247	10,161
Total preservation services	18,350	17,663
Total revenues	$ 61,948	$ 45,059

Forward-Looking Statements

This Form 10-Q includes “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”). Forward-looking statements give our expectations or forecasts of future events as of the date of this Form 10-Q. The words “could,” “may,” “might,” “will,” “would,” “shall,” “should,” “pro forma,” “potential,” “pending,” “intend,” “believe,” “expect,” “anticipate,” “estimate,” “plan,” “future,” “assume,” and other similar expressions generally identify forward-looking statements. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Readers are cautioned not to place undue reliance on these forward-looking statements, which are made as of the date of this Form 10-Q.

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

- Our belief that the acquisition of JOTEC will create a company with a broad and highly competitive product portfolio focused on aortic surgery, and will position us to compete strongly in the important and growing endovascular surgical markets;
- Our plans, costs, and expected timeline regarding regulatory approval for PerClot in the U.S. and additional international markets and the distribution of PerClot in those markets after the requisite regulatory approvals are obtained; our expectation that we will terminate our minimum purchase requirements after regulatory approval of PerClot; and assuming enrollment proceeds as anticipated, our belief that we could receive Premarket Approval from the FDA between the second half of 2019 and the first half of 2020;
- Our belief that our distributors may delay or reduce purchases of products in U.S. Dollars depending on the relative price of goods in their local currencies;
- Our belief regarding the international growth opportunity that would be provided by obtaining regulatory approval for BioGlue in China;
- Our belief that the growth rate for JOTEC products will accelerate in future years due to the selling efforts of a larger, realigned international sales force as they undertake additional training and become more experienced with selling JOTEC products and due to technologically and clinically advanced benefits of JOTEC products;
- Our belief that revenues for preservation services, particularly revenues for certain high-demand cardiac tissues, can vary from quarter to quarter and year to year due to a variety of factors including: quantity and type of incoming tissues, yields of tissue through the preservation process, timing of receipt of donor information, timing of the release of tissues to an implantable status, demand for certain tissue types due to the number and type of procedures being performed, and pressures from competing products or services;
- Our beliefs regarding the seasonal nature of the demand for some of our products and services and the reasons for such seasonality, if any;
- Our belief that our cash from operations and existing cash and cash equivalents will enable us to meet our current operational liquidity needs for at least the next twelve months, our expectations regarding future cash requirements, and the impact that our cash requirements might have on our cash flows for the next twelve months;
- Our expectation regarding the impact on cash flows of undertaking significant business development activities and the potential need to obtain additional borrowing capacity or financing;
- Our belief that the utilization of net operating loss carryforwards from our acquisitions of Hemosphere, Inc. and Cardiogenesis Corporation will reduce required cash payments for federal income taxes by approximately $359,000 for the 2018 tax year and our belief that the acquired net operating losses from the acquisition of JOTEC will not have a material impact on foreign income taxes for the 2018 tax year; and
- Other statements regarding future plans and strategies, anticipated events, or trends.

These and other forward-looking statements reflect the views of management at the time such statements are made based on certain assumptions and analyses made by us in light of our experience and our perception of historical trends, current conditions, and expected future developments as well as other factors we believe are appropriate in the circumstances and are subject to a number of risks, uncertainties, estimates, and assumptions. Whether actual results and developments will conform with our expectations and predictions is subject to a number of risks and uncertainties which could cause actual results to differ materially from our expectations, including, without limitation, in addition to those specified in the text surrounding such statements, the risks described under “Risks and Uncertainties” in this Form 10-Q and elsewhere throughout this report and our Annual Report on Form 10-K for the year ended December 31, 2017, including, without limitation, the risk factors specifically set forth below under Part II, Item 1A, as well as in Part I, Item 1A of our Form 10-K for the year ended December 31, 2017, and other factors, many of

which are beyond our control. Consequently, all of the forward-looking statements made in this Form 10-Q are qualified by these cautionary statements, and there can be no assurance that the actual results or developments anticipated by us will be realized, or even if substantially realized, that they will have the expected consequences to, or effects on, us or our business or operations. We assume no obligation, and expressly disclaim any duty to update publicly any such forward-looking statements, whether as a result of new information, future events, or otherwise.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Overview

CryoLife, Inc. ("CryoLife," the "Company," "we," or "us"), incorporated in 1984 in Florida, is a leader in the manufacturing, processing, and distribution of medical devices and implantable human tissues used in cardiac and vascular surgical procedures focused on aortic repair. Our medical devices and processed tissues primarily include four product families: BioGlue® Surgical Adhesive ("BioGlue"); On-X Life Technologies Holdings, Inc. ("On-X") mechanical heart valves and surgical products; JOTEC GmbH ("JOTEC") endovascular and surgical products; and cardiac and vascular human tissues including the CryoValve® SG pulmonary heart valve ("CryoValve SGPV") and the CryoPatch® SG pulmonary cardiac patch ("CryoPatch SG"), both of which are processed using our proprietary SynerGraft® technology. Additional products include CardioGenesis cardiac laser therapy, PerClot® and PhotoFix™.

We reported quarterly revenues of $61.9 million in the three months ended March 31, 2018, a 37% increase from the quarter ended March 31, 2017. This increase was primarily due to revenues from JOTEC GmbH ("JOTEC"), a Hechingen, Germany-based endovascular, and surgical products company, which we acquired in December 2017. See the "Results of Operations" section below for additional analysis of the three months ended March 31, 2018.

Critical Accounting Policies

A summary of our significant accounting policies is included in Note 1 of the "Notes to Consolidated Financial Statements," contained in our Form 10-K for the year ended December 31, 2017. Management believes that the consistent application of these policies enables us to provide users of the financial statements with useful and reliable information about our operating results and financial condition. The summary consolidated financial statements are prepared in accordance with accounting principles generally accepted in the U.S., which require us to make estimates and assumptions. We did not experience any significant changes during the quarter ended March 31, 2018 in any of our Critical Accounting Policies from those contained in our Form 10-K for the year ended December 31, 2017.

New Accounting Pronouncements

See Note 1 of Notes to Summary Consolidated Financial Statements for further discussion of new accounting standards that have been adopted or are being evaluated for future adoption.

Results of Operations
(Tables in thousands)

Revenues

	Revenues for the Three Months Ended March 31,		Revenues as a Percentage of Total Revenues for the Three Months Ended March 31,	
	2018	**2017**	**2018**	**2017**
Products:				
BioGlue and BioFoam	$ 15,970	$ 15,681	26%	35%
JOTEC	14,460	--	23%	--
On-X	10,309	8,860	17%	20%
CardioGenesis cardiac laser therapy	1,346	1,585	2%	3%
PerClot	972	819	1%	2%
PhotoFix	541	451	1%	1%
Total products	43,598	27,396	70%	61%
Preservation services:				
Cardiac tissue	8,103	7,502	13%	17%
Vascular tissue	10,247	10,161	17%	22%
Total preservation services	18,350	17,663	30%	39%
Total	$ 61,948	$ 45,059	100%	100%

Revenues increased 37% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. The increase in revenues for the three months ended March 31, 2018 was primarily due to revenues from JOTEC, which we acquired in December 2017, in addition to increases in On-X and BioGlue product revenues and preservation services revenues. A detailed discussion of the changes in product revenues and preservation services revenues for the three months ended March 31, 2018 is presented below.

Products

Revenues from products increased 59% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. The increase was primarily due to the JOTEC Acquisition during the fourth quarter of 2017 and increased revenues from the sale of On-X and BioGlue products. A detailed discussion of the changes in product revenues for BioGlue and BioFoam; JOTEC; On-X; CardioGenesis cardiac laser therapy; PerClot; and PhotoFix is presented below.

Sales of certain products through our direct sales force and distributors across Europe, the U.K., and various other countries are denominated in a variety of currencies, with a concentration in Euros but also including British Pounds, Polish Zloty, Swiss Francs, Brazilian Real, and Canadian Dollars which are subject to exchange rate fluctuations. Between March 31, 2017 and March 31, 2018, the U.S. Dollar generally weakened in comparison to these currencies, resulting in revenue increases when these foreign currency denominated transactions were translated into U.S. Dollars. Future changes in these exchange rates could have a material, adverse effect on our revenues denominated in these currencies. Additionally, our sales to many distributors around the world are denominated in U.S. Dollars and, although these sales are not directly impacted by currency exchange rates, we believe that some of our distributors may delay or reduce purchases of products in U.S. Dollars depending on the relative price of these goods in their local currencies.

BioGlue and BioFoam

Revenues from the sale of surgical sealants, consisting of BioGlue and BioFoam, increased 2% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. This increase was primarily due to the favorable effect of foreign currency exchange, which increased revenues by 2%, and an increase in average selling prices, which increased sales by 1%, offset by a 6% decrease in the volume of milliliters sold, which decreased revenues by 1%.

The decrease in sales volume of surgical sealants for the three months ended March 31, 2018 was primarily due to a decrease in revenues in certain markets in Asia and Latin America, primarily due to changes in distributor buying patterns, partially offset by increases in sales in U.S. and the European Economic Area, the Middle East, and Africa (collectively, “EMEA”) markets.

We are currently seeking regulatory approval for BioGlue in China, and if this effort is successful, management believes this will provide an additional international growth opportunity for BioGlue in future years.

Domestic revenues from BioGlue accounted for 57% of total BioGlue revenues for the three months ended March 31, 2018 and 55% of total BioGlue revenues for the three months ended March 31, 2017. BioFoam revenues accounted for less than 1% of surgical sealant revenues for the three months ended March 31, 2018 and 2017. BioFoam is approved for sale in certain international markets.

JOTEC

On December 1, 2017 CryoLife acquired JOTEC and its subsidiaries (the "JOTEC Acquisition"), a German-based, privately held developer of technologically differentiated endovascular stent grafts, and cardiac and vascular surgical grafts, focused on aortic repair. JOTEC products are distributed in a variety of international markets.

JOTEC post-acquisition revenues for the three months ended March 31, 2018 increased 20% when compared to JOTEC pre-acquisition revenues for the three months ended March 31, 2017. Excluding the effects for foreign exchange, the revenues increased 5% primarily due to an increase in unit shipments.

We believe that the JOTEC products will achieve double-digit growth over the next five years due to the selling efforts of our larger, realigned international sales force as they undertake additional training and become more experienced in selling JOTEC products. We expect this larger sales force will take market share and drive market expansion, including opening additional hospitals to using JOTEC products, based on the technologically and clinically advanced benefits of JOTEC products.

On-X

The On-X catalogue of products includes the On-X prosthetic aortic and mitral heart valves and the On-X ascending aortic prosthesis ("AAP"). On-X product revenues also include revenues from the distribution of CarbonAid CO_2 diffusion catheters and from the sale of Chord-X ePTFE sutures for mitral chordal replacement. On-X products are distributed in both domestic and international markets. On-X also generates revenue from pyrolytic carbon coating products produced for other medical device manufacturers ("OEM").

On-X product revenues, excluding OEM, increased 17% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. This increase was primarily due to a 19% increase in volume of units sold, which increased revenues by 18% and the favorable effect of foreign currency exchange which increased revenues 1%, partially offset by a decrease in average sales prices, which decreased revenues by 2%.

The volume increase of On-X products was primarily due an increase in volume in the U.S, an increase in volume in Canada after establishing a direct market in July 2017, and an increase in volume in EMEA, partially offset by a decrease in volume with certain Asia Pacific and Latin American distributors as a result of changes in distributor buying patterns.

CardioGenesis Cardiac Laser Therapy

Revenues from our CardioGenesis cardiac laser therapy product line consist primarily of sales of handpieces and, in certain periods, the sale of laser consoles. Revenues from cardiac laser therapy decreased 15% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. This decrease was primarily due to a 14% decrease in unit shipments of handpieces.

The major contributing factors to the decrease in handpiece revenues included the de-emphasis on this product line since 2016, the emphasis on On-X and JOTEC product lines that were recently acquired, and the corresponding realignment of our sales force. Cardiac laser therapy is generally used adjunctively with cardiac bypass surgery by a limited number of physicians who perform these procedures. Revenues from laser console sales are difficult to predict and can vary significantly from quarter to quarter.

PerClot

Revenues from the sale of PerClot increased 19% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. This increase was primarily due to a 20% increase in the volume of grams sold, which increased revenues by 18%, and a favorable effect of foreign currency exchange, which increased revenues by 7%, partially offset by a decrease in average sales prices, which decreased revenues by 6%.

The volume increase for the three months ended March 31, 2018 was primarily due to an increase in sales of PerClot in EMEA. The decrease in average selling prices for the three months ended March 31, 2018 was primarily due to price reductions to certain customers in Europe as a result of pricing pressures from competitive products.

We are conducting our pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S. We resumed enrollment into the PerClot U.S. clinical trial in the fourth quarter of 2016, and assuming enrollment proceeds as anticipated, we could receive Premarket Approval ("PMA") from the U.S. Food and Drug Administration ("FDA") between the second half of 2019 and the first half of 2020.

PhotoFix

PhotoFix revenues increased 20% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. This increase was primarily due to an increase in units sold, which increased revenues by 20%, primarily due to an increase in the number of implanting physicians when compared to the prior year period, as this product continues to penetrate domestic markets.

Preservation Services

Revenues from preservation services increased 4% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017.

We continue to evaluate modifications to our tissue processing procedures in an effort to improve tissue processing throughput, reduce costs, and maintain quality across our tissue processing business. Preservation services revenues, particularly revenues for certain high-demand cardiac tissues, can vary from quarter to quarter and year to year due to a variety of factors including: quantity and type of incoming tissues, yields of tissue through the preservation process, timing of receipt of donor information, timing of the release of tissues to an implantable status; demand for certain tissue types due to the number and type of procedures being performed; and pressures from competing products or services. See further discussion below of specific items affecting cardiac and vascular preservation services revenues for the three months ended March 31, 2018.

Cardiac Preservation Services

Revenues from cardiac preservation services, consisting of revenues from the distribution of heart valves and cardiac patch tissues, increased 8% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. This increase was primarily due to a 17% increase in unit shipments of cardiac tissues, which increased revenues by 9%, partially offset by a decrease in average service fees, which decreased revenues by 1%.

The increase in cardiac volume for the three months ended March 31, 2018 was primarily due to an increase in the volume of cardiac patch shipments and to a lesser extent cardiac valve shipments. The increase in unit shipments did not result in a similar increase in revenues since the increase in unit shipments was primarily cardiac patches which have lower average service fees than cardiac valves.

Our cardiac valves are primarily used in cardiac replacement and reconstruction surgeries, including the Ross procedure, for patients with endocarditis or congenital heart defects. Our cardiac tissues are primarily distributed in domestic markets.

Vascular Preservation Services

Revenues from vascular preservation services increased 1% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. This increase was primarily due to a 4% increase in vascular tissue shipments, which increased revenues by 4%, partially offset by a decrease in average service fees, which decreased revenues by 3%.

The increase in vascular volume for the three months ended March 31, 2018 was primarily due to increases in saphenous vein and femoral artery shipments. The decrease in average service fees for the three months ended March 31, 2018 was primarily driven by fee differences due to physical characteristics of vascular tissues and the routine negotiation of pricing contracts with certain customers.

The majority of our vascular preservation services revenues are related to shipments of saphenous veins, which are mainly used in peripheral vascular reconstruction surgeries to avoid limb amputations. These tissues are primarily distributed in domestic markets.

Cost of Products and Preservation Services

Cost of Products

	Three Months Ended March 31,	
	2018	2017
Cost of products	$ 14,157	$ 8,017

Cost of products increased 77% for the three months ended March 31, 2018 as compared to the three months ended March 31, 2017. Cost of products for the three months ended March 31, 2018 and 2017 included costs related to BioGlue, BioFoam, On-X, CardioGenesis cardiac laser therapy, PerClot, and PhotoFix. Cost of products for the three months ended March 31, 2018 also included costs related to JOTEC.

Cost of products for the three months ended March 31, 2018 includes $1.5 million in inventory basis step-up expense, primarily related to the JOTEC inventory fair value adjustment recorded in purchase accounting. Cost of products for the three months ended March 31, 2017 included $2.0 million in acquisition inventory basis step-up expense, primarily related to the On-X inventory fair value adjustment for distributor buybacks.

The increase in cost of products for the three months ended March 31, 2018 was primarily due to an increase in revenues related to JOTEC, which we acquired in December 2017, partially offset by a reduction of acquisition inventory basis step-up expense, as compared to the prior year period as discussed above.

Cost of Preservation Services

	Three Months Ended March 31,	
	2018	2017
Cost of preservation services	$ 8,563	$ 7,530

Cost of preservation services increased 14% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. Cost of preservation services includes costs for cardiac and vascular tissue preservation services.

Cost of preservation services increased in the three months ended March 31, 2018 primarily due to a 9% increase in the unit shipment of tissues and a 5% increase in the per unit cost of processing tissues resulting from the factors discussed above.

Gross Margin

	Three Months Ended March 31,	
	2018	2017
Gross margin	$ 39,228	$ 29,512
Gross margin as a percentage of total revenues	63%	65%

Gross margin increased 33% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017, primarily due to increases in On-X and JOTEC product revenues. Gross margin as a percentage of total revenues decreased in the three months ended March 31, 2018, as compared to the three months ended March 31, 2017 primarily due to reduced tissue processing margins and lower margins on JOTEC revenues (after the impact of purchase accounting adjustments) in comparison to our other product revenues, partially offset by higher On-X revenues, which have slightly higher margins than our other product revenues, and the reduction of inventory basis step-up expenses in the three months ended March 31, 2018, as compared to the prior year period.

Operating Expenses

General, Administrative, and Marketing Expenses

	Three Months Ended March 31,	
	2018	**2017**
General, administrative, and marketing expenses	$ 37,348	$ 22,871
General, administrative, and marketing expenses as a percentage of total revenues	60%	51%

General, administrative, and marketing expenses increased 63% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. The increase in general, administrative, and marketing expenses for the three months ended March 31, 2018 was primarily due to the addition of JOTEC's general, administrative, and marketing expenses, as well as an increase in business development and integration expenses, and higher expenses to support our increasing revenue base and employee headcount. General, administrative, and marketing expenses for the three months ended March 31, 2018 included $3.8 million in business development and integration expenses, primarily related to the JOTEC Acquisition, as compared to $288,000 for the three months ended March 31, 2017.

Research and Development Expenses

	Three Months Ended March 31,	
	2018	**2017**
Research and development expenses	$ 5,370	$ 4,093
Research and development expenses as a percentage of total revenues	9%	9%

Research and development expenses increased 31% for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. Research and development spending in the three months ended March 31, 2018 was primarily focused on JOTEC products and clinical work with respect to our pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S, and to a lesser extent, On-X and BioGlue products. Research and development spending in the three months ended March 31, 2017 was primarily focused on clinical work with respect to PerClot, NeoPatch™, On-X and BioGlue products.

Interest Expense

Interest expense was $3.7 million and $801,000 for the three months ended March 31, 2018 and 2017, respectively. Interest expense in 2018 and 2017 included interest on debt and uncertain tax positions. The increase in interest expense in 2018 was due to a full quarter of interest on borrowings under the $225.0 million secured term loan facility we entered into in December 2017 to finance, in part, the JOTEC Acquisition.

Earnings

	Three Months Ended March 31,	
	2018	**2017**
(Loss) income before income taxes	$ (6,906)	$ 1,744
Income tax benefit	(3,051)	(479)
Net (loss) income	$ (3,855)	$ 2,223
Diluted (loss) income per common share	$ (0.11)	$ 0.06
Diluted weighted-average common shares outstanding	36,146	33,604

Income before income taxes decreased for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. The decrease in income before income taxes for the three months ended March 31, 2018 was due to an increase in operating expenses largely as a result of increased business development costs, primarily related to the JOTEC Acquisition.

Our effective income tax rate was 44% for the three months ended March 31, 2018, as compared to 27% for the three months ended March 31, 2017. Our income tax rate for the three months ended March 31, 2018 was favorably impacted by losses in high rate jurisdictions and excess tax benefit deductions related to stock compensation, partially offset by unfavorable impacts of non-deductible operating expenses and executive compensation expenses.

On December 22, 2017 the U.S. enacted tax reform legislation known as the H.R. 1, commonly referred to as the "Tax Cuts and Jobs Act" (the "Tax Act"), resulting in significant modifications to existing law. We have elected to follow the guidance in SEC Staff Accounting Bulletin 118 ("SAB 118"), which provides additional clarification regarding the application of Accounting Standards Codification ("ASC") Topic 740 in situations where we do not have the necessary information available, prepared, or analyzed in reasonable detail to complete the accounting for certain income tax effects of the Tax Act for the reporting period in which the Tax Act was enacted. SAB 118 provides for a measurement period beginning in the reporting period that includes the Tax Act's enactment date and ending when we have obtained, prepared, and analyzed the information needed in order to complete the accounting requirements. However the measurement period cannot extend beyond one year from the enactment date.

As of March 31, 2018 we have not completed our accounting for the income tax effects of all elements of the Tax Act. Where we could make reasonable estimates of the effects of elements for which our analysis is not yet complete, we recorded provisional adjustments. If we were not yet able to make reasonable estimates of the impact of certain elements, we have not recorded any adjustments related to those elements and have continued accounting for them in accordance with ASC Topic 740 based on the tax laws in effect before the Tax Act.

We recorded a one-time estimated deemed repatriation transition tax resulting in a nominal tax benefit to us, based on the interplay of the transition tax and the foreign tax credit in 2017. The provisional amount is based on information currently available, including information from our recent acquisition of JOTEC. We continue to gather and analyze information, including historical adjustments to earnings and profits of foreign subsidiaries, in order to complete the accounting for the effects of the estimated transition tax.

For our calendar year beginning in 2018, we are subject to several provisions of the Tax Act including computations under Global Intangible Low Taxed Income ("GILTI"), Foreign Derived Intangible Income ("FDII"), Base Erosion and Anti-Abuse Tax ("BEAT"), and Internal Revenue Code Section 163(j) interest limitation ("Interest Limitation") rules. Based on preliminary information and analysis, we have not recorded a provisional estimate in our effective tax rate for the three months ended March 31, 2018 for these provisions because we currently estimate that these provisions of the Tax Act will not impact our 2018 effective rate. We will continue to refine our provisional estimates for our computations of the GILTI, FDII, BEAT, and Interest Limitation rules as we gather additional information.

As we complete our analysis of the Tax Act, further collect and analyze data, interpret any additional guidance issued by the U.S. Treasury Department, the Internal Revenue Service, and other standard-setting bodies, we may adjust our provisional amounts. Those adjustments may materially impact our provision for income taxes in the period in which the adjustments are made.

Net income and diluted income per common share decreased for the three months ended March 31, 2018, as compared to the three months ended March 31, 2017. The decrease for the three months ended March 31, 2018 was primarily due to a decrease in income before income taxes, partially offset by an income tax benefit, as discussed above.

Seasonality

We believe the demand for BioGlue and On-X products is seasonal, with a decline in demand generally occurring in the third quarter followed by stronger demand in the fourth quarter. We believe that this trend may be due to the summer holiday season in Europe and the U.S. We further believe that demand for BioGlue in Japan may continue to be lowest in the second quarter of each year due to distributor ordering patterns driven by the slower summer holiday season in Japan, although this trend could vary somewhat from year to year. We believe the seasonality for On-X products may be obscured as the On-X products have not fully penetrated many markets.

We believe the demand for JOTEC products is seasonal with a decline in demand generally occurring in the third quarter due to the summer holiday season in Europe. However, the nature of any seasonal trends may be obscured due to integration activities subsequent to the JOTEC Acquisition including the distributor to direct strategy and the European sales force realignment.

We do not believe the demand for CardioGenesis cardiac laser therapy is seasonal, as our data does not indicate a significant trend.

We are uncertain whether the demand for PerClot or PhotoFix will be seasonal, as these products have not fully penetrated many markets and, therefore, the nature of any seasonal trends may be obscured.

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

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

Liquidity and Capital Resources

Net Working Capital

As of March 31, 2018 net working capital (current assets of $166.8 million less current liabilities of $32.9 million) was $133.9 million, with a current ratio (current assets divided by current liabilities) of 5 to 1, compared to net working capital of $136.4 million and a current ratio of 4 to 1 at December 31, 2017.

Overall Liquidity and Capital Resources

Our primary cash requirements for the three months ended March 31, 2018 were general working capital needs, interest and principal payments under our debt agreement, capital expenditures for facilities and equipment, business development expenses, and to a lesser extent repurchases of stock to cover tax withholdings. We funded our cash requirements through our existing cash reserves.

We believe our cash from operations and existing cash and cash equivalents will enable us to meet our current operational liquidity needs for at least the next twelve months. Our future cash requirements are expected to include interest and principal payments under our debt agreement, expenditures for clinical trials, additional research and development expenditures, general working capital needs, capital expenditures, and other corporate purposes and may include cash to fund business development activities. These items may have a significant effect on our future cash flows during the next twelve months. Subject to the terms of our credit facility, considering our revolving credit availability and other obligations, we may seek additional borrowing capacity or financing, pursuant to our current or any future shelf registration statement, for general corporate purposes or to fund other future cash requirements. If we undertake any further significant business development activity, we may need to finance such activities by drawing down monies under our credit agreement, discussed below, obtaining additional debt financing, or using a registration statement to sell equities. There can be no assurance that we will be able to obtain any additional debt or equity financing at the time needed, or that such financing will be available on terms that are favorable or acceptable to us.

Significant Sources and Uses of Liquidity

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

On December 1, 2017, CryoLife borrowed the entire $225.0 million Term Loan Facility. The proceeds of the Term Loan Facility were used along with cash on hand and shares of CryoLife common stock to (i) fund the JOTEC Acquisition (ii) pay certain fees and expenses related to the JOTEC Acquisition and the Credit Agreement and (iii) pay the outstanding balance of our prior credit facility.

Loans under the Term Loan Facility are repayable on a quarterly basis according to the amortization provisions set forth in the Credit Agreement. We have the right to prepay loans under the Credit Agreement in whole or in part at any time. Amounts repaid in respect of loans under the Term Loan Facility may not be reborrowed. Amounts repaid in respect of loans under the Revolving Credit Facility may be reborrowed. All outstanding principal and interest in respect of (i) the Term Loan Facility must be repaid on or before December 1, 2024 and (ii) the Revolving Credit Facility must be repaid on or before December 1, 2022. As of March 31, 2018 the remaining availability on our revolving credit facility was $30.0 million.

We are conducting our pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S. We resumed enrollment in the PerClot U.S. clinical trial in the fourth quarter of 2016, and assuming enrollment proceeds as

anticipated, we could receive PMA from the FDA between the second half of 2019 and the first half of 2020. See also Part I, Item 1A, “Risk Factors—Risks Relating To Our Business—Our investment in PerClot is subject to significant risks, and our ability to fully realize our investment is dependent on our ability to obtain FDA approval and to successfully commercialize PerClot in the U.S. either directly or indirectly.”

We believe utilization of net operating loss carryforwards from our acquisitions of Hemosphere, Inc. (“Hemosphere”) and Cardiogenesis Corporation (“Cardiogenesis”) will reduce required cash payments for federal income taxes by approximately $359,000 for the 2018 tax year. We believe the acquired net operating losses from the acquisition of JOTEC will not have a material impact on foreign income taxes for the 2018 tax year.

As of March 31, 2018 approximately 28% of our cash and cash equivalents were held in foreign jurisdictions.

Net Cash Flows from Operating Activities

Net cash used in operating activities was $9.7 million for the three months ended March 31, 2018, as compared to net cash provided by operating activities of $3.9 million for the three months ended March 31, 2017. The current year cash used in operating activities was largely a result of increased business development costs, primarily related to the JOTEC Acquisition.

We use the indirect method to prepare our cash flow statement and, accordingly, the operating cash flows are based on our net income, which is then adjusted to remove non-cash items, items classified as investing and financing cash flows, and for changes in operating assets and liabilities from the prior year end. For the three months ended March 31, 2018 these non-cash items included $4.4 million in depreciation and amortization expenses, $1.2 million in non-cash compensation, and a reduction in deferred income taxes of $1.3 million.

Our working capital needs, or changes in operating assets and liabilities, also affected cash from operations. For the three months ended March 31, 2018 these changes included an unfavorable adjustment of $10.4 million due to timing differences between recording accounts payable, accrued expenses, and other liabilities and the payment of cash and $3.3 million due to the timing difference between recording receivables and the receipt of cash, partially offset by $3.0 million due to decreases in inventory balances and deferred preservation costs.

Net Cash Flows from Investing Activities

Net cash used in investing activities was $2.1 million for the three months ended March 31, 2018, as compared to $1.3 million for the three months ended March 31, 2017 primarily due to capital expenditures in both years.

Net Cash Flows from Financing Activities

Net cash used in financing activities was $2.0 million for the three months ended March 31, 2018, as compared to $483,000 for the three months ended March 31, 2017. The current year cash used was primarily due to $1.5 million for repurchases of common stock to cover tax withholdings.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements.

Scheduled Contractual Obligations and Future Payments

Scheduled contractual obligations and the related future payments as of March 31, 2018 were as follows (in thousands):

	Total	Remainder of 2018	2019	2020	2021	2022	Thereafter
Long-term debt obligations	$ 228,950	$ 2,124	$ 2,831	$ 2,832	$ 2,831	$ 2,831	$ 215,501
Interest payments	91,670	10,652	14,068	13,915	13,763	13,610	25,662
Operating leases	27,266	4,320	6,068	5,137	4,288	2,053	5,400
Capital leases	8,689	670	923	739	689	630	5,038
Research obligations	5,254	3,839	899	222	159	135	--
Purchase commitments	3,149	1,342	1,807	--	--	--	--
Other long-term liabilities	1,140	1,140	--	--	--	--	--
Contingent payments	1,000	--	--	1,000	--	--	--
Total contractual obligations	$367,118	$ 24,087	$26,596	$23,845	$21,730	$19,259	$ 251,601

Our long-term debt obligations and interest payments above result from scheduled principal payments and anticipated interest payments related to our Credit Agreement and the JOTEC governmental loans.

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

Our research obligations represent commitments for ongoing studies and payments to support research and development activities.

Our purchase commitments include obligations from agreements with suppliers, one of which is the minimum purchase requirements for PerClot under a distribution agreement with Starch Medical, Inc. (“SMI”). Pursuant to the terms of the distribution agreement, we may terminate that agreement, including the minimum purchase requirements set forth in the agreement for various reasons, one of which is if we obtain FDA approval for PerClot. These minimum purchases are included in the table above through 2019, based on the assumption that we will not terminate the distribution agreement before its target date for receiving FDA approval for PerClot in 2019. However, if we do not obtain FDA approval for PerClot and choose not to terminate the distribution agreement, we may have minimum purchase obligations of up to $1.75 million per year through the end of the contract term in 2025.

The contingent payments obligation includes payments that we may make if certain U.S. regulatory approvals and certain commercial milestones are achieved related to our transaction with SMI for PerClot.

The schedule of contractual obligations above excludes (i) obligations for estimated liability claims unless they are due as a result of a settlement agreement or other contractual obligation, as no assessments have been made for specific litigation, and (ii) any estimated liability for uncertain tax positions and interest and penalties, currently estimated to be $4.6 million, as no specific assessments have been made by any taxing authorities.

Capital Expenditures

Capital expenditures were $2.1 million and $2.0 million for the three months ended March 31, 2018 and 2017, respectively. Capital expenditures in the three months ended March 31, 2018 were primarily related to the routine purchases of manufacturing and tissue processing equipment; leasehold improvements needed to support our business; computer software; and computer and office equipment.

Risks and Uncertainties

See the risks identified in Part II, Item 1A of this Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

Our interest income and interest expense are sensitive to changes in the general level of U.S. interest rates. In this regard, changes in U.S. interest rates affect the interest earned on our cash and cash equivalents of $26.6 million as of March 31, 2018 and interest paid on the outstanding balances, if any, of our variable rate Revolving Credit Facility and $224.4 million secured Term Loan Facility. A 10% adverse change in interest rates, as compared to the rates experienced by us in the three months ended March 31, 2018, affecting our cash and cash equivalents, restricted cash and securities, $224.4 million secured Term Loan Facility, and Revolving Credit Facility would not have a material effect on our financial position, results of operations, or cash flows.

Foreign Currency Exchange Rate Risk

We have balances, such as cash, accounts receivable, accounts payable, and accruals that are denominated in foreign currencies. These foreign currency denominated balances are sensitive to changes in exchange rates. In this regard, changes in exchange rates could cause a change in the U.S. Dollar equivalent of cash or funds that we will receive in payment for assets or that we would have to pay to settle liabilities. As a result, we could be required to record these changes as gains or losses on foreign currency translation.

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

An additional 10% adverse change in exchange rates from the exchange rates in effect on March 31, 2018, affecting our balances denominated in foreign currencies, would not have had a material effect on our financial position, results of operations, or cash flows. An additional 10% adverse change in exchange rates from the weighted-average exchange rates experienced by us for the three months ended March 31, 2018, affecting our revenue and expense transactions denominated in foreign currencies, would not have had a material effect on our financial position, results of operations, or cash flows.

Item 4. Controls and Procedures.

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

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

Our management utilizes the criteria set forth in “Internal Control-Integrated Framework (2013)” issued by the Committee of Sponsoring Organizations of the Treadway Commission to evaluate the effectiveness of our Disclosure Controls over financial reporting. Based upon the most recent Disclosure Controls evaluation conducted by management with the participation of the CEO and CFO, as of March 31, 2018, the CEO and CFO have concluded that our Disclosure Controls were effective at the reasonable assurance level to satisfy their objectives and to ensure that the information required to be disclosed by us in our periodic reports is accumulated and communicated to management, including the CEO and CFO, as appropriate to allow timely

decisions regarding disclosure and is recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms.

As disclosed above, on December 1, 2017 we acquired JOTEC AG, a Swiss entity that we converted to JOTEC GmbH ("JOTEC") and its subsidiaries. We are currently in the process of integrating the JOTEC operations, evaluating their internal controls, and implementing CryoLife's internal control structure over these operations.

Part II - OTHER INFORMATION

Item 1. Legal Proceedings.

We are currently involved in litigation with the representative of the former shareholders of On-X Life Technologies Holdings, Inc. ("On-X") over our indemnification claims under the On-X purchase agreement and the approximately $10 million of the purchase price paid into escrow. The On-X shareholder representative filed a complaint in Delaware Chancery Court on June 1, 2017, seeking declaratory relief that our indemnification claims were invalid. We timely filed an answer and counterclaim on June 22, 2017, and discovery is on-going.

Item 1A. Risk Factors.

Risks Relating To Our Business

We may not realize all of the anticipated benefits of the JOTEC Acquisition.

On December 1, 2017 we acquired JOTEC for $168.8 million in cash and 2,682,754 shares of CryoLife common stock with an estimated value of $53.1 million as determined on the date of closing, for a total purchase price of approximately $221.9 million, including debt and cash acquired on the date of closing. We paid part of the cash portion of the purchase price using available cash on hand and financed the remainder of the cash portion of the purchase price and related expenses and refinanced our then existing approximately $69.0 million term loan, with a new $255.0 million senior secured credit facility, consisting of a $225.0 million institutional term loan B and a $30.0 million undrawn revolving credit facility.

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

- The continued growth of the global market for stent grafts used in endovascular and open repair of aortic disease;
- Our ability to leverage our global infrastructure, including in the markets in which JOTEC is already direct; minimize difficulties and costs associated with transitioning away from distributors in key markets; and accelerate our ability to go direct in Europe in developed markets with the CryoLife and JOTEC product portfolios;
- Our ability to foster cross-selling opportunities between the CryoLife and JOTEC product portfolios;
- Our ability to bring JOTEC products to the U.S. market;
- Our ability to harness the JOTEC new product pipeline and R&D capabilities to drive long-term growth, including our ability to obtain Conformité Européene Mark product certification ("CE Mark") for pipeline products;
- Our ability to drive gross margin expansion;
- Our ability to successfully integrate the JOTEC business with ours, including integrating the combined European sales force;
- Our ability to compete effectively;
- Our ability to carry, service, and manage significantly more debt and repayment obligations; and
- Our ability to manage the unforeseen risks and uncertainties related to JOTEC's business.

Many of these factors are outside of our control and any one of them could result in increased costs, decreased revenues, and diversion of management's time and energy, which could materially, adversely impact our business, financial condition, profitability, and cash flows. These benefits may not be achieved within the anticipated time frame or at all. Any of these factors could negatively impact our earnings per share, decrease or delay the expected accretive effect of the acquisition, and negatively impact the price of our common stock. In addition, if we fail to realize the anticipated benefits of the acquisition, we could

experience an interruption or loss of momentum in our existing business activities, which could adversely affect our revenues, financial condition, profitability, and cash flows.

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

Our current and future levels of indebtedness could:

- Limit our ability to borrow money for our working capital, capital expenditures, development projects, strategic initiatives, or other purposes;
- Require us to dedicate a substantial portion of our cash flow from operations to the repayment of our indebtedness, thereby reducing funds available to us for other purposes;
- Limit our flexibility in planning for, or reacting to, changes in our operations or business;
- Make us more vulnerable to downturns in our business, the economy, or the industry in which we operate;
- Restrict us from making strategic acquisitions, introducing new technologies, or exploiting business opportunities; and
- Expose us to the risk of increased interest rates as most of our borrowings are at a variable rate of interest.

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

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

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

As a result of these covenants, we are limited in the manner in which we conduct our business, and we may be unable to engage in favorable business activities or finance future operations or capital needs.

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

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

- Will not be required to lend any additional amounts to us;
- Could elect to declare all indebtedness outstanding, together with accrued and unpaid interest and fees, to be due and payable and terminate all commitments to extend further credit, if applicable; or
- Could require us to apply all of our available cash to repay such indebtedness.

If we are unable to repay those amounts, the holders of our secured indebtedness could proceed against the collateral granted to them to secure that indebtedness. If the indebtedness under our existing debt agreements were to be accelerated, there can be no assurance that our assets would be sufficient to repay such indebtedness in full.

Our charges to earnings resulting from acquisition, restructuring, and integration costs may materially adversely affect the market value of our common stock.

We account for the completion of our acquisitions using the purchase method of accounting. We allocate the total estimated purchase prices to net tangible assets, amortizable intangible assets and indefinite-lived intangible assets, and based on their fair values as of the date of completion of the acquisitions, record the excess of the purchase price over those fair values as goodwill. Our financial results, including earnings per share, could be adversely affected by a number of financial adjustments required in purchase accounting including the following:

- We will incur additional amortization expense over the estimated useful lives of some of the intangible assets acquired in connection with acquisitions during such estimated useful lives;
- We will incur additional depreciation expense as a result of recording purchased tangible assets;
- To the extent the value of goodwill or intangible assets becomes impaired, we may be required to incur material charges relating to the impairment of those assets;
- Cost of sales may increase temporarily following an acquisition as a result of acquired inventory being recorded at its fair market value;
- Earnings may be affected by changes in estimates of future contingent consideration to be paid when an earn-out is part of the consideration; or
- Earnings may be affected by transaction and implementation costs, which are expensed immediately.

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

BioGlue® Surgical Adhesive (“BioGlue”) is a significant source of our revenues, representing approximately 26% and 35% of revenues in the three months ended March 31, 2018 and 2017, respectively. The following could materially, adversely affect our revenues, financial condition, profitability, and cash flows:

- BioGlue is a mature product, our U.S. Patent for BioGlue expired in mid-2012, and our patents in most of the rest of the world for BioGlue expired in mid-2013. Other companies may use the inventions disclosed in the expired patents to develop and make competing products;
- Another company launched competitive products in 2016 and another is in the process of doing so. These companies have greater financial, technical, manufacturing, and marketing resources than we do and are well established in their markets. Companies other than these may also pursue regulatory approval for competitive products;
- We may be unable to obtain regulatory approvals to commercialize BioGlue in certain countries other than the U.S. at the same rate as our competitors or at all. We also may not be able to capitalize on new regulatory approvals we obtain for BioGlue in countries other than the U.S., including approvals for new indications;
- BioGlue contains a bovine blood protein. Animal-based products are increasingly subject to scrutiny from the public and regulators, who may have concerns about the use of animal-based products or concerns about the transmission of disease from animals to humans. These concerns could lead to additional regulations or product bans in certain countries;
- Changes to components in the BioGlue product, including in the delivery system require regulatory approval, which if delayed, could cause prolonged disruptions to our ability to supply BioGlue; and

- BioGlue is subject to potential adverse developments with regard to its safety, efficacy, or reimbursement practices.

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

JOTEC is now a significant source of our revenues, representing 23% of revenues in the three months ended March 31, 2018. The following could materially, adversely affect our revenues, financial condition, profitability, and cash flows:

- Our ability to achieve anticipated JOTEC revenue in international markets outside the U.S.;
- Our ability to compete effectively with our major competitors, as they may have advantages over us in terms of cost structure, pricing, sales force footprint, and brand recognition;
- Our ability to develop innovative and in-demand products in the aortic surgery space; and
- Our ability to contend with enhanced regulatory enforcement activities.

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

Tissue preservation services are a significant source of our revenues, representing 30% and 39% of revenues in the three months ended March 31, 2018 and 2017, respectively. The following could materially, adversely affect our revenues, financial condition, profitability, and cash flows, if we are unable to:

- Source sufficient quantities of some tissue types from human donors or address potential excess supply of other tissue types. We rely primarily upon the efforts of third-party procurement organizations, tissue banks (most of which are not-for-profit), and others to educate the public and foster a willingness to donate tissue. Factors beyond our control such as supply, regulatory changes, negative publicity concerning methods of tissue recovery or disease transmission from donated tissue, or public opinion of the donor process as well as our own reputation in the industry can negatively impact the supply of tissue;
- Process donated tissue cost effectively or at all due to factors such as employee turnover, ineffective or inefficient operations, or an insufficiently skilled workforce;
- Compete effectively in tissue preservation services, as we may be unable to capitalize on our clinical advantage or our competitors may have advantages over us in terms of cost structure, pricing, back office automation, marketing, and sourcing tissue; or
- Mitigate sufficiently the risk that processed tissue cannot be sterilized and hence carries an inherent risk of infection or disease transmission; there is no assurance that our quality controls will be adequate to mitigate such risk.

In addition, U.S. and foreign governments and regulatory agencies have adopted restrictive laws, regulations, and rules that apply to our tissue preservation services. These include but are not limited to:

- National Organ Transplant Act, NOTA which prohibits the acquisition or transfer of human organs for valuable consideration for use in human transplantation, but allows for the payment of reasonable expenses associated with the removal, transportation, implantation, processing, preservation, quality control, and storage of human organs;
- U.S. Department of Labor, Occupational Safety and Health Administration, and U.S. Environmental Protection Agency requirements for prevention of occupational exposure to infectious agents and hazardous chemicals and protection of the environment; and
- The EU Tissue and Cells Directives, EUTCD which require that countries in the European Economic Area, (‘EEA”) take responsibility for regulating tissues and cells through a Competent Authority.

Any of these laws, regulations, and rules or others could change, our interpretation of them could be challenged by U.S., state, or foreign governments and regulatory agencies, or these governments and regulatory agencies could adopt more restrictive laws or regulations in the future regarding tissue preservation services that could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

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

On-X is a significant source of our revenues, representing 17% and 20% of revenues in the three months ended March 31, 2018 and 2017, respectively. The following could materially, adversely affect our revenues, financial condition, profitability, and cash flows:

- Our ability to achieve anticipated On-X revenue in international markets outside the U.S., particularly in markets with large legacy inventories;
- Our ability to capitalize on the FDA's approved reduced INR indication;
- Our ability to compete effectively with our major competitors, as they may have advantages over us in terms of cost structure, pricing, sales force footprint, and brand recognition;
- Our ability to manage the risks associated with less favorable contract terms for On-X products on consignment at hospitals with more bargaining power;
- Changes in technology that may impact the market for mechanical heart valves, such as transcatheter aortic valve replacement, or "TAVR" devices; and
- Enhanced regulatory enforcement activities or failure to receive renewed certifications that could cause interruption in our ability to sell On-X products in certain markets.

Our revenues for the On-X AAP in Europe may continue to be adversely affected by regulatory enforcement activities regarding the On-X AAP's CE Mark.

On November 22, 2016, we received a letter from G-Med, which acts as our Notified Body for the On-X product line, indicating that it was temporarily suspending the CE Mark for the On-X AAP in the EEA, due to an allegedly untimely and allegedly deficient plan by us to address certain technical documentation issues found by G-Med during a review and renewal of the design examination certificate for the On-X AAP. On July 26, 2017, we received a letter from G-Med indicating that it was continuing the suspension of the CE Mark for the AAP product for a period of up to 18 months pending further assessment. We have since withdrawn our application from G-Med for certification of the AAP product and are currently pursuing another pathway to CE Mark for the AAP product with a goal of returning the product to the European market in the third quarter of 2018. Failure to obtain CE Mark for the On-X AAP in the EEA could have a material adverse effect on EEA revenues in 2018 and beyond.

Our investment in PerClot is subject to significant risks, and our ability to fully realize our investment is dependent on our ability to obtain FDA approval and to successfully commercialize PerClot in the U.S. either directly or indirectly.

In 2010 and 2011, we entered into various agreements with SMI pursuant to which, among other things, we (a) may distribute PerClot in certain international markets and are licensed to manufacture PerClot in the U.S.; (b) acquired some technology to assist in the production of a potentially key component in PerClot; and (c) obtained the exclusive right to pursue, obtain, and maintain FDA PMA for PerClot. We are currently conducting our pivotal clinical trial to gain approval to commercialize PerClot for surgical indications in the U.S., and assuming enrollment proceeds as anticipated, we could receive PMA from the FDA between the second half of 2019 and the first half of 2020. There is no guarantee, however, that we will obtain FDA approval when anticipated or at all. The estimated timing of regulatory approval for PerClot is based on factors beyond our control, including but not limited to, the pace of enrollment in the pivotal clinical trial and the approval process may be delayed because of unforeseen scheduling difficulties and unfavorable results at various stages in the pivotal clinical trial or the process. We may also decide to delay or terminate our pursuit of U.S. regulatory approval for PerClot at any time due to changing conditions at CryoLife, in the marketplace, or in the economy in general.

Further, even if we receive FDA PMA for PerClot, we may be unsuccessful in selling PerClot in the U.S. By the time we secure approvals, competitors may have substantial market share or significant market protections due to contracts, among other things. We may also be unsuccessful in selling in countries other than the U.S. due, in part, to a proliferation in other countries of multiple generic competitors, SMI's breach of its contractual obligations, or the lack of adequate intellectual property protection or enforcement. Any of these occurrences could materially, adversely affect our future revenues, financial condition, profitability, and cash flows.

PerClot sold in the EEA has a CE Mark owned by a third party, who informed us in the fourth quarter of 2017 that its CE Mark will expire in the second quarter of 2018. If that CE Mark is not timely renewed, we may be unable to distribute PerClot in the EEA and other countries that recognize the CE Mark, which could materially, adversely affect our future revenues.

Reclassification by the FDA of CryoValve® SGPV may make it commercially infeasible to continue processing the CryoValve SGPV.

In October 2014 the FDA convened an advisory committee meeting to consider the FDA's recommendation to re-classify more MMM allograft heart valves from an unclassified medical device to a Class III medical device. The class of MMM allograft heart valves includes our CryoValve SGPV. At the meeting, a majority of the advisory committee panel recommended to the FDA that MMM allograft heart valves be re-classified as a Class III product. We expect that the FDA will issue a proposal for reclassification of MMM allograft heart valves, which will be subject to a public comment period before finalization. After

publication of the reclassification rule, we expect to have thirty months to submit for an FDA PMA, after which the FDA will determine if, and for how long, we may continue to provide these tissues to customers. To date, the FDA has not issued a proposed reclassification for MMM allograft heart valves.

We have continued to process and ship our CryoValve SGPV tissues. If the FDA ultimately classifies our CryoValve SGPV as a Class III medical device, we anticipate requesting a meeting with the FDA to determine the specific requirements to file for and obtain a PMA, and we will determine an appropriate course of action in light of those requirements. If there are delays in obtaining the PMA, if we are unsuccessful in obtaining the PMA, or if the costs associated with these activities are significant, this could materially, adversely affect our revenues, financial condition, profitability, and/or cash flows in future periods. In addition, we could decide that the requirements for obtaining a PMA make continued processing of the CryoValve SGPV infeasible, necessitating that we discontinue distribution of these tissues.

Our key growth areas may not generate anticipated benefits.

Our strategic plan is focused on four growth areas, primarily in the cardiac and vascular surgery segment, which are expected to drive our business in the near term. These growth areas and their key elements are described below:

- *New Products* – Drive growth through new products, including JOTEC and On-X products;
- *New Indications* – Drive growth by broadening the reach of some of our products and services, including the JOTEC, On-X, and BioGlue products, and preserved cardiac and vascular tissues, with new or expanded approvals and indications in the U.S. or in international markets;
- *Global Expansion* – Drive growth by expanding our current products and services into new markets, including emerging markets, and developing new direct sales territories overseas; and
- *Business Development* – Drive growth through business development by selectively pursuing potential acquisitions, licensing, or distribution rights of companies or technologies that complement our existing products, services, and infrastructure and expand our footprint in the cardiac and vascular surgery space, as we did with the recent acquisitions of JOTEC and On-X; and licensing of products developed internally with non-cardiac indications. To the extent we identify new non-core products or additional applications for our core products, we may attempt to license these products to corporate partners for further development or seek funding from outside sources to continue commercial development.

Although we continue to implement these strategies, we cannot be certain that they will ultimately drive business expansion and enhance shareholder value.

We may not be successful in obtaining necessary clinical results and regulatory approvals for products and services in development, and our new products and services may not achieve market acceptance.

Our growth and profitability will depend, in part, upon our ability to complete development of, and successfully introduce, new products and services, or expand upon existing indications, which requires that we invest significant time and resources to obtain required regulatory approvals, including significant investment of time and resources into clinical trials. Although we have conducted clinical studies on certain products and services under development, which indicate that such products and services may be effective in a particular application, we cannot be certain that we will be able to successfully execute on these clinical trials or that the results we obtain from clinical studies will be sufficient for us to obtain any required regulatory approvals or clearances.

As noted above, we are currently engaged in an Investigational Device Exemption clinical trial for PerClot, as well as a clinical trial in China for BioGlue and in the U.S. for the On-X valve. We also anticipate commencing in 2018 and 2019 U.S. trials for certain JOTEC products. Each of these trials is subject to the risks outlined herein.

We cannot give assurance that the relevant regulatory agencies will clear or approve these or any new products and services, or new indications, in a timely basis, if ever, or that the new products and services, or new indications, will adequately meet the requirements of the applicable market or achieve market acceptance. We may encounter delays or rejections during any stage of the regulatory approval process if clinical or other data fails to demonstrate satisfactorily compliance with, or if the service or product fails to meet, the regulatory agency’s requirements for safety, efficacy, and quality, or the regulatory agency otherwise has concerns about our quality or regulatory compliance. Regulatory requirements for safety, efficacy, and quality may become more stringent due to changes in applicable laws, regulatory agency policies, or the adoption of new regulations. Clinical trials may also be delayed or halted due to the following, among other factors:

- Unanticipated side effects;

- Lack of funding;
- Inability to locate or recruit clinical investigators;

- Inability to locate, recruit, and qualify sufficient numbers of patients;
- Redesign of clinical trial programs;
- Inability to manufacture or acquire sufficient quantities of the products, tissues, or any other components required for clinical trials;
- Changes in development focus; or
- Disclosure of trial results by competitors.

Our ability to complete the development of any of our products and services is subject to all of the risks associated with the commercialization of new products and services based on innovative technologies. Such risks include unanticipated technical or other problems, manufacturing, or processing difficulties, and the possibility that we have allocated insufficient funds to complete such development. Consequently, we may not be able to successfully introduce and market our products or services, or we may not be able to do so on a timely basis. These products and services may not meet price or performance objectives and may not prove to be as effective as competing products and services.

If we are unable to successfully complete the development of a product, service, or application, or if we determine for financial, technical, competitive, or other reasons not to complete development or obtain regulatory approval or clearance of any product, service, or application, particularly in instances when we have expended significant capital, this could materially, adversely affect our revenues, financial condition, profitability, and cash flows. Research and development efforts are time consuming and expensive, and we cannot be certain that these efforts will lead to commercially successful products or services. Even the successful commercialization of a new product or service in the medical industry can be characterized by slow growth and high costs associated with marketing, under-utilized production capacity, and continuing research and development and education costs. The introduction of new products or services may require significant physician training and years of clinical evidence derived from follow-up studies on human patients in order to gain acceptance in the medical community.

All of these could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

We are subject to a variety of risks as we seek to expand our business globally.

The expansion of our international operations is subject to a number of risks, which may vary significantly from the risks we face in our U.S. operations, including:

- Difficulties and costs associated with staffing, establishing and maintaining internal controls, managing foreign operations, including foreign distributor relationships, and developing direct sales operations in key foreign countries;
- Expanded compliance obligations, including obligations associated with the Foreign Corrupt Practices Act, the U.K. Bribery Law, local anti-corruption laws, and Office of Foreign Asset Control administered sanction programs;
- Broader exposure to corruption;
- Overlapping and potentially conflicting international legal and regulatory requirements, as well as unexpected changes in international legal and regulatory requirements or reimbursement policies and programs;
- Longer accounts receivable collection cycles in certain foreign countries and additional cost of collection of those receivables;
- Diminished protection for intellectual property and the presence of a growing number of generic or smaller competitors in some countries;
- Changes in currency exchange rates, particularly fluctuations in the British Pound and Euro as compared to the U.S. Dollar, including any fluctuations in exchange rates due to the exit of the U.K. from the European Union;
- Differing local product preferences and product requirements;
- Adverse economic or political changes or political instability;
- Potential trade restrictions, exchange controls, and import and export licensing requirements including tariffs; and
- Potential adverse tax consequences of overlapping tax structures.

Our failure to adequately address these risks could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

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

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

- Issue additional equity securities that would dilute our stockholders' ownership interest in us;
- Use cash that we may need in the future to operate our business;
- Incur debt, including on terms that could be unfavorable to us or debt that we might be unable to repay;
- Structure the transaction in a manner that has unfavorable tax consequences, such as a stock purchase that does not permit a step-up in the tax basis for the assets acquired;
- Be unable to realize the anticipated benefits, such as increased revenues, cost savings, or synergies from additional sales;
- Be unable to integrate, upgrade, or replace the purchasing, accounting, financial, sales, billing, employee benefits, payroll, and regulatory compliance functions of an acquisition target;
- Be unable to secure or retain the services of key employees related to the acquisition;
- Be unable to succeed in the marketplace with the acquisition; or
- Assume material unknown liabilities associated with the acquired business.

As an example of these risks, in December 2017 we acquired JOTEC, which we financed by incurring further debt, using cash on hand, and issuing additional equity securities. This acquisition poses many of the same risks as set forth above.

Any of the above risks, should they occur, could materially, adversely affect our revenues, financial condition, profitability, and cash flows, including the inability to recover our investment or cause a write-down or write-off of such investment, associated goodwill, or assets.

We are heavily dependent on our suppliers to provide quality materials and supplies.

The materials and supplies used in our product manufacturing and our tissue processing are subject to stringent quality standards and requirements, and many of these materials and supplies are subject to significant regulatory oversight and action. If materials or supplies used in our processes fail to meet these standards and requirements or are subject to recall or other quality action, an outcome could be the rejection or recall of our products or tissues and/or the immediate expense of the costs of the manufacturing or preservation. In addition, if these materials and supplies or changes to them do not receive regulatory approval or are recalled or the related suppliers and/or their facilities are shut down temporarily or permanently, whether by government order, natural disaster, or otherwise, there may not be sufficient materials or supplies available for purchase to allow us to manufacture our products or process tissues. Any of these occurrences or actions could materially, adversely affect our revenues, financial condition, profitability, and cash flows.

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

Some of the materials, supplies, and services that are key components of our product manufacturing or our tissue processing are sourced from single or sole source suppliers. As a result, our ability to negotiate favorable terms with those suppliers may be limited, and if those suppliers experience operational, financial, quality, or regulatory difficulties, or those suppliers and/or their facilities refuse to supply us or cease operations temporarily or permanently, we could be forced to cease product manufacturing or tissue processing until the suppliers resume operations, until alternative suppliers could be identified and qualified, or permanently if the suppliers do not resume operations and no alternative suppliers could be identified and qualified. We could also be forced to purchase alternative materials, supplies, or services with unfavorable terms due to diminished bargaining power. We also conduct substantially all of our operations at three facilities: Austin, Texas for our On-X product line, Hechingen, Germany for our JOTEC product line, and Kennesaw, Georgia for all our other products. If one of these facilities ceases operations temporarily or permanently, due to natural disaster or other reason, our business could be substantially disrupted.

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

The manufacture and sale of medical devices and processing, preservation, and distribution of human tissues are highly complex and subject to significant quality and regulatory risks. Any of the following could materially, adversely affect our revenues, financial condition, profitability, and cash flows:

- Our products and tissues may be recalled or placed on hold by us, the FDA, or other regulatory bodies;

- Our products and tissues allegedly have caused, and may in the future cause, injury to patients, which has exposed, and could in the future expose, us to product and tissue processing liability claims, and such claims could lead to additional regulatory scrutiny and inspections;
- Our manufacturing and tissue processing operations are subject to regulatory scrutiny and inspections, including by the FDA and foreign regulatory agencies, and these agencies could require us to change or modify our manufacturing operations, processes, and procedures;
- Regulatory agencies could reclassify, reevaluate, or suspend our clearances and approvals to sell our products and distribute tissues;
- European Notified Bodies have recently engaged in more rigorous regulatory enforcement activities and may continue to do so. For example, our Notified Body for the On-X product line temporarily suspended the CE Mark for the On-X AAP in the EEA. See the risk factor above entitled "Our revenues for the On-X AAP in Europe may continue to be adversely affected by regulatory enforcement activities regarding the On-X AAP's CE Mark" for further discussion.
- The European Union has adopted a new Medical Device Regulation (MDR 2017/745), which could result in product reclassifications or more stringent commercialization requirement that adversely impact our clearances and approvals; and
- Adverse publicity associated with our products or processed tissues or our industry could lead to a decreased use of our products or tissues, additional regulatory scrutiny, and/or product or tissue processing liability lawsuits.

As another example of these risks, in January 2013 we received a warning letter from the FDA related to the manufacture of our products and our processing, preservation, and distribution of human tissue, as well as a subsequent 2014 Form 483, after a re-inspection by the FDA related to the warning letter that included observations concerning design and process validations, environmental monitoring, product controls and handling, corrective and preventive actions, and employee training. Despite an FDA re-inspection in the first quarter of 2015, after which the FDA closed out the warning letter issued in 2013, we remain subject to further inspections and oversight by the FDA and, if the FDA is not satisfied with our quality and regulatory compliance, it could institute a wide variety of enforcement actions, ranging from issuing additional Form 483s or warning letters, to more severe sanctions such as fines; injunctions; civil penalties; recalls of our products and/or tissues; operating restrictions; suspension of production; non-approval or withdrawal of approvals or clearances for new products or existing products; and criminal prosecution. Any further Form 483s, warning letters, recalls, holds, or other adverse action from the FDA may decrease demand for our products or tissues or cause us to write down our inventories or deferred preservation costs and could materially, adversely affect our revenues, financial condition, profitability, and cash flows.

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

The market for our products and services is intensely competitive and significantly affected by new product introductions and activities of other industry participants. We face intense competition from other companies engaged in the following lines of business:

- The sale of mechanical, synthetic, and animal-based tissue valves for implantation;
- The sale of endovascular and surgical stents;
- The sale of synthetic and animal-based patches for implantation;
- The sale of surgical adhesives, surgical sealants, and hemostatic agents; and
- The processing and preservation of human tissue.

A significant percentage of market revenues from these products was generated by Baxter, Ethicon (a Johnson & Johnson Company), Medtronic, Inc., Abbott Laboratories, LivaNova PLC, Edwards Life Sciences Corp., BD, Integra Life Sciences Holdings, LifeNet, Admedus, Inc., Aziyo Biologics, Cook Medical, Gore, Terumo Corp., Endologix, Antegraft, Inc., LeMaitre, Maquet, Inc., Vascutek, Novadaq Technologies, Inc., Pfizer, Inc., and BioCer Entwicklungs-GmbH. Several of our competitors enjoy competitive advantages over us, including:

- Greater financial and other resources for product research and development, sales and marketing, acquisitions, and patent litigation;
- Enhanced experience in, and resources for, launching, marketing, distributing, and selling products;
- Greater name recognition as well as more recognizable trademarks for products similar to the products that we sell;
- More established record of obtaining and maintaining FDA and other regulatory clearances or approvals for products and product enhancements;
- More established relationships with healthcare providers and payors;
- Lower cost of goods sold or preservation costs;

- Advanced systems for back office automation, product development, and manufacturing, which may provide certain cost advantages; and
- Larger direct sales forces and more established distribution networks.

Our competitors may develop services, products, or processes with significant advantages over the products, services and processes that we offer or are seeking to develop, and our products and tissues may not be able to compete successfully. If we are unable to successfully market and sell innovative and in-demand products and services, our competitors may gain competitive advantages that may be difficult to overcome. In addition, consolidation among our competitors may make it more difficult for us to compete effectively. If we fail to compete effectively, this could materially, adversely affect our revenues, financial condition, profitability, and cash flows.

We are dependent on our key personnel.

Our business and future operating results depend in significant part upon the continued contributions of our key personnel, including qualified personnel with medical device and tissue processing experience, and senior management with experience in the medical device or tissue processing space, many of whom would be difficult to replace. Our business and future operating results, including production at our manufacturing and tissue processing facilities, also depend in significant part on our ability to attract and retain qualified management, operations, processing, marketing, sales, and support personnel for our operations. Our main facilities are in Kennesaw, Georgia, Austin, Texas, and Hechingen, Germany, where the local supply of qualified personnel in the medical device and tissue processing industries is limited. Competition for such personnel is intense, and we cannot ensure that we will be successful in attracting and retaining such personnel. If we lose any key employees, if any of our key employees fail to perform adequately, or if we are unable to attract and retain skilled employees as needed, this could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

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

We rely upon a combination of sophisticated information technology systems and traditional recordkeeping to operate our business. In the ordinary course of business, we collect, store, and transmit large amounts of confidential information (including, but not limited to, personal information, intellectual property and, in some instances, patient data). We have also outsourced elements of our operations to third parties, including elements of our information technology infrastructure and, as a result, we manage a number of independent vendor relationships with third parties who may or could have access to our confidential information. Our information technology and information security systems and records are potentially vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees or vendors. Our information technology and information security systems are also potentially vulnerable to malicious attacks by third parties. Such attacks are of ever-increasing levels of sophistication and are made by groups and individuals with a wide range of motives (including, but not limited to, industrial espionage and market manipulation) and expertise. While we have invested significantly in the protection of data and information technology, there can be no assurance that our efforts will prevent service interruptions or security breaches. For example, although we have taken security precautions and are assessing additional precautions to provide greater data security, certain data may be vulnerable to loss in a catastrophic event. We have only limited cyber-insurance coverage that will not cover a number of the events described above and this insurance is subject to deductibles and coverage limitations, and we may not be able to maintain this insurance. We thus have no insurance for most of the claims that could be raised and, for those where we have coverage, those claims could exceed the limits of our coverage. Any interruption or breach in our systems could adversely affect our business operations and/or result in the loss of critical or sensitive confidential information or intellectual property, and could result in financial, legal, business, and reputational harm to us or allow third parties to gain material, inside information that they may use to trade in our securities.

The implementation of the General Data Protection Regulation in the EEA in May 2018 could adversely affect our business.

The European Commission has approved a data protection regulation, known as the General Data Protection Regulation (“GDPR”), which takes effect in May 2018. GDPR includes significant new requirements for companies that receive or process the personal data of residents of the European Union (including company employees) and significant penalties for noncompliance. GDPR, as well as any related government enforcement activities, may be costly to comply with, result in negative publicity, increase our operating costs, require significant management time and energy, and subject us to significant penalties, any of which could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

Consolidation in the healthcare industry could have an adverse effect on our revenues and results of operations.

Many healthcare industry companies, including health care systems, are consolidating to create new companies with greater market power. As the healthcare industry consolidates, competition to provide goods and services to industry participants will

become more intense. These industry participants may try to use their market power to negotiate price concessions or reductions for medical devices that incorporate components produced by us. If we are forced to reduce our prices because of consolidation in the healthcare industry, our revenues would decrease and our financial condition, profitability, and/or cash flows would suffer.

Our sales are affected by challenging domestic and international economic and geopolitical conditions and their constraining effect on hospital budgets, and demand for our products and tissue preservation services could decrease in the future, which could materially, adversely affect our business.

The demand for our products and tissue preservation services can fluctuate from time to time. In challenging economic environments, hospitals attempt to control costs by reducing spending on consumable and capital items, which can result in reduced demand for some of our products and services. If demand for our products or tissue preservation services decreases significantly in the future, our revenues, profitability, and cash flows would likely decrease, possibly materially. In addition, the manufacturing throughput of our products and the processing throughput of our preservation services would necessarily decrease, which would likely adversely impact our margins and, therefore, our profitability, possibly materially. Further, if demand for our products and/or tissue preservation services materially decreases in the future, we may not be able to ship our products and/or tissues before they expire, which would cause us to write down our inventories and/or deferred preservation costs.

Our sales may also be affected by challenging economic and geopolitical conditions in countries around the world, in addition to the U.S., particularly in countries where we have significant BioGlue, On-X product, or JOTEC product sales or where BioGlue, On-X products, or JOTEC products are still in a growth phase. These factors could materially, adversely affect our revenues, financial condition, and profitability.

The success of some of our products and preservation services depends upon relationships with healthcare professionals.

If we fail to maintain our working relationships with healthcare professionals, many of our products and preservation services may not be developed and marketed to appropriately meet the needs and expectations of the professionals who use and support our products and preservation services or the patients who receive them.

The research, development, marketing, and sales of many of our new and improved products and preservation services are dependent upon us maintaining working relationships with healthcare professionals. We rely on these professionals to provide us with considerable knowledge and experience regarding our products and preservation services. Healthcare professionals assist us as researchers, marketing and training consultants, product consultants, and speakers. If we are unable to maintain our relationships with these professionals and do not continue to receive their advice and input, the development and commercialization of our products and preservation services could suffer, which could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

If healthcare providers are not adequately reimbursed for procedures conducted with our products, or if reimbursement policies change adversely, we may not be successful in marketing and selling our products or preservation services.

Most of our customers, and the healthcare providers to whom our customers supply medical devices, rely on third-party payors, including government programs and private health insurance plans, to reimburse some or all of the cost of the procedures in which medical devices that incorporate components we manufacture or assemble are used. Healthcare providers, facilities, and government agencies are unlikely to purchase our products or implant our tissues if they are not adequately reimbursed for these procedures. Unless a sufficient amount of peer-reviewed clinical data about our products and preservation services has been published, third-party payors, including insurance companies and government agencies, may refuse to provide reimbursement. The continuing efforts of governmental authorities, insurance companies, and other payors of healthcare costs to contain or reduce these costs could lead to patients being unable to obtain approval for payment from these third-party payors. Furthermore, even if reimbursement is provided, it may not be adequate to fully compensate the clinicians or hospitals. Some third-party payors may impose restrictions on the procedures for which they will provide reimbursement. If healthcare providers cannot obtain sufficient reimbursement from third-party payors for our products or preservation services or the screenings conducted with our products, we may not achieve significant market acceptance. Acceptance of our products in international markets will depend upon the availability of adequate reimbursement or funding within prevailing healthcare payment systems. Reimbursement, funding, and healthcare payment systems vary significantly by country. We may not obtain approvals for reimbursement in a timely manner or at all.

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

Our business and future growth depend on the continued use of our products for specific approved uses. Generally, unless the products are approved or cleared by the FDA for the alternative uses, the FDA contends that we may not make claims about the safety or effectiveness of our products, or promote them, for such uses. Such limitations present a risk that the FDA or other

federal or state law enforcement authorities could determine that the nature and scope of our sales, marketing, and/or support activities, though designed to comply with all FDA requirements, constitute the promotion of our products for an unapproved use in violation of the Federal Food, Drug, and Cosmetic Act, FDCA. We also face the risk that the FDA or other governmental authorities might pursue enforcement based on past activities that we have discontinued or changed, including sales activities, arrangements with institutions and doctors, educational and training programs, and other activities. Investigations concerning the promotion of unapproved uses and related issues are typically expensive, disruptive, and burdensome and generate negative publicity. If our promotional activities are found to be in violation of the law, we may face significant fines and penalties and may be required to substantially change our sales, promotion, grant, and educational activities. There is also a possibility that we could be enjoined from selling some or all of our products for any unapproved use. In addition, as a result of an enforcement action against us or our executive officers, we could be excluded from participation in government healthcare programs such as Medicare and Medicaid.

Tax reform could have a material adverse effect on us.

The December 2017 legislation commonly referred to as the "Tax Cuts and Jobs Act" (the "Tax Act") made significant changes to federal income tax law including, among other things, reducing the statutory corporate income tax rate to 21 percent from 35 percent and changing the U.S. taxation of our non-U.S. business activities. We may be adversely affected by these changes in U.S. tax laws and regulations, and it is possible that governmental authorities in the U.S. and/or other countries could further amend tax laws that would adversely affect us. In addition, we are required to evaluate the impact of the Tax Act on our operations and financial statements, and to the extent we initially do so inaccurately, we may not provide investors or the public with advance notice of any adverse effect. Currently, we have accounted for the effects of the Tax Act using reasonable estimates based on currently available information and our interpretations thereof. This accounting may change due to, among other things, changes in interpretations we have made and the issuance of new tax or accounting guidance.

Certain changes in tax law implemented by the Tax Act will be partially effective in the current 2018 fiscal year and fully effective in the 2019 fiscal year. The primary impacts to us include repeal of the alternative minimum tax regime, decrease of the corporate income tax rate structure, net operating loss limitations, and changes to the limits on executive compensation deductions. These changes will have a material impact to the value of deferred tax assets and liabilities, and our future taxable income and effective tax rate. Although we currently anticipate the enacted changes in the corporate tax rate and calculation of taxable income will have a favorable effect on our financial condition, profitability, and/or cash flows, we are still analyzing the Tax Act with our professional advisers. Until such analysis is complete and verified, the full impact of the Tax Act on us in future periods is uncertain, and no assurances can be made by us that it will not have any negative impacts on us.

Our acquired federal tax net operating loss and general business credit carryforwards will be limited or may expire, which could result in greater future income tax expense and adversely impact future cash flows.

Our federal tax net operating loss and general business credit carryforwards include acquired net operating loss carryforwards. Such acquired net operating loss carryforwards will be limited in future periods due to a change in control of our former subsidiaries Hemosphere and Cardiogenesis, as mandated by Section 382 of the Internal Revenue Code of 1986, as amended ("Section 382"). We believe that our acquisitions of these companies each constituted a change in control, and that prior to our acquisition, Hemosphere had experienced other equity ownership changes that should be considered a change in control. We also acquired net operating loss carryforwards in the acquisition of On-X that are limited under Section 382. We believe, however, that such net operating loss carryforwards from On-X will be fully realizable prior to expiration. The deferred tax assets recorded on our Consolidated Balance Sheets exclude amounts that we expect will not be realizable due to these changes in control. A portion of the acquired net operating loss carryforwards is related to state income taxes for which we believe it is more likely than not that these deferred tax assets will not be realized. Therefore, we recorded a valuation allowance against these state net operating loss carryforwards. Limitations on our federal tax net operating loss and general business credit carryforwards could result in greater future income tax expense and adversely impact future cash flows.

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

Our relationships with physicians, hospitals, and other healthcare providers are subject to scrutiny under various federal anti-kickback, self-referral, false claims, privacy, and transparency laws, and similar laws, often referred to collectively as healthcare compliance laws. Healthcare compliance laws are broad, can be ambiguous, and are complex, and even minor inadvertent violations can give rise to claims that the relevant law has been violated. Possible sanctions for violation of these healthcare compliance laws include monetary fines, civil and criminal penalties, exclusion from federal and state healthcare programs, including Medicare, Medicaid, Veterans Administration health programs, workers' compensation programs, and TRICARE (the healthcare system administered by or on behalf of the U.S. Department of Defense for uniformed services beneficiaries, including active duty and their dependents and retirees and their dependents), and forfeiture of amounts collected in violation of such

prohibitions. Any government investigation or a finding of a violation of these laws could result in a material, adverse effect on our business, financial condition, and profitability.

Anti-kickback laws and regulations prohibit any knowing and willful offer, payment, solicitation, or receipt of any form of remuneration in return for the referral of an individual or the ordering or recommending of the use of a product or service for which payment may be made by Medicare, Medicaid, or other government-sponsored healthcare programs. We have entered into consulting agreements, speaker agreements, research agreements, and product development agreements with healthcare professionals, including some who may order our products or make decisions to use them. While these transactions were structured with the intention of complying with all applicable laws, including state anti-referral laws and other applicable anti-kickback laws, it is possible that regulatory or enforcement agencies or courts may in the future view these transactions as prohibited arrangements that must be restructured or for which we would be subject to other significant civil or criminal penalties. We have also adopted the AdvaMed Code of Conduct into our Code of Business Conduct, which governs our relationships with healthcare professionals, including our payment of travel and lodging expenses, research and educational grant procedures, and sponsorship of third-party conferences. In addition, we have conducted training sessions on these principles. There can be no assurance, however, that regulatory or enforcement authorities will view these arrangements as being in compliance with applicable laws or that one or more of our employees or agents will not disregard the rules we have established. Because our strategy relies on the involvement of healthcare professionals who consult with us on the design of our products, perform clinical research on our behalf, or educate the market about the efficacy and uses of our products, we could be materially impacted if regulatory or enforcement agencies or courts interpret our financial relationships with healthcare professionals, who refer or order our products, to be in violation of applicable laws and determine that we would be unable to achieve compliance with such applicable laws. This could harm our reputation and the reputations of the healthcare professionals we engage to provide services on our behalf. In addition, the cost of noncompliance with these laws could be substantial since we could be subject to monetary fines and civil or criminal penalties, and we could also be excluded from federally funded healthcare programs, including Medicare and Medicaid, for noncompliance.

The Federal False Claims Act (“FCA”) imposes civil liability on any person or entity that submits, or causes the submission of, a false or fraudulent claim to the U.S. Government. Damages under the FCA can be significant and consist of the imposition of fines and penalties. The FCA also allows a private individual or entity with knowledge of past or present fraud against the federal government to sue on behalf of the government to recover the civil penalties and treble damages. The U.S. Department of Justice (“DOJ”) on behalf of the government has previously alleged that the marketing and promotional practices of pharmaceutical and medical device manufacturers, including the off-label promotion of products or the payment of prohibited kickbacks to doctors, violated the FCA, resulting in the submission of improper claims to federal and state healthcare entitlement programs such as Medicaid. In certain cases, manufacturers have entered into criminal and civil settlements with the federal government under which they entered into plea agreements, paid substantial monetary amounts, and entered into corporate integrity agreements that require, among other things, substantial reporting, and remedial actions going forward.

The Physician Payments Sunshine Act and similar state laws require us to annually report in detail certain payments and “transfer of value” from us to healthcare professionals, such as reimbursement for travel and meal expenses or compensation for services provided such as training, consulting, and research and development. This information is then posted on the website of the Center of Medicare and Medicaid Services (“CMS”). Certain states also prohibit some forms of these payments, require adoption of marketing codes of conduct, and regulate our relationships with physicians and other referral sources.

The scope and enforcement of all of these laws is uncertain and subject to rapid change, especially in light of the scarcity of applicable precedent and regulations. There can be no assurance that federal or state regulatory or enforcement authorities will not investigate or challenge our current or future activities under these laws. Any investigation or challenge could have a material, adverse effect on our business, financial condition, and profitability. Any state or federal regulatory or enforcement review of us, regardless of the outcome, would be costly and time consuming. Additionally, we cannot predict the impact of any changes in or interpretations of these laws, whether these changes will be retroactive or will have effect on a going-forward basis only.

Healthcare policy changes, including U.S. healthcare reform legislation signed in 2010, may have a material, adverse effect on us.

In response to perceived increases in healthcare costs in recent years, there have been and continue to be proposals by the federal government, state governments, regulators, and third-party payors to control these costs and, more generally, to reform the U.S. healthcare system. Some of these proposals could limit the prices we are able to charge for our products or the amounts of reimbursement available for our products and could limit the acceptance and availability of our products. The adoption of some or all of these proposals could have a material, adverse effect on our financial condition and profitability.

The Patient Protection and Affordable Care Act ("ACA") and the Health Care and Education Affordability Reconciliation Act of 2010 imposed significant new taxes on medical device makers in the form of a 2.3 percent excise tax on all U.S. medical device sales that commenced in January 2013. While this tax was suspended for 2016 and 2017, and just recently suspended again for

2018 and 2019, and while efforts are being continued to repeal or delay this tax further, there is no guarantee that the excise tax will not be reinstated or that the underlying legislation might not be repealed or replaced.

Efforts to repeal and replace the ACA have been ongoing since the 2016 election, but it is unclear if these efforts will be successful. On January 20, 2017, President Trump issued an executive order titled "Minimizing the Economic Burden of the Patient Protection and Affordable Care Act Pending Repeal." In addition, as part of the Tax Act, the "individual mandate," which required individuals to purchase insurance, was repealed. The impact of the executive order and the repeal of the individual mandate, as well as the future of the ACA itself, remain unclear. There are many programs and requirements for which the details have not yet been fully established or the consequences are not fully understood. These proposals may affect aspects of our business. We cannot predict what further reform proposals, if any, will be adopted, when they will be adopted, or what impact they may have on us. Any changes that lower reimbursement for our products or reduce medical procedure volumes, however, could adversely affect our business and profitability.

Our operating results may fluctuate significantly on a quarterly or annual basis as a result of a variety of factors, many of which are outside our control.

Fluctuations in our quarterly and annual financial results have resulted and will continue to result from numerous factors, including:

- Changes in demand for the products we sell;
- Increased product and price competition, due to the announcement or introduction of new products by our competitors, market conditions, the regulatory landscape, or other factors;
- Changes in the mix of products we sell;
- Availability of materials and supplies, including donated tissue used in preservation services;
- Our pricing strategy with respect to different product lines;
- Strategic actions by us, such as acquisitions of businesses, products, or technologies;
- Effects of domestic and foreign economic conditions and exchange rates on our industry and/or customers;
- The divestiture or discontinuation of a product line or other revenue generating activity;
- The relocation and integration of manufacturing operations and other strategic restructuring;
- Regulatory actions that may necessitate recalls of our products or warning letters that negatively affect the markets for our products;
- Failure of government and private health plans to adequately and timely reimburse the users of our products;
- Costs incurred by us in connection with the termination of contractual and other relationships, including distributorships;
- Our ability to collect outstanding accounts receivable in selected countries outside of the U.S.;
- The expiration or utilization of deferred tax assets such as net operating loss carryforwards;
- Market reception of our new or improved product offerings; and
- The loss of any significant customer, especially in regard to any product that has a limited customer base.

We have based our current and future expense levels largely on our investment plans and estimates of future events, although some of our expense levels are, to a large extent, fixed. We may be unable to adjust spending in a timely manner to compensate for any unexpected revenue shortfall. Accordingly, any significant shortfall in revenue relative to our planned expenditures would have an immediate adverse effect on our business, results of operations, and financial condition. Further, as a strategic response to changes in the competitive environment, we may from time to time make certain pricing, service, or marketing decisions that could have a material, adverse effect on our business, results of operations, and financial condition. Due to the foregoing factors, some of which are not within our control, the price of our common stock may fluctuate substantially. If our quarterly operating results fail to meet or exceed the expectations of securities analysts or investors, our stock price could drop suddenly and significantly. We believe the quarterly comparisons of our financial results are not always meaningful and should not be relied upon as an indication of our future performance.

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

The majority of our foreign product and tissue processing revenues are denominated in Euros and British Pounds and, as such, are sensitive to changes in exchange rates. In addition, a portion of our dollar-denominated product sales are made to customers in other countries who must convert local currencies into U.S. Dollars in order to purchase these products. We also have balances, such as cash, accounts receivable, accounts payable, and accruals that are denominated in foreign currencies. These foreign currency transactions and balances are sensitive to changes in exchange rates. Fluctuations in exchange rates of Euros and British

Pounds or other local currencies in relation to the U.S. Dollar could materially reduce our future revenues as compared to the comparable prior periods. Should this occur, it could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

Our existing insurance coverage may be insufficient, and we may be unable to obtain insurance in the future.

Our products and tissues allegedly have caused, and may in the future cause, injury to patients using our products or tissues, and we have been, and may be, exposed to product and tissue processing liability claims. We maintain claims-made insurance policies to mitigate our financial exposure to product and tissue processing liability claims. Claims-made insurance policies generally cover only those asserted claims and incidents that are reported to the insurance carrier while the policy is in effect. In addition, our product and tissue processing liability insurance policies do not include coverage for any punitive damages. Although we have insurance for product and tissue processing liabilities, securities, property, and general liabilities, it is possible that:

- We could be exposed to product and tissue processing liability claims and security claims greater than the amount that we have insured;
- We may be unable to obtain future insurance policies in an amount sufficient to cover our anticipated claims at a reasonable cost or at all; or
- Because we are not insured against all potential losses, uninsured losses due to natural disasters or other catastrophes could adversely impact our business.

Any product liability claim, with or without merit, could result in an increase in our product insurance rates or our inability to secure coverage on reasonable terms, if at all. Even in the absence of a claim, our insurance rates may rise in the future due to market, industry, or other factors. Any product liability claim, even a meritless or unsuccessful one, would be time-consuming and expensive to defend and could result in the diversion of our management's attention from our business and result in adverse publicity, withdrawal of clinical trial participants, injury to our reputation, and loss of revenue.

If we are unsuccessful in arranging acceptable settlements of future product or tissue processing liability claims or future securities class action or derivative claims, we may not have sufficient insurance coverage and liquid assets to meet these obligations. If we are unable to obtain satisfactory insurance coverage in the future, we may be subject to additional future exposure from product or tissue processing liability or securities claims. Additionally, if one or more claims with respect to which we may become, in the future, a defendant should result in a substantial verdict rendered in favor of the plaintiff(s), such verdict(s) could exceed our available insurance coverage and liquid assets. If we are unable to meet required future cash payments to resolve any outstanding or any future claims, this will materially, adversely affect our financial condition, profitability, and cash flows. Further, although we have an estimated reserve for our unreported product and tissue processing liability claims for which we do expect that we will obtain recovery under our insurance policies, these costs could exceed our current estimates. Finally, our facilities could be materially damaged by tornadoes, flooding, other natural disasters, or catastrophic circumstances, for which we are not fully covered by business interruption and disaster insurance, and, even with such coverage, we could suffer substantial losses in our inventory and operational capacity, along with a potential adverse impact on our customers and opportunity costs for which our insurance would not compensate us.

Any of these events could have a material, adverse impact on our revenues, financial condition, profitability, and cash flows.

If we experience decreasing prices for our goods and services and we are unable to reduce our expenses, our results of operations will suffer.

We may experience decreasing prices for our goods and services due to pricing pressure experienced by our customers from managed care organizations and other third-party payors, increased market power of our customers as the medical device industry consolidates, and increased competition among medical engineering and manufacturing services providers. If the prices for our goods and services decrease and we are unable to reduce our expenses, our results of operations will be adversely affected.

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

We own patents, patent applications, and licenses relating to our technologies, which we believe provide us with important competitive advantages. In addition, we have certain proprietary technologies and methods that we believe provide us with important competitive advantages. We cannot be certain that our pending patent applications will issue as patents or that no one will challenge the validity or enforceability of any patent that we own or license.

We have obtained licenses from third parties for certain patents and patent application rights, including rights related to our PerClot technologies. These licenses allow us to use intellectual property rights owned by or licensed to these third parties. We do

not control the maintenance, prosecution, enforcement, or strategy for many of these patents or patent application rights and as such are dependent in part on the owners of the intellectual property rights to maintain their viability. Their failure to do so could significantly impair our ability to exploit those technologies.

Furthermore, competitors may independently develop similar technologies, or duplicate our technologies, or design around the patented aspects of such technologies. In addition, our technologies, products, or services could infringe patents or other rights owned by others, or others could infringe our patents. If we become involved in a patent dispute, the costs of the dispute could be expensive, and if we were to lose or decide to settle the dispute, the amounts or effects of the settlement or award by a tribunal could be costly. For example, in 2015 we resolved a patent infringement case with Medafor related to technology we licensed from SMI. The settlement of that patent infringement case resulted in the continuation of an injunction prohibiting us from marketing, selling, or distributing PerClot in the U.S. until February 8, 2019. We incurred substantial attorneys' fees and costs in pursuing and defending that case, and only a portion of those fees and costs are subject to recovery through indemnification. Should we be forced to sue a potential infringer, if we are unsuccessful in prohibiting infringements of our patents, should the validity of our patents be successfully challenged by others, or if we are sued by another party for alleged infringement (whether we ultimately prevail or not), our revenues, financial condition, profitability, and cash flows could be materially, adversely affected.

We may be subject to damages resulting from claims that we, our employees, or our independent contractors have wrongfully used or disclosed alleged trade secrets of others.

Some of our employees were previously employed at other medical device or tissue companies. We may also hire additional employees who are currently employed at other medical device or tissue companies, including our competitors. Additionally, consultants or other independent agents with which we may contract may be or have been in a contractual arrangement with one or more of our competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or independent contractors have used or disclosed any party's trade secrets or other proprietary information. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to us. If we fail to defend such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key personnel or their work product could hamper or prevent our ability to market existing or new products, which could severely harm our business.

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

In recent years, shareholder activists have become involved in numerous public companies. Shareholder activists frequently propose to involve themselves in the governance, strategic direction, and operations of the company. We may in the future become subject to such shareholder activism and demands. Such demands may disrupt our business and divert the attention of our management and employees, and any perceived uncertainties as to our future direction resulting from such a situation could result in the loss of potential business opportunities, be exploited by our competitors, cause concern to our current or potential customers, and make it more difficult to attract and retain qualified personnel and business partners, all of which could adversely affect our business. In addition, actions of activist shareholders may cause significant fluctuations in our stock price based on temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business.

Risks Related to Ownership of our Common Stock

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

In December 2015 our Board of Directors discontinued dividend payments on our common stock for the foreseeable future. If we do not pay cash dividends, our shareholders may receive a return on their investment in our common stock only if the market price of our common stock has increased when they sell shares of our common stock that they own. Future dividends, if any, will be authorized by our Board of Directors and declared by us based upon a variety of factors deemed relevant by our directors, including, among other things, our financial condition, liquidity, earnings projections, and business prospects. In addition, restrictions in our credit facility limit our ability to pay future dividends. We can provide no assurance of our ability to pay cash dividends in the future.

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

We are subject to the Florida affiliated transactions statute, which generally requires approval by the disinterested directors or supermajority approval by shareholders for "affiliated transactions" between a corporation and an "interested stockholder." Additionally our organizational documents contain provisions restricting persons who may call shareholder meetings and allowing

the Board of Directors to fill vacancies and fix the number of directors. These provisions of Florida law and our articles of incorporation and bylaws could prevent attempts by shareholders to remove current management, prohibit or delay mergers or other changes of control transactions, and discourage attempts by other companies to acquire us, even if such a transaction would be beneficial to our shareholders.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

(c) The following table provides information about purchases by us during the quarter ended March 31, 2018 of equity securities that are registered by us pursuant to Section 12 of the Securities Exchange Act of 1934:

Period	Total Number of Common Shares and Common Stock Units Purchased	Average Price Paid per Common Share	Total Number of Common Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Common Shares That May Yet Be Purchased Under the Plans or Programs
01/01/18 - 01/31/18	88,030	$ 19.45	--	$ --
02/01/18 - 02/28/18	59,845	18.07	--	--
03/01/18 - 03/31/18	30,510	19.36	--	--
Total	178,385	18.97	--	

The common shares purchased during the quarter ended March 31, 2018 were tendered to us in payment of taxes on stock compensation and were not part of a publicly announced plan or program.

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

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

The exhibit index can be found below.

Exhibit Number	Description
2.1	Agreement and Plan of Merger, dated as of December 22, 2015, by and among CryoLife, Inc., On-X Life Technologies Holdings, Inc., Cast Acquisition Corporation, Fortis Advisors LLC and each of the security holders who becomes a party thereto. (Incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed January 25, 2016.)
2.2	Securities Purchase Agreement, dated as of October 10, 2017, by and among CryoLife, Inc., CryoLife Germany HoldCo GmbH, Jolly Buyer Acquisition GmbH, JOTEC AG, each of the security holders identified therein, and Lars Sunnanväder as the representative of such security holders. (Incorporated herein by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed October 11, 2017.)
3.1	Amended and Restated Articles of Incorporation of CryoLife, Inc. (Incorporated herein by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed November 23, 2015.)
3.2	Amended and Restated By-Laws of CryoLife, Inc. (Incorporated herein by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed February 22, 2018.)
4.1	Form of Certificate for our Common Stock. (Incorporated herein by reference to Exhibit 4.2 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1997.)
4.2	Form of Indenture for Senior Debt Securities (Incorporated herein by reference to Exhibit 4.7 to the Registrant's Registration Statement on Form S-3 filed August 5, 2015 (No. 333-206119).)
4.3	Form of Subordinated Indenture for Subordinated Debt Securities (Incorporated herein by reference to Exhibit 4.9 to the Registrant's Registration Statement on Form S-3 filed August 5, 2015 (No. 333-206119).)
10.1†	CryoLife, Inc. 2009 Employee Stock Incentive Plan. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009.)
10.1(a)†	Amended and Restated CryoLife, Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Exhibit 99.1 to the Registrant's Form S-8 filed June 22, 2012.)
10.1(b)†	First Amendment to the Amended and Restated CryoLife, Inc. 2009 Stock Incentive Plan, dated July 24, 2012. (Incorporated herein by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012.)
10.1(c)†	Second Amended and Restated CryoLife Inc. 2009 Stock Incentive Plan. (Incorporated herein by reference to Appendix B to the Registrant's Definitive Proxy Statement filed April 8, 2014.)
10.1(d)†	Form of Non-Qualified Stock Option Grant Agreement pursuant to the CryoLife, Inc. 2009 Employee Stock Incentive Plan entered into with each Named Executive Officer. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010.)
10.2†	CryoLife, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q filed July 28, 2015.)
10.2(a)†	First Amendment to CryoLife, Inc. Equity and Cash Incentive Plan. (Incorporated herein by reference to Appendix B to the Registrant's Definitive Proxy Statement filed March 8, 2017.)
10.2(b)†*	Form of 2018 Performance Share Award Agreement pursuant to the CryoLife, Inc. Equity and Cash Incentive Plan.
10.2(c)†*	Form of 2018 Officer Restricted Stock Award Agreement pursuant to the CryoLife, Inc. Equity and Cash Incentive Plan.
10.2(d)†*	Form of 2018 Non-Employee Director Restricted Stock Award Agreement pursuant to the CryoLife, Inc. Equity and Cash Incentive Plan.
10.2(e)†*	Form of 2018 Grant of Non-Qualified Stock Option pursuant to the CryoLife, Inc. Equity and Cash Incentive Plan.

Exhibit Number	Description
10.3	CryoLife, Inc. Employee Stock Purchase Plan. (Incorporated herein by reference to Appendix A to the Registrant's Definitive Proxy Statement filed April 10, 1996.)
10.3(a)	First Amendment to the CryoLife, Inc. Employee Stock Purchase Plan. (Incorporated herein by reference to the Registrant's Definitive Proxy Statement filed May 20, 2010.)
10.4†	CryoLife, Inc. Executive Deferred Compensation Plan. (Incorporated herein by reference to Exhibit 10.52 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2010.)
10.5†	Summary of 2017 Compensation Arrangements with Non-Employee Directors. (Incorporated by reference to Exhibit 10.8(b) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2017.)
10.6†	Employment Agreement between CryoLife, Inc. and J. Patrick Mackin, dated as of July 7, 2014. (Incorporated herein by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed July 11, 2014.)
10.7†	Stock Option Grant Agreement by and between CryoLife, Inc. and J. Patrick Mackin, dated September 2, 2014. (Incorporated herein by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed October 28, 2014.)
10.8†	Form of Indemnification Agreement for Non-Employee Directors and Certain Officers. (Incorporated herein by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed March 23, 2017.)
10.9†*	Change of Control Severance Agreement between CryoLife, Inc. and John E. Davis, dated November 21, 2016.
10.10†	Change of Control Severance Agreement between CryoLife, Inc. and Jean F. Holloway, dated November 21, 2016 (Incorporated herein by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K filed November 22, 2016.)
10.11†	Change of Control Severance Agreement between CryoLife, Inc. and D. Ashley Lee, dated November 21, 2016 (Incorporated herein by reference to Exhibit 10.4 to Registrant's Current Report on Form 8-K filed November 22, 2016.)
10.12†*	Change of Control Severance Agreement between CryoLife, Inc. and James McDermid, dated November 21, 2016.
10.13	Lease Agreement between CryoLife, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to Amli Land Development—I Limited Partnership, dated April 18, 1995. (Incorporated herein by reference to Exhibit 10.16 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2007.)
10.13 (a)	First Amendment to Lease Agreement between CryoLife, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to Amli Land Development—I Limited Partnership, dated August 6, 1999. (Incorporated herein by reference to Exhibit 10.16(a) to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1999.)
10.13 (b)	Restatement and Amendment to Funding Agreement between CryoLife, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to Amli Land Development—I Limited Partnership, dated August 6, 1999. (Incorporated herein by reference to Exhibit 10.16(b) to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2000.)
10.13 (c)	Second Amendment to Lease Agreement between CryoLife, Inc. and The H.N. and Frances C. Berger Foundation, successor in interest to P&L Barrett, L.P., dated May 10, 2010. (Incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2010.)
10.14*+	Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated March 2, 2009.
10.14 (a)*+	First Amendment to Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated November 15, 2012
10.14 (b)*+	Second Amendment to Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated January 29, 2015.
10.14 (c)*+	Third Amendment to Lease Agreement between On-X Life Technologies, Inc. and 1300 E. Anderson Lane, Ltd., dated January 29, 2015.

Exhibit Number	Description
10.15*	Lease Agreement between JOTEC GmbH and Lars Sunnanväder for Lotzenäcker 23, dated October 27, 2017 and November 2, 2017.
10.15(a)*	First Amendment to Lease Agreement between JOTEC GmbH and Lars Sunnanväder for Lotzenäcker 23, dated December 28, 2017 and January 1, 2018.
10.16*+	Lease Agreement between JOTEC GmbH and Lars Sunnanväder for Lotzenäcker 25, dated October 27, 2017 and November 2, 2017
10.17	Credit and Guaranty Agreement, dated as of December 1, 2017, by and among CryoLife, Inc., CryoLife International, Inc., On-X Life Technologies Holdings, Inc., On-X Life Technologies, Inc., AuraZyme Pharmaceuticals, Inc., the financial institutions party thereto from time to time as lenders, and Deutsche Bank AG New York Branch, as administrative agent and collateral agent. (Incorporated herein by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed December 1, 2017.)
14.1	Form of Code of Conduct, as amended (Incorporated herein by reference to Exhibit 14.1 to the Registrant's Current Report on Form 8-K filed November 23, 2015.)
21.1	Subsidiaries of CryoLife, Inc. (Incorporated by reference to Exhibit 21.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2017.)
31.1*	Certification by J. Patrick Mackin pursuant to section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification by D. Ashley Lee pursuant to section 302 of the Sarbanes-Oxley Act of 2002.
32**	Certification Pursuant To 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 Of The Sarbanes-Oxley Act Of 2002
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith.

** Furnished herewith.

† Indicates management contract or compensatory plan or arrangement.

\+ The Registrant has requested confidential treatment for certain portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

++ The Registrant has been granted confidential treatment for certain portions of this exhibit pursuant to Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

SIGNATURES

Pursuant to the requirements 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.

CRYOLIFE, INC.
(Registrant)

/s/ J. PATRICK MACKIN

J. PATRICK MACKIN
Chairman, President, and
Chief Executive Officer
(Principal Executive Officer)

/s/ D. ASHLEY LEE

D. ASHLEY LEE
Executive Vice President,
Chief Operating Officer, and
Chief Financial Officer
(Principal Financial and
Accounting Officer)

May 4, 2018

DATE

Name:
Total No. of Units:

CRYOLIFE, INC.
EQUITY AND CASH INCENTIVE PLAN
PERFORMANCE SHARE AWARD AGREEMENT

Unless otherwise defined herein, the terms defined in the CryoLife, Inc. Equity and Cash Incentive Plan (the "Plan') will have the same defined meanings in this Performance Share Award Agreement, including the Notice of Stock Unit Grant (the "Notice of Grant") and the Terms and Conditions of Performance Share Award, attached hereto as Exhibit A, together the ("Award Agreement").

NOTICE OF PERFORMANCE STOCK UNIT GRANT

The undersigned Participant has been granted a Performance Share Unit, subject to the terms and conditions of the Plan and this Award Agreement, as follows:

Grant Date:

Total Number of Units of Stock Unit Award:

Vesting Schedule:

Performance Stock Units	**Vest Date**

The Award will vest, and common stock ("Shares") of CryoLife, Inc. (the "Company") will be issued, based on a combination of (i) attaining specified levels of 2018 adjusted EBITDA and (ii) the satisfaction of time-based service vesting requirements, as more specifically described below. The weighting of the performance goals (i.e., the percentage of the Target Number of Performance Shares eligible to vest based on the achievement of each goal) shall be as follows: EBITDA component (100%) The Company calculates adjusted EBITDA as GAAP Net Income before interest, taxes, depreciation and amortization, as further adjusted by removing the impact of the following: stock-based compensation; R&D (excluding salaries and related expense); grant revenue; litigation expense or revenue; acquisition, license, and business development expense; integration costs (including any litigation costs or revenue related to assumed litigation); unbudgeted executive severance expenses and on-boarding costs; and GAAP other income or expense.

Adjusted EBITDA Vesting Schedule

If adjusted EBITDA of at least $55,200,000 but less than $58,469,000 is achieved, the Company will fix the number of Shares that may be issued pursuant to the adjusted EBITDA component of the Award at 60% of the target number of Shares related to adjusted EBITDA; 50% of the fixed Shares will vest on the anniversary of the Grant Date, 25% of the fixed Shares will vest on the second anniversary of the Grant Date, and the final 25% of the fixed Shares will vest on the third anniversary of Grant Date.

If adjusted EBITDA of at least $58,470,000 but less than $62,359,000 is achieved, the Company will fix the number of Shares that may be issued pursuant to the adjusted EBITDA component of the Award at 80% of the target number of Shares related to adjusted EBITDA; 50% of the fixed Shares will vest on the anniversary of the Grant Date, 25% of the fixed Shares will vest on the second anniversary of the Grant Date, and the final 25% of the fixed Shares will vest on the third anniversary of the Grant Date.

If adjusted EBITDA of at least $62,360,000 but less than $67,565,000 is achieved, the Company will fix the number of Shares that may be issued pursuant to the adjusted EBITDA component of the Award at 100% of the target number of Shares related to adjusted EBITDA; 50% of the fixed Shares will vest on the anniversary of the Grant Date, 25% of the fixed Shares will vest on the second anniversary of the Grant Date, and the final 25% of the fixed Shares will vest on the third anniversary of the Grant Date.

If adjusted EBITDA of $67,565,000 or more is achieved, the fixed number of Shares earned will be calculated on a sliding scale; the scale will begin with adjusted EBITDA of $67,565,000 (or 104% of the target EBITDA of $64,966,000) resulting in 110% of the target number of Shares related to adjusted EBITDA being fixed, and the scale will end with adjusted EBITDA of $75,361,000 (or 116% of the target EBITDA of $64,966,000), resulting in 150% of the target number of Shares related to adjusted EBITDA being fixed; accordingly, the Company will fix the number of Shares subject to the adjusted EBITDA component of the Award as follows:

- actual adjusted EBITDA divided by target adjusted EBITDA of $64,966,000,
- minus 1.04,
- times 3.333333…,
- plus 1.10,
- times the target number of Shares,

up to a maximum number of Shares equal to 150% of the Target Number of Shares. 50% of the fixed Shares will vest on the anniversary of the Grant Date, 25% of the fixed Shares will vest on the second anniversary date of the Grant Date, and the final 25% will vest on the third anniversary of the Grant Date.

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

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

GRANTED BY:

CRYOLIFE, INC.

//James P. Mackin//
President and CEO

GRANTED TO:

_____
_____
_____
_____
_____

EXHIBIT A

TERMS AND CONDITIONS OF PERFORMANCE SHARE AWARD

1. Effect of Termination of Service. Participant must be an employee of the Company, CryoLife International, Inc., or another eligible employer approved by the Company's Compensation Committee (the "Committee") of its Board of Directors (each, an "Eligible Employer") on the applicable vesting date to be entitled to the vesting of the Award on such date. If Participant ceases to be an employee of an Eligible Employer for any reason (including, without limitation, by reason of death, disability, or retirement), then the portion of the Award that has not vested as of the date of termination of service shall automatically be forfeited and cancelled as of the date of such termination of service, unless the Committee waives this employment requirement or accelerates the vesting as permitted by the Plan.

2. The Company's Obligation to Pay. Each Performance Share represents the right to receive one (1) share of Company common stock at the target level, and subject to adjustment up or down based upon the Company's adjusted EBITDA performance for 2018 as further described in the Notice of Grant, on the date the Performance Share vests in accordance with the vesting schedules described in the Notice of Grant (or at such later time as indicated in this Award Agreement or the Plan). Unless and until the Award vests, Participant will have no right to payment of Shares with respect to any such Performance Shares. Prior to actual payment of any Shares with respect to any Performance Shares, such Performance Shares will represent an unfunded, unsecured obligation of the Company, payable (if at all) only from the general assets of the Company. The number of Shares subject to the Award, i.e., the relevant percentage of target shares that will be issued if time vesting requirements are satisfied, will be determined on and as of the date of filing of the Company's Form 10-K for fiscal 2018 with the Securities and Exchange Commission. Shares will be rounded down to the nearest whole number. No fractional Shares will be issued. **Notwithstanding anything to the contrary contained herein, at any time prior to the first anniversary of the Grant Date, the Committee, in its sole discretion, may reduce the number of Shares to be issued hereunder, but in no event may the number of Shares to be issued be reduced below the target number of Shares. Participant will receive written notice of any such reduction.**

3. Time of Payment.

a. Payment After Vesting. Except as otherwise provided in the Plan, any Performance Shares that vest in accordance with this Award Agreement shall be paid to Participant (or in the event of Participant's death, to Participant's estate), in whole Shares within thirty (30) days after the date on which such Performance Shares vest or as soon as administratively practicable thereafter, but in no event later than the date that is two and one-half months following the later of (i) the end of the Company's taxable year; or (ii) the end of Participant's taxable year that includes the vesting date. Notwithstanding anything in the Plan or this Award Agreement to the contrary, payment to Participant of Shares upon the vesting of a Performance Share shall be delayed to the extent required by Section 409A of the Internal Revenue of 1986, as amended (the "Code").

b. Accelerated Vesting Upon a Change of Control. If the vesting of the balance, or some lesser portion of the balance, of the Performance Shares subject to this Award Agreement is accelerated upon a Change of Control, as such term is defined in the Plan, of the Company, and such Change of Control is not a "change in the ownership or effective control" or "change in the ownership of a substantial portion of the assets" of the Company within the meaning of Section 1.409A-3(i)(5) of the United States Treasury Regulations, then such accelerated Performance Shares shall not be paid until the applicable vesting date of such Performance Shares, as set forth on the Notice of Grant, or if earlier, the date of Participant's death, disability or "separation from service" within the meaning of Section 409A of the Code from the Company (a "Separation from Service"); *provided, however,* that if the payment pursuant to this Section (b) is to be made upon Participant's Separation from Service and as of the

date of Participant's Separation from Service Participant is a "specified employee" within the meaning of Section 409A of the Code then payment of the Shares with respect to the Performance Shares subject to this Section (b) shall not be made until the date that is six (6) months and one day following the date of Participant's Separation from Service if earlier payment would result in the imposition of the additional tax under Section 409A of the Code.

4. Rights with Respect to Performance Shares Prior to Vesting. Participant may not transfer or otherwise assign the Award or the Shares subject to the Award prior to vesting. As this Award vests, Participant may receive certificates representing the vested portion or the Shares to be issued or the Shares may be issued in uncertificated form. Prior to issuance of Shares, Participant is not entitled to any rights as a shareholder with respect to the Shares underlying this Award. As a result, subject to the provisions of the Plan, Participant will have no rights to vote such Shares or to receive dividends or other distributions, if any, payable with respect to such Shares after the Grant Date but prior to the issuance of the Shares subsequent to vesting.

5. Withholding of Taxes. Notwithstanding any contrary provision of this Award Agreement, no Shares will be issued to Participant unless and until satisfactory arrangements (as determined by the Committee) have been made by Participant with respect to the payment of federal, state, local or foreign income, employment and other taxes which the Committee determines must be withheld ("Tax Related Items") with respect to the Shares so issuable. The Committee hereby allows Participant, pursuant to such procedures as the Committee may specify from time to time, to satisfy such Tax Related Items, in whole or in part (without limitation) by one or more of the following: (a) paying cash; or (b) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value, as defined in the Plan, equal to the amount of the Tax Related Items required to be withheld. If the obligation for Tax Related Items is satisfied by withholding a number of Shares as described above, Participant will be deemed to have been issued the full number of Shares subject to the vested Performance Shares, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax Related Items due as a result of any aspect of the Award. If Participant fails to make satisfactory arrangements for the payment of the Tax Related Items at the time any portion of the Award is scheduled to vest, Participant will permanently forfeit such portion of the Award and no Shares will be issued to Participant pursuant to them.

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

To the Company:	CryoLife, Inc. 1655 Roberts Blvd., NW Kennesaw, GA 30144 Attention: Corporate Secretary
To Participant:	The address set forth in the Notice of Grant.

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

8. Section 409A. This Award Agreement and the Award granted hereunder are intended to comply with, or otherwise be exempt from, Section 409A of the Code. This Award Agreement and the Award shall be administered, interpreted and construed in a manner consistent with such Code section. Should any provision of this Award Agreement or the Award be found not to comply with, or otherwise be exempt from, the provisions of Section 409A of the Code, it shall be modified and given effect, in the sole discretion of the Committee and without requiring Participant's consent (notwithstanding any other provisions hereof), in such manner as the Committee determines to be necessary or appropriate to comply with, or effectuate an exemption from, Section 409A of the Code. Each amount payable under this Award Agreement as a payment upon vesting of a Performance Share is designated as a separate identified payment for purposes of Section 409A of the Code.

Name:
Total No. of Units:

CRYOLIFE, INC.
EQUITY AND CASH INCENTIVE PLAN
RESTRICTED STOCK AWARD AGREEMENT

Unless otherwise defined herein, the terms defined in the CryoLife, Inc. Equity and Cash Incentive Plan (the "Plan') will have the same defined meanings in this Restricted Stock Award Agreement, including the Notice of Restricted Stock Grant (the "Notice of Grant") and the Terms and Conditions of Restricted Stock Award, attached hereto as Exhibit A, together the ("Award Agreement").

NOTICE OF RESTRICTED STOCK AWARD GRANT

The undersigned Participant has been granted a Restricted Stock Award, subject to the terms and conditions of the Plan and this Award Agreement, as follows:

Grant Date:

Total Number of Shares of Stock Award:

Vesting Schedule:

Restricted Stock Units	**Vest Date**

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

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

GRANTED BY:

CRYOLIFE, INC.

//James P. Mackin//
President and CEO

GRANTED TO:

EXHIBIT A

TERMS AND CONDITIONS OF RESTRICTED STOCK AWARD

1. Effect of Termination of Service. Participant must be an employee of the Company, CryoLife, Inc., or another eligible employer approved by the Company's Compensation Committee (the "Committee") of its Board of Directors (each, an "Eligible Employer") on the applicable vesting date to be entitled to the vesting of the Award on such date. If Participant ceases to be an employee of an Eligible Employer for any reason (including, without limitation, by reason of death, disability, or retirement), then the portion of the Award that has not vested as of the date of termination of service shall automatically be forfeited and cancelled as of the date of such termination of service, unless the Committee waives this employment requirement or accelerates the vesting as permitted by the Plan.

2. Book Entry. Shares of Common Stock (the "Shares") to be issued pursuant to the Award shall be issued in restricted book entry form in Participant's name and shall be held by the Company's transfer agent until the Award is vested or forfeited as provided herein. Upon vesting of the Award, the restrictions described in the following section will be lifted and the Shares will be transferred into Participant's account unencumbered.

3. Rights with Respect to Award Prior to Vesting. Participant may not transfer the Award or the Shares subject to the Award prior to vesting. Once this Award vests, the restrictions described in the following section will be lifted and the Shares will be transferred into Participant's account unencumbered. Prior to vesting, Participant is entitled to all other rights as a shareholder with respect to the Shares underlying the Award, including the right to vote such Shares and to receive dividends and other distributions, if any, payable with respect to such Shares after the Grant Date.

4. Withholding. Notwithstanding any contrary provision of this Award Agreement, whenever the Company proposes, or is required, to distribute Shares to Participant or pay Participant dividends with respect to the unvested portion of the Award, the Company may either: (a) require Participant to pay to the Company an amount sufficient to satisfy any local, state, federal and foreign income tax, employment tax and insurance which the Committee determines should be withheld ("Tax Related Items") prior to the delivery of any payment or distribution of Stock owing to Participant pursuant to the Award; or, in its discretion, (b) reduce the number of Shares to be delivered to Participant by that number of Shares of the Award sufficient to satisfy all or a portion of such Tax Related Items, based on the Fair Market Value of the Shares subject to the Award as determined under the Plan. If the obligation for Tax Related Items is satisfied by withholding a number of Shares as described above, Participant will be deemed to have been issued the full number of Shares subject to the vested Award, notwithstanding that a number of Shares are withheld solely for the purpose of paying the Tax Related Items due as a result of any aspect of the Award.

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

To the Company:	CryoLife, Inc. 1655 Roberts Blvd., NW Kennesaw, GA 30144 Attention: Corporate Secretary
To Participant:	The address set forth in the Notice of Grant.

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

Name:
Total No. of Units:

CRYOLIFE RESTRICTED STOCK AWARD AGREEMENT

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

Grant Date:
Total Number of Shares of Stock Award:

Vesting Schedule:

Restricted Stock Awards	Vest Date

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

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

GRANTED BY:

CRYOLIFE, INC.

//D. Ashley Lee//
CFO, COO

GRANTED TO:

_____
_____
_____
_____
_____

ADDITIONAL TERMS AND CONDITIONS OF YOUR RESTRICTED STOCK AWARD

EFFECT OF TERMINATION OF SERVICE. You must be a member of the CryoLife Board of Directors on the applicable vesting date to be entitled to the vesting of your Stock Award on such date. Notwithstanding the foregoing, if you cease to be a member of the CryoLife Board of Directors as a result of your death or disability or because you have served out your full term but are not standing for re-election at the end thereof, your Stock Award shall immediately become fully vested on the date you cease to be a member of the Board. If you cease to be a member of the CryoLife Board of Directors for any other reason, and your Stock Award has not vested as of the date of termination of Board service, your Stock Award shall automatically be forfeited and cancelled as of the date of such termination of Board service.

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

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

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

To CryoLife:	CryoLife, Inc. 1655 Roberts Blvd., NW Kennesaw, GA 30144 Attention: Assistant Secretary
To you:	The address set forth in the Agreement

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

CryoLife, Inc.
1655 Roberts Boulevard N.W.
Kennesaw, Georgia 30144

Date of Grant:

Name:
Address:

Re: **Grant of Non-Qualified Stock Option**

Dear :

This letter sets forth the agreement (the "Agreement") between you ("Employee") and CryoLife, Inc., a Florida corporation (the "Company"), regarding your option to acquire shares of the Company's Common Stock.

1. Grant of Option. Subject to the terms set forth below, the Company hereby grants to Employee the right, privilege, and option to purchase up to %%TOTAL_SHARES_GRANTED%-% (of Common Stock the "Option Shares") at the purchase price of %%OPTION_PRICE%-% per share. The date of grant ("Grant Date") of the option is %%OPTION_DATE,'MM/DD/YYYY'%-%. This option is intended to be and shall be treated as a "Non-Qualified Stock Option," which is an option that is not intended to be an "incentive stock option" pursuant to Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"). This option is granted pursuant to the CryoLife, Inc. Equity and Cash Incentive Plan (the "Plan").

2. Time of Exercise of Option. Prior to its termination as set forth in Section 5 below, this option shall vest, and the Employee may exercise the option granted herein on the following dates, or thereafter, provided the option is exercised prior to its termination:

Vest Date	Number of Option Shares Exercisable	Percentage of Option Shares Exercisable	Option Expiration Date
	%	33 1/3%	— %
		33 1/3%	— %
		33 1/3%	— %

3. Method of Exercise. The option shall be exercised by written notice directed to the Compensation Committee (the "Committee"), at the Company's principal executive office, and except as set forth below, must be accompanied by payment of the option price for the number of Option Shares purchased in accordance with the Plan's requirements. The payment for the number of Option Shares purchased may be payable in cash or by tendering unrestricted shares of the Company's common stock in accordance with the Plan. To the extent permitted by applicable law, you may elect to pay for the number of Option Shares purchased by irrevocably authorizing a third party to sell shares of the Company's common stock acquired upon exercise of the Option Shares and remitting to the Company a

sufficient portion of the sale proceeds as payment of the entire option price for the number of Option Shares purchased, including any tax withholding resulting from such exercise. The Company shall make delivery of such shares in accordance with the Plan, provided that if any law or regulation requires the Company to take any action with respect to the shares specified in such notice before the issuance thereof, then the date of delivery of such shares shall be extended for the period necessary to take such action.

4. The Plan. The Plan, as amended from time to time by the Board of Directors of the Company, is hereby incorporated in this Agreement, and to the extent that anything in this Agreement is inconsistent with the Plan, the terms of the Plan shall control. Employee acknowledges that the Company has provided a copy of the Plan to Employee.

5. Termination of Option. Except as herein otherwise stated, the option, to the extent not previously exercised, shall terminate in accordance with the Plan and upon the first to occur of the following events:

(a) Disability. The expiration of 36 months after the date on which Employee's employment by the Company is terminated, if such termination be by reason of Employee's permanent and total disability, provided, however, that (i) the option shall be exercisable only to the extent that Employee had the right to exercise the option at the time of termination, and (ii) if the Employee dies within such 36 month period, any unexercised option held by such Employee shall thereafter be exercisable in accordance with the provisions of, and shall terminate upon the first to occur of the events described in, Sections 5(b) and (d);

(b) Death. In the event of Employee's death while in the employ of the Company, the expiration of 12 months following the date of his or her death, provided that the option shall be exercisable following the Employee's death only to the extent that Employee had the right to exercise the option at the time of his or her death.

(c) Retirement. In the event Employee's employment with the Company terminates by reason of normal or early retirement, any option held by such Employee may be exercised by the Employee for a period of 36 months from the date of such termination; provided, however, that if the Employee dies within such 36-month period, any unexercised option held by Employee shall thereafter be exercisable in accordance with the provisions of, and shall terminate upon the first to occur of the events described in, Section 5(b) and (d); or

(d) Other. Upon the earlier to occur of (i) 84 months following the Grant Date, or (ii) 90 days following termination of Employee's employment by the Company (except if such termination be by reason of death, disability, or normal or early retirement). It is in the Compensation Committee's sole discretion to determine whether the Employee's employment with the Company terminates by reason of disability, normal or early retirement.

Employee shall be deemed to be employed by the Company if he or she is employed by the Company or any of its subsidiaries. Notwithstanding the above, in no event may the option be exercised after 84 months following the Grant Date.

6. Reclassification, Consolidation, or Merger. The number of Option Shares may be adjusted in accordance with the Plan if certain events such as merger, reorganization, consolidation, recapitalization, stock dividends, stock splits, or other changes in the Company's corporate structure affecting its Common Stock occur.

7. Rights Prior to Exercise of Option. This option is not transferrable by Employee, except by will or by the laws of descent and distribution or as otherwise set forth in the Plan, and during Employee's lifetime shall be exercisable only by Employee. This option shall confer no rights to the holder hereof to act as stockholder with respect to any of the option Shares until payment of the option price and delivery of a share certificate has been made.

8. Employee's Representations and Warranties. By execution of this Agreement, Employee represents and warrants to the Company as follows:

(a) The entire legal and beneficial interest of the option and the Option Shares are for and will be held for the account of the Employee only and neither in whole nor in part for any other person.

(b) Employee resides at the following address:

(c) Employee is familiar with the Company and its plans, operations, and financial condition. Prior to the acceptance of this option, Employee has received all information as he or she deems necessary and appropriate to enable an evaluation of the financial risk inherent in accepting the option and has received satisfactory and complete information concerning the business and financial condition of the Company in response to all inquiries in respect thereof.

9. Restricted Securities. Employee recognizes and understands that this option and the Option Shares are currently registered under the Securities Act of 1933, as amended (the "Act"), but may not remain so registered, and are not registered under any state securities law. Any transfer of the option (if otherwise permitted hereunder, and once exercised, the Option Shares) will not be recognized by the Company unless such transfer is registered under the Act, the Georgia Uniform Securities Act of 2008, as amended, (the "Georgia Act") and any other applicable state securities laws or effected pursuant to an exemption from such registration which may then be available. If the Option Shares are not registered, any share certificates representing the Option Shares may be stamped with legends restricting transfer thereof in accordance with the Company's policy with respect to unregistered shares of its Common Stock issued to employees as a result of exercise of options granted under the Plan. The Company may make a notation in its stock transfer records of the aforementioned restrictions on transfers and legends. Employee recognizes and understands that the Option Shares may be restricted securities within the meaning of Rule 144 promulgated under the Act; that the exemption from registration under Rule 144 may not be available under certain circumstances and that Employee's opportunity to utilize such Rule 144 to sell the Option Shares may be limited or denied. The Company shall be under no obligation to maintain or promote a public trading market for the class of shares for which the option is granted or to make provision for adequate information concerning the Company to be available to the public as contemplated under Rule 144. The Company will be under no obligation to recognize any transfer or sale of any Option Shares pursuant to Rule 144 unless the terms and conditions of Rule 144 are complied with by the Employee. By acceptance hereof, Employee agrees that no permitted disposition of any Option Shares shall be made unless and until (i) there is at the time of exercise of the option in effect a registration statement under the Act, or (ii) Employee shall have notified the Company of a proposed Option disposition and shall have furnished to the Company a detailed statement of the circumstances surrounding such disposition, together with an opinion of counsel acceptable in form and substance to the Company that such disposition will not require registration of the shares so disposed under the Act, the Georgia Act, and any applicable state securities laws. The Company shall be under no obligation to permit such transfer or disposition on its stock transfer books unless counsel for the Company shall concur as to such matters. Employee recognizes and understands that if and for so long as Employee is a designated Section 16 officer of the Company, and for up to six months thereafter, any sales of Option Shares will be subject to Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the regulations promulgated thereunder. Employee also recognizes and understands that any sale of the Option Shares will also be subject to Rule 10b-5 promulgated under the Exchange Act. Employee agrees that any disposition of the Option Shares shall be made only in compliance with the Act, the Exchange Act, and the rules and regulations promulgated thereunder.

10. Tax Matters. No later than the date as of which an amount first becomes includable in the gross income of the Employee for federal income tax purposes with respect to the exercise of any option under the Plan, Employee shall pay to the Company, or make arrangements satisfactory to the Committee regarding the payment of, any federal, state, or local taxes of any kind required by law to be withheld with respect to such amount. The obligations of the Company under the Plan are conditional on such payment or arrangements and the Company shall have the right to deduct any such taxes from any payment of any kind otherwise due to Employee.

11. Section 409A. This Agreement is intended to comply with, or otherwise be exempt from, Section 409A of the Code. This Agreement shall be administered, interpreted and construed in a manner consistent with such Code section. Should any provision of this Agreement be found not to comply with, or otherwise be exempt from, the provisions of Section 409A of the Code, it shall be modified and given effect, in the sole discretion of the Committee and without requiring your consent, in such manner as the Committee determines to be necessary or appropriate to comply with, or effectuate an exemption from, Section 409A of the Code.

12. Binding Effect. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors, and permissible assigns.

13. Miscellaneous. This Agreement shall be governed by and construed under the laws of the State of Georgia. If any term or provision hereof shall be held invalid or unenforceable, the remaining terms and provisions hereof shall continue in full force and effect. Any modification to this Agreement shall not be effective unless the same shall be in writing and such writing shall be signed by authorized representatives of both of the parties hereto. The terms of paragraphs 8 and 9 hereof shall survive exercise of the option by Employee and shall attach to the Option Shares. The option contained in this letter shall not confer upon Employee any right to continued employment with the Company, nor shall it interfere in any way with the right of the Company to terminate the employment of Employee at any time. This letter can be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.

[signatures on following page]

Please signify your acceptance of the option and your agreement to be bound by the terms hereof by promptly signing one of the two original letters provided to you and returning the same to the President of the Company.

Sincerely,

(SEAL)

THE COMPANY:
CRYOLIFE, INC.

Attest:

D. Ashley Lee
Executive Vice President, COO and CFO

Karen K. Dabbs
Assistant Secretary for the Company

EMPLOYEE:

Exhibit 10.9

CRYOLIFE, INC.

CHANGE OF CONTROL SEVERANCE AGREEMENT

This Change of Control Severance Agreement (this "Agreement") dated as of the 21 day of November, 2016 is made and entered into by and between CryoLife, Inc., a Florida corporation ("CryoLife" or the "Company") and John E. Davis (the "Executive").

RECITALS

1. It is expected that the Company from time to time will consider the possibility of an acquisition by another company or other change of control. The Board of Directors of the Company (the "Board"), upon the recommendation of its Compensation Committee, has determined that it is in the best interests of the Company and its shareholders to enter into this Change of Control Agreement in order to assure that the Company will have the continued dedication of Executive, notwithstanding the possibility, threat or occurrence of a Change of Control (as defined herein) of the Company.

2. The Board believes that it is in the best interests of the Company and its stockholders to provide Executive with an incentive to continue Executive's employment and to motivate Executive to maximize the value of the Company upon a Change in Control for the benefit of the stockholders.

3. The Board believes it is imperative to provide Executive with certain severance benefits upon Executive's termination of employment both prior to and following a Change in Control. These benefits will provide Executive with enhanced financial security and incentive and encouragement to remain with the Company notwithstanding the possibility of a Change in Control.

4. Certain capitalized terms used in the Agreement are as defined below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. CERTAINDEFINITIONS.

(a) "Effective Date" means the first date during the Change of Control Period (as defined herein) on which a Change of Control occurs. Notwithstanding anything in this Agreement to the contrary, if the Executive's employment with the Company is Terminated by the Company without Cause or by Executive for Good Reason (as such terms are defined herein) within the six (6) month period prior to the date on which the Change of Control occurs and if such Change of Control is consummated (such a Termination of employment, an "Anticipatory Termination"), then for all purposes of this Agreement the "Effective Date" means the date immediately prior to the date of such Termination of employment.

(b) "Change of Control Period" means the period commencing on the date hereof and ending on December 31 of the year above; *provided, however,* that, commencing on December 31 of the year above, and each one-year anniversary of such date (such date and each such one-year anniversary thereof, the "Renewal Date") unless previously terminated, the Change of Control Period shall be automatically extended so as to terminate one (1) year from such Renewal Date, unless, at least thirty (30) days prior to the next Renewal Date, the Company shall give notice to the Executive that the Change of Control Period shall not be so extended.

(c) "Affiliated Company" means any company controlled by, controlling or under common control with the Company.

(d) "Change of Control" means a change in the ownership or effective control of, or in the ownership of a substantial portion of the assets of, the Company, as described in paragraphs (i) through (iii) below.

(i) Change in Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, acquires ownership of the Company stock that, together with the Company stock held by such person or group, constitutes more than 50% of the total voting power of the stock of the Company.

(A) If any one person or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, is considered to own more than 50% of the total voting power of the stock of the Company, the acquisition of additional the Company stock by such person or persons shall not be considered to cause a change in the ownership of the Company or to cause a change in the effective control of the Company (within the meaning of paragraph (ii) below).

(B) An increase in the percentage of the Company stock owned by any one person, or persons acting as a group (within the meaning of paragraph (iv)), as a result of a transaction in which the Company acquires its stock in exchange for property, shall be treated as an acquisition of stock for purposes of this paragraph (i).

(C) Except as provided in (B) above, the provisions of this paragraph (i) shall apply only to the transfer or issuance of the Company stock if such stock remains outstanding after such transfer or issuance.

(ii) Change in Effective Control of the Company.

(A) A change in the effective control of the Company shall occur on the date that either of (1) or (2) below occurs:

(1) Any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of the Company possessing 30% or more of the total voting power of the stock of the Company (the provisions of Sections l(d)(i) (B) and (C) above shall apply equally to this Section l(d)(ii)(A)(l); or

(2) A majority of the members of the Company Board of Directors are replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the Board of Directors prior to the date of the appointment or election.

(B) A change in effective control of the Company also may occur with respect to any transaction in which either of the Company or the other entity involved in a transaction described in paragraph (iii) experiences a Change of Control event described in paragraphs (i) or (iii).

(C) If any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), is considered to effectively control the Company (within the meaning of this paragraph (ii)), the acquisition of additional control of the Company by the same person or persons shall not be considered to cause a change in the effective control of the Company (or to cause a change in the ownership of the Company within the meaning of paragraph (i)).

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the

ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value (within the meaning of paragraph (iii)(B)) equal to or more than 40% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions.

(A) A transfer of the Company's assets shall not be treated as a change in the ownership of such assets if the assets are transferred to one or more of the following:

(1) A shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to Company stock;

(2) An entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company;

(3) A person, or more than one person acting as a group (within the meaning of paragraph (iv)) that owns, directly or indirectly, 50% or more of the total value or voting power of all of the outstanding stock of the Company; or

(4) An entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a person described in paragraph (iii)(A)(3).

For purposes of this paragraph (iii)(A), and except as otherwise provided herein, a person's status is determined immediately after the transfer of assets.

(B) For purposes of this paragraph (iii), gross fair market value means the value of all the Company assets, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

(iv) For purposes of this Section 1(d), persons shall be considered to be acting as a group if they are owners of an entity that enters into a merger, consolidation, purchase, or acquisition of assets, or similar business transaction with the Company. If a person, including an entity shareholder, owns stock in the Company and another entity with which the Company enters into a merger, consolidation, purchase, or acquisition of stock, or similar business transaction, such shareholder shall be considered to be acting as a group with the other shareholders in a corporation only to the extent of the ownership in that corporation prior to the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. Persons shall not be considered to be acting as a group solely because they purchase or own stock of the Company at the same time, or as a result of the same public offering of the Company's stock.

(v) Under no circumstances shall the reincorporation of the Company in a different state, or any action or inaction taken in furtherance thereof, constitute a Change of Control under this Agreement, including but not limited to efforts to end incorporation in the current state of incorporation or alterations to equity that facilitate such an event.

(e) Terminate or Termination means a "separation from service" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended.

2. EMPLOYMENT.

Executive and the Company acknowledge that the employment of the Executive by the Company is "at will," and Executive shall have no rights under this Agreement unless Executive is Terminated by the Company without Cause or by the Executive with Good Reason during the period commencing on the Effective Date and

ending on the second first anniversary of such date.

3. TERMSOF AT WILL EMPLOYMENT.

The terms of Executive's at will employment, as recorded in the Employee Proprietary Information Agreement executed by the Executive and the Company, are incorporated herein.

4. TERMINATION OF EMPLOYMENT.

(a) For purposes of this Agreement, "Cause" shall mean:

(i) an act of fraud, embezzlement, theft or any other material violation of law that occurs during or in the course of the Executive's employment with the Company;

(ii) intentional or grossly negligent damage by Executive to the Company's assets;

(iii) intentional or grossly negligent disclosure by Executive of the Company's confidential information contrary to the Company policies;

(iv) material breach of the Executive's obligations under this Agreement or any other Agreement with the Company;

(v) engagement by the Executive in any activity which would constitute a breach of the Executive's duty of loyalty or of the Executive's assigned duties;

(vi) breach by the Executive of any of the company's policies and procedures;

(vii) the willful and continued failure by Executive to perform the Executive's assigned duties (other than as a result of incapacity due to physical or mental illness); or

(viii) willful conduct by the Executive that is demonstrably and materially injurious to the Company, monetarily or otherwise.

(b) Good Reason. For purposes of this Agreement, "Good Reason" shall mean the assignment to the Executive, without the Executive's consent, of any duties materially inconsistent with the Executive's position (including changes in status, offices, or titles and any change in the Executive's reporting requirements that would cause Executive to report to an Executive who is junior in seniority to the employee to whom Executive reports), authority, duties or responsibilities, determined as of the later of the date of this Agreement or the date of any modification to Executive's position (including status, offices, titles and reporting requirements, as described above), authority, duties or responsibilities that is agreed to by Executive, or any other action by the Company that results in a material diminution in such position, authority, duties, responsibilities or Executive's aggregate compensation, excluding for this purpose an isolated, insubstantial and inadvertent action taken in good faith and which is remedied by the Company within thirty (30) days after receipt of notice thereof given by the Executive (each of these an "Event" for purposes of this Section 4(b)). Executive must notify the Company of any Event that constitutes Good Reason within ninety (90) days following Executive's knowledge of the existence of such Event or such Event shall not constitute Good Reason under this Agreement.

(c) Notice of Termination. Any Termination by the Company for Cause, or by the Executive for Good Reason, shall be communicated by Notice of Termination to the other party hereto given in accordance with Section 11(b) of this Agreement. For purposes of this Agreement, a "Notice of Termination" means a written notice which (i) indicates the specific termination provision in this Agreement relied upon, (ii) to the extent applicable, sets forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated and (iii) specifies the termination date (which date

shall not be more than thirty (30) days after the giving of such notice; *provided, however,* if Executive is terminating for Good Reason such date shall not be less than thirty (30) nor more than forty-five (45) days after giving of such notice). The failure by the Executive or the Company to set forth in the Notice of Termination any fact or circumstance which contributes to a showing of Good Reason or Cause shall not waive any right of the Executive or the Company, respectively, hereunder or preclude the Executive or the Company, respectively, from asserting such fact or circumstance in enforcing the Executive's or the Company's rights hereunder.

(d) Date of Termination. "Date of Termination" means the date of receipt of the Notice of Termination, or any later date specified therein, as the case may be. The Company and the Executive shall take all steps necessary (including with regard to any post-Termination services by the Executive) to ensure that any Termination described in this Section 4 constitutes a "separation from service" within the meaning of Section 409A of the Code, and notwithstanding anything contained herein to the contrary, the date on which the separation from service takes place shall be the "Date of Termination."

(e) Covenants Necessary to the Company's Business. The covenants recorded in the Employee Proprietary Information Agreement executed by the Executive and the Company are incorporated herein, including but not limited to the covenant not to compete, the covenant regarding customer solicitation and interference, and the covenant regarding solicitation of employees. Officer covenants and agrees that the payment of any Severance Payment (as defined in Section 5(e) below) shall be subject to and expressly conditioned upon Officer's compliance with the covenants set forth in the Employee Proprietary Information Agreement, which have been incorporated herein. Should Officer fail to comply with these covenants, the Company shall not be required to make the Severance Payment (or any portion of the Severance Payment that remains unpaid), and the Officer shall be required to repay any portion of the Severance Payment that the Officer has already received from the Company.

5. OBLIGATIONS OF THE COMPANY UPON TERMINATION.

(a) If, during the two (2) year period commencing on the Effective Date and ending on the second anniversary of the Effective Date, (i) the Company shall Terminate the Executive's employment without Cause, or (ii) the Executive shall Terminate employment for Good Reason, then the Company shall pay to Executive the Severance Payment (defined below).

(b) Severance Payment. The "Severance Payment" shall be an amount equal to one and one-half ($1^{1/2}$) times the aggregate of Executive's base salary as of the Date of Termination and cash bonus compensation for the year in which the Termination of employment occurs. For purposes of determining Executive's cash bonus compensation for purposes of this Section 5(b), if the Date of Termination occurs before the awarding of bonuses for the year in which the Date of Termination occurs, the cash bonus compensation component of the Severance Payment shall be computed based on Executive's most recent awarded cash bonus. Cash bonus compensation shall include only the Annual Bonus paid in cash and shall specifically exclude the value of any non-cash bonuses, such as options or restricted stock. For the sake of clarification, all cash paid in payment of all or a portion of the bonus pursuant to the Company's 2007 Executive Incentive Plan or any successor thereto shall be bonus compensation for purposes of this Agreement for the year in which paid or issued. The Severance Payment shall be payable to Executive as follows:

(i) Except for the group health plan benefits payments or as otherwise provided herein, the Severance Payment, if any is due hereunder, shall be paid to Executive in a lump sum not later than thirty (30) days following Executive's Date of Termination, unless the Termination is an Anticipatory Termination.

(ii) In the event of an Anticipatory Termination, the Severance Payment, except for the group health plan benefits payments, shall be paid to Executive in a lump sum not later than thirty (30) days following the date of the Change of Control.

(iii) Notwithstanding the foregoing, if any amount paid pursuant to this Section 5(b) is deferred

compensation within the meaning of Section 409A of the Code and as of the Date of Termination Executive is a Specified Employee, amounts that would otherwise be payable during the six-month period immediately following the Date of Termination shall instead be paid, with interest on any delayed payment at the applicable federal rate provided for in Section 7872(f)(2)(A) of the Code, on the first business day after the date that is six months following Executive's "separation from service" within the meaning of Section 409A of the Code (the "Delayed Payment Date"). As used in this Agreement, the term "Specified Employee" means a "specified employee" as defined in Section 409A(a)(2)(B)(i) of the Internal Revenue Code of 1986, as amended (the "Code"). By way of clarification, "specified employee" means a "key employee" (as defined in Section 416(i) of the Code, disregarding Section 416(i)(5) of the Code) of the Company. Executive shall be treated as a key employee if the Executive meets the requirement of Section 416(i)(l)(A)(i), (ii), or (iii) at any time during the twelve (12) month period ending on an "identification date." For purposes of any "Specified Employee" determination hereunder, the "identification date" shall mean the last day of each calendar year.

(c) Medical Coverage. In addition, group health plan coverage for the Executive and covered dependents, with the same contribution by the Executive, will be provided as part of the Severance Payment for the lesser of eighteen (18) months following the Date of Termination or until the Executive is provided comparable benefits by another employer.

(d) Separation Agreement and Release of Claims. The receipt of any Severance Payment pursuant to this Agreement will be subject to the Executive signing and not revoking a separation agreement and release of claims in a form provided by the Company (the "Release"), which may include restatements of covenants contained in the Employee Proprietary Information Agreement among others, and provided that such Release becomes effective and irrevocable no later than sixty (60) days following the termination date (such deadline, the "Release Deadline"). If the Release does not become effective and irrevocable by the Release Deadline, Executive will forfeit any rights to severance under this Agreement. In no event will any Severance Payment be paid or provided until the Release becomes effective and irrevocable. Except as required by Section 5(b)(iii), any Severance Payment that would have been made to Executive prior to the Release becoming effective and irrevocable but for the preceding sentence will be paid to Executive on the first regularly scheduled Company payroll date following the date the Release becomes effective and irrevocable, and any remaining payments will be made as provided in the Agreement.

6. FULL SETTLEMENT.

In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to the Executive under any of the provisions of this Agreement and such amounts shall not be reduced whether or not the Executive obtains other employment. The Company agrees to pay, to the full extent permitted by law, all legal fees and expenses which the may reasonably incur as a result of any contest by the Company or Executive with respect to liability under or the interpretation of the validity or enforceability of, any provision of this Agreement, but only in the event and to the extent that (i) the Executive receives a final, non-appealable judgment in his favor in any such action or receives a final judgment in his favor that has not been appealed by the Company within thirty (30) days of the date of the judgment; or (ii) the parties agree to dismiss any such action upon the Company's payment of the sums allegedly due the Executive or performance of the covenants by the Company allegedly breached by it.

7. PAYMENT CUT-BACK.

(a) Notwithstanding anything to the contrary contained herein, the Company will not pay to Executive any excise tax gross up pursuant to this Agreement or any other agreement between Executive and the Company. Further notwithstanding anything to the contrary contained herein, the Company shall reduce any payment contingent on a Change of Control pursuant to any plan, agreement, or arrangement of the Company that would be considered in determining whether a "parachute payment" (as defined in Section 280G ("Section 280G") of the Code), has occurred ("Change of Control Severance Payment") to 2.99 times Employee's average compensation, as indicated on such Employee's Form W-2, for the five (5) years ending immediately prior to the

year containing the date of the Change of Control (the "Safe Harbor Amount") if, and only if, reducing the Change of Control Severance Payment would provide Executive with a greater net after-tax Change of Control Severance Payment than would be the case if no such reduction took place. The Safe Harbor Amount, as defined herein, is an amount expressed in present value which maximizes the aggregate present value of the Change of Control Severance Payment without causing the Change of Control Severance Payment to be subject to the excise tax under Section 4999 (and related Section 280G) of the Code (the "Excise Tax"), determined in accordance with Section 280G(d)(4). Any reduction in the Change of Control Severance Payment shall be implemented in accordance with Section 7(b).

(b) (i) Any reduction in payments pursuant to Section 7(a) shall apply so as to minimize the amount of compensation that is reduced (i.e., it applies to payments that to the greatest extent represent parachute payments), *provided, however,* no reduction shall be applied to an amount that constitutes a deferral of compensation under Section 409A except for amounts that have become payable at the time of the reduction and as to which the reduction will not result in a non-reduction in a corresponding amount that is a deferral of compensation under Section 409A that is not currently payable.

(ii) For purposes of determining whether the Change of Control Severance Payment will be subject to the Excise Tax and the amount of such Excise Tax:

(A) The Change of Control Severance Payment shall be treated as a "parachute payment" within the meaning of Section 280G(b)(2), and if it is an "excess parachute payment" within the meaning of Section 280G(b)(l), it shall be treated as subject to the Excise Tax, unless, and except to the extent that, in the written opinion of independent compensation consultants, counsel or auditors of nationally recognized standing ("Independent Advisors") selected by the Company and reasonably acceptable to Executive, the Change of Control Severance Payment (in whole or in part) does not constitute a parachute payment, or such excess parachute payment (in whole or in part) represents reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) in excess of the base amount within the meaning of Section 280G(b)(3) or are otherwise not subject to the Excise Tax.

(B) The value of any non-cash benefits or any deferred payment or benefit shall be determined by the Independent Advisors in accordance with the principles of Sections 280G(d)(3) and (4).

(iii) For purposes of determining reductions in compensation pursuant to this Section 7(b), if any, Executive will be deemed (A) to pay federal income taxes at the applicable rates of federal income taxation for the calendar year in which the compensation would be payable; and (B) to pay any applicable state and local income taxes at the applicable rates of taxation for the calendar year in which the compensation would be payable, taking into account any effect on federal income taxes from payment of state and local income taxes. Compensation will be adjusted not later than the applicable deadline under Section 409A to provide for accurate payments under the cut-back provision of this Section 7(b), but after any such deadline no further adjustment will be made if it would result in a tax penalty under Section 409A.

(c) Furthermore, notwithstanding anything in this Agreement to the contrary, aggregate Severance Payments, separation payments and/or similar payments made to Executive pursuant to this Agreement and otherwise shall be limited to the equivalent of Executive's salary paid during the three (3) completed fiscal years ended prior to the Date of Termination, including any bonuses and guaranteed benefits paid during those years.

8. CONFIDENTIAL INFORMATION.

The Executive and the Company will also be parties to one or more separate agreements respecting confidential information, trade secrets, inventions and non-competition, including but not limited to the Employee Proprietary Information Agreement, (collectively, the "IP Agreements"). The parties agree that the IP Agreements shall not be superseded or terminated by this Agreement and shall survive any termination of this Agreement; provided, however, that to the extent that there is any conflict or overlap between the provisions of this Agreement

and any of the IP Agreements, those provisions that provide the Company with the greatest rights and protections shall control.

9. SUCCESSORS.

(a) This Agreement is personal to the Executive and without the prior written consent of the Company shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) This Agreement shall inure to the benefit of and be binding upon the Company and its successors and assigns.

(c) The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to assume expressly and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place. As used in this Agreement, "the Company" shall mean CryoLife as hereinbefore defined and any successor to its business and/or assets as aforesaid which assumes and agrees to perform this Agreement by operation of law, or otherwise.

10. COMPLIANCE WITH SECTION 409A.

(a) This Agreement is intended to comply with, or otherwise be exempt from, Section 409A of the Code and any regulations and Treasury guidance promulgated thereunder.

(b) The Company and Executive agree that they will execute any and all amendments to this Agreement as they mutually agree in good faith may be necessary to ensure compliance with Section 409A of the Code.

(c) The Company makes no representation or warranty as to the tax effect of any of the preceding provisions, and the provisions of this Agreement shall not be construed as a guarantee by the Company of any particular tax effect to Executive under this Agreement. The Company shall not be liable to Executive or any other person for any payment made under this Agreement which is determined to result in the imposition of an excise tax, penalty or interest under Section 409A of the Code, nor for reporting in good faith any payment made under this Agreement as an amount includible in gross income under Section 409A of the Code.

11. MISCELLANEOUS.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of Georgia, without reference to principles of conflict of laws. Both the Executive and the Company expressly consent to the exclusive venue of and personal jurisdiction within the state and federal courts located in Georgia for any lawsuit arising from or related to this Agreement

(b) The captions of this Agreement are not part of the provisions hereof and shall have no force and effect. This Agreement may not be amended or modified otherwise than by a written agreement executed by the parties hereto or their respective successors and legal representatives.

(c) All notices and other communications hereunder shall be in writing and shall be given by hand delivery (which shall include delivery via Federal Express or UPS) to the other party or by registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to the Executive:

John E. Davis
3102 Heybridge Lane
Milton, GA 30004

If to the Company:

CryoLife, Inc.
1655 Roberts Boulevard, N.W
Kennesaw, GA 30144
Attention: Chief Executive Officer

or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notice and communications shall be effective when actually received by the addressee.

(d) If any provision of this Agreement or the application of any provision hereof to any person or circumstance is held invalid, unenforceable or otherwise illegal, the remainder of this Agreement and the application of such provision to any other person or circumstance shall not be affected, and the provision so held to be invalid, unenforceable or otherwise illegal shall be reformed to the extent (and only to the extent) necessary to make it valid, enforceable and legal; provided, however, if the provision so held to be invalid, unenforceable or otherwise illegal cannot be reformed so as to be valid and enforceable, then it shall be severed from, and shall not affect the enforceability of, the remaining provisions of the Agreement.

(e) The Company may withhold from any amounts payable under this Agreement such federal, state, local or foreign taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(f) This Agreement supersedes any Change of Control Agreements previously entered into by and between Executive and Company and, along with the Employee Proprietary Information Agreements and other agreements noted herein, embodies the entire agreement between the parties with respect to the subject matter addressed herein.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

/s/ John E. Davis
John E. Davis

CRYOLIFE, INC

By: /s/ J. Patrick Mackin
J. Patrick Mackin
Chairman, President and CEO

CRYOLIFE, INC.

CHANGE OF CONTROL SEVERANCE AGREEMENT

This Change of Control Severance Agreement (this "Agreement") dated as of the 21 day of November, 2016 is made and entered into by and between CryoLife, Inc., a Florida corporation ("CryoLife" or the "Company") and James McDermid (the "Executive").

RECITALS

1. It is expected that the Company from time to time will consider the possibility of an acquisition by another company or other change of control. The Board of Directors of the Company (the "Board"), upon the recommendation of its Compensation Committee, has determined that it is in the best interests of the Company and its shareholders to enter into this Change of Control Agreement in order to assure that the Company will have the continued dedication of Executive, notwithstanding the possibility, threat or occurrence of a Change of Control (as defined herein) of the Company.

2. The Board believes that it is in the best interests of the Company and its stockholders to provide Executive with an incentive to continue Executive's employment and to motivate Executive to maximize the value of the Company upon a Change in Control for the benefit of the stockholders.

3. The Board believes it is imperative to provide Executive with certain severance benefits upon Executive's termination of employment both prior to and following a Change in Control. These benefits will provide Executive with enhanced financial security and incentive and encouragement to remain with the Company notwithstanding the possibility of a Change in Control.

4. Certain capitalized terms used in the Agreement are as defined below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. CERTAIN DEFINITIONS.

(a) "Effective Date" means the first date during the Change of Control Period (as defined herein) on which a Change of Control occurs. Notwithstanding anything in this Agreement to the contrary, if the Executive's employment with the Company is Terminated by the Company without Cause or by Executive for Good Reason (as such terms are defined herein) within the six (6) month period prior to the date on which the Change of Control occurs and if such Change of Control is consummated (such a Termination of employment, an "Anticipatory Termination"), then for all purposes of this Agreement the "Effective Date" means the date immediately prior to the date of such Termination of employment.

(b) "Change of Control Period" means the period commencing on the date hereof and ending on December 31 of the year above; *provided, however,* that, commencing on December 31 of the year above, and each one-year anniversary of such date (such date and each such one-year anniversary thereof, the "Renewal Date") unless previously terminated, the Change of Control Period shall be automatically extended so as to terminate one (1) year from such Renewal Date, unless, at least thirty (30) days prior to the next Renewal Date, the Company shall give notice to the Executive that the Change of Control Period shall not be so extended.

(c) "Affiliated Company" means any company controlled by, controlling or under common control with the Company.

(d) "Change of Control" means a change in the ownership or effective control of, or in the ownership of a substantial portion of the assets of, the Company, as described in paragraphs (i) through (iii) below.

(i) Change in Ownership of the Company. A change in the ownership of the Company shall occur on the date that any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, acquires ownership of the Company stock that, together with the Company stock held by such person or group, constitutes more than 50% of the total voting power of the stock of the Company.

(A) If any one person or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, is considered to own more than 50% of the total voting power of the stock of the Company, the acquisition of additional the Company stock by such person or persons shall not be considered to cause a change in the ownership of the Company or to cause a change in the effective control of the Company (within the meaning of paragraph (ii) below).

(B) An increase in the percentage of the Company stock owned by any one person, or persons acting as a group (within the meaning of paragraph (iv)), as a result of a transaction in which the Company acquires its stock in exchange for property, shall be treated as an acquisition of stock for purposes of this paragraph (i).

(C) Except as provided in (B) above, the provisions of this paragraph (i) shall apply only to the transfer or issuance of the Company stock if such stock remains outstanding after such transfer or issuance.

(ii) Change in Effective Control of the Company.

(A) A change in the effective control of the Company shall occur on the date that either of (1) or (2) below occurs:

(1) Any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) ownership of stock of the Company possessing 30% or more of the total voting power of the stock of the Company (the provisions of Sections l(d)(i) (B) and (C) above shall apply equally to this Section l(d)(ii)(A)(l); or

(2) A majority of the members of the Company Board of Directors are replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the Board of Directors prior to the date of the appointment or election.

(B) A change in effective control of the Company also may occur with respect to any transaction in which either of the Company or the other entity involved in a transaction described in paragraph (iii) experiences a Change of Control event described in paragraphs (i) or (iii).

(C) If any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), is considered to effectively control the Company (within the meaning of this paragraph (ii)), the acquisition of additional control of the Company by the same person or persons shall not be considered to cause a change in the effective control of the Company (or to cause a change in the ownership of the Company within the meaning of paragraph (i)).

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets shall occur on the date that any one person, or more than one person acting as a group (within the meaning of paragraph (iv)), other than a group of which Executive is a member, acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value (within the meaning of paragraph (iii)(B)) equal to or more than 40% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions.

(A) A transfer of the Company's assets shall not be treated as a change in the ownership of such assets if the assets are transferred to one or more of the following:

(1) A shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to Company stock;

(2) An entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company;

(3) A person, or more than one person acting as a group (within the meaning of paragraph (iv)) that owns, directly or indirectly, 50% or more of the total value or voting power of all of the outstanding stock of the Company; or

(4) An entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a person described in paragraph (iii)(A)(3).

For purposes of this paragraph (iii)(A), and except as otherwise provided herein, a person's status is determined immediately after the transfer of assets.

(B) For purposes of this paragraph (iii), gross fair market value means the value of all the Company assets, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

(iv) For purposes of this Section 1(d), persons shall be considered to be acting as a group if they are owners of an entity that enters into a merger, consolidation, purchase, or acquisition of assets, or similar business transaction with the Company. If a person, including an entity shareholder, owns stock in the Company and another entity with which the Company enters into a merger, consolidation, purchase, or acquisition of stock, or similar business transaction, such shareholder shall be considered to be acting as a group with the other shareholders in a corporation only to the extent of the ownership in that corporation prior to the transaction giving rise to the change and not with respect to the ownership interest in the other corporation. Persons shall not be considered to be acting as a group solely because they purchase or own stock of the Company at the same time, or as a result of the same public offering of the Company's stock.

(v) Under no circumstances shall the reincorporation of the Company in a different state, or any action or inaction taken in furtherance thereof, constitute a Change of Control under this Agreement, including but not limited to efforts to end incorporation in the current state of incorporation or alterations to equity that facilitate such an event.

(e) Terminate or Termination means a "separation from service" within the meaning of Section 409A of the Internal Revenue Code of 1986, as amended.

2. EMPLOYMENT.

Executive and the Company acknowledge that the employment of the Executive by the Company is "at will," and Executive shall have no rights under this Agreement unless Executive is Terminated by the Company without Cause or by the Executive with Good Reason during the period commencing on the Effective Date and ending on the second first anniversary of such date.

3. TERMS OF AT WILL EMPLOYMENT.

The terms of Executive's at will employment, as recorded in the Employee Proprietary Information Agreement executed by the Executive and the Company, are incorporated herein.

4. TERMINATION OF EMPLOYMENT.

(a) For purposes of this Agreement, "Cause" shall mean:

(i) an act of fraud, embezzlement, theft or any other material violation of law that occurs during or in the course of the Executive's employment with the Company;

(ii) intentional or grossly negligent damage by Executive to the Company's assets;

(iii) intentional or grossly negligent disclosure by Executive of the Company's confidential information contrary to the Company policies;

(iv) material breach of the Executive's obligations under this Agreement or any other Agreement with the Company;

(v) engagement by the Executive in any activity which would constitute a breach of the Executive's duty of loyalty or of the Executive's assigned duties;

(vi) breach by the Executive of any of the company's policies and procedures;

(vii) the willful and continued failure by Executive to perform the Executive's assigned duties (other than as a result of incapacity due to physical or mental illness); or

(viii) willful conduct by the Executive that is demonstrably and materially injurious to the Company, monetarily or otherwise.

(b) Good Reason. For purposes of this Agreement, "Good Reason" shall mean the assignment to the Executive, without the Executive's consent, of any duties materially inconsistent with the Executive's position (including changes in status, offices, or titles and any change in the Executive's reporting requirements that would cause Executive to report to an Executive who is junior in seniority to the employee to whom Executive reports), authority, duties or responsibilities, determined as of the later of the date of this Agreement or the date of any modification to Executive's position (including status, offices, titles and reporting requirements, as described above), authority, duties or responsibilities that is agreed to by Executive, or any other action by the Company that results in a material diminution in such position, authority, duties, responsibilities or Executive's aggregate compensation, excluding for this purpose an isolated, insubstantial and inadvertent action taken in good faith and which is remedied by the Company within thirty (30) days after receipt of notice thereof given by the Executive (each of these an "Event" for purposes of this Section 4(b)). Executive must notify the Company of any Event that constitutes Good Reason within ninety (90) days following Executive's knowledge of the existence of such Event or such Event shall not constitute Good Reason under this Agreement.

(c) Notice of Termination. Any Termination by the Company for Cause, or by the Executive for Good Reason, shall be communicated by Notice of Termination to the other party hereto given in accordance with Section 11(b) of this Agreement. For purposes of this Agreement, a "Notice of Termination" means a written notice which (i) indicates the specific termination provision in this Agreement relied upon, (ii) to the extent applicable, sets forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Executive's employment under the provision so indicated and (iii) specifies the termination date (which date

shall not be more than thirty (30) days after the giving of such notice; *provided, however,* if Executive is terminating for Good Reason such date shall not be less than thirty (30) nor more than forty-five (45) days after giving of such notice). The failure by the Executive or the Company to set forth in the Notice of Termination any fact or circumstance which contributes to a showing of Good Reason or Cause shall not waive any right of the Executive or the Company, respectively, hereunder or preclude the Executive or the Company, respectively, from asserting such fact or circumstance in enforcing the Executive's or the Company's rights hereunder.

(d) Date of Termination. "Date of Termination" means the date of receipt of the Notice of Termination, or any later date specified therein, as the case may be. The Company and the Executive shall take all steps necessary (including with regard to any post-Termination services by the Executive) to ensure that any Termination described in this Section 4 constitutes a "separation from service" within the meaning of Section 409A of the Code, and notwithstanding anything contained herein to the contrary, the date on which the separation from service takes place shall be the "Date of Termination."

(e) Covenants Necessary to the Company's Business. The covenants recorded in the Employee Proprietary Information Agreement executed by the Executive and the Company are incorporated herein, including but not limited to the covenant not to compete, the covenant regarding customer solicitation and interference, and the covenant regarding solicitation of employees. Officer covenants and agrees that the payment of any Severance Payment (as defined in Section 5(e) below) shall be subject to and expressly conditioned upon Officer's compliance with the covenants set forth in the Employee Proprietary Information Agreement, which have been incorporated herein. Should Officer fail to comply with these covenants, the Company shall not be required to make the Severance Payment (or any portion of the Severance Payment that remains unpaid), and the Officer shall be required to repay any portion of the Severance Payment that the Officer has already received from the Company.

5. OBLIGATIONS OF THE COMPANY UPON TERMINATION.

(a) If, during the two (2) year period commencing on the Effective Date and ending on the second anniversary of the Effective Date, (i) the Company shall Terminate the Executive's employment without Cause, or (ii) the Executive shall Terminate employment for Good Reason, then the Company shall pay to Executive the Severance Payment (defined below).

(b) Severance Payment. The "Severance Payment" shall be an amount equal to one and one-half ($1^1/_2$) times the aggregate of Executive's base salary as of the Date of Termination and cash bonus compensation for the year in which the Termination of employment occurs. For purposes of determining Executive's cash bonus compensation for purposes of this Section 5(b), if the Date of Termination occurs before the awarding of bonuses for the year in which the Date of Termination occurs, the cash bonus compensation component of the Severance Payment shall be computed based on Executive's most recent awarded cash bonus. Cash bonus compensation shall include only the Annual Bonus paid in cash and shall specifically exclude the value of any non-cash bonuses, such as options or restricted stock. For the sake of clarification, all cash paid in payment of all or a portion of the bonus pursuant to the Company's 2007 Executive Incentive Plan or any successor thereto shall be bonus compensation for purposes of this Agreement for the year in which paid or issued. The Severance Payment shall be payable to Executive as follows:

(i) Except for the group health plan benefits payments or as otherwise provided herein, the Severance Payment, if any is due hereunder, shall be paid to Executive in a lump sum not later than thirty (30) days following Executive's Date of Termination, unless the Termination is an Anticipatory Termination.

(ii) In the event of an Anticipatory Termination, the Severance Payment, except for the group health plan benefits payments, shall be paid to Executive in a lump sum not later than thirty (30) days following the date of the Change of Control.

(iii) Notwithstanding the foregoing, if any amount paid pursuant to this Section 5(b) is deferred compensation within the meaning of Section 409A of the Code and as of the Date of Termination Executive is a Specified Employee, amounts that would otherwise be payable during the six-month period immediately following the Date of Termination shall instead be paid, with interest on any delayed payment at the applicable federal rate provided for in Section 7872(f)(2)(A) of the Code, on the first business day after the date that is six months following Executive's "separation from service" within the meaning of Section 409A of the Code (the "Delayed Payment Date"). As used in this Agreement, the term "Specified Employee" means a "specified employee" as defined in Section 409A(a)(2)(B)(i) of the Internal Revenue Code of 1986, as amended (the "Code"). By way of clarification, "specified employee" means a "key employee" (as defined in Section 416(i) of the Code, disregarding Section 416(i)(5) of the Code) of the Company. Executive shall be treated as a key employee if the Executive meets the requirement of Section 416(i)(l)(A)(i), (ii), or (iii) at any time during the twelve (12) month period ending on an "identification date." For purposes of any "Specified Employee" determination hereunder, the "identification date" shall mean the last day of each calendar year.

(c) Medical Coverage. In addition, group health plan coverage for the Executive and covered dependents, with the same contribution by the Executive, will be provided as part of the Severance Payment for the lesser of eighteen (18) months following the Date of Termination or until the Executive is provided comparable benefits by another employer.

(d) Separation Agreement and Release of Claims. The receipt of any Severance Payment pursuant to this Agreement will be subject to the Executive signing and not revoking a separation agreement and release of claims in a form provided by the Company (the "Release"), which may include restatements of covenants contained in the Employee Proprietary Information Agreement among others, and provided that such Release becomes effective and irrevocable no later than sixty (60) days following the termination date (such deadline, the "Release Deadline"). If the Release does not become effective and irrevocable by the Release Deadline, Executive will forfeit any rights to severance under this Agreement. In no event will any Severance Payment be paid or provided until the Release becomes effective and irrevocable. Except as required by Section 5(b)(iii), any Severance Payment that would have been made to Executive prior to the Release becoming effective and irrevocable but for the preceding sentence will be paid to Executive on the first regularly scheduled Company payroll date following the date the Release becomes effective and irrevocable, and any remaining payments will be made as provided in the Agreement.

6. FULL SETTLEMENT.

In no event shall the Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to the Executive under any of the provisions of this Agreement and such amounts shall not be reduced whether or not the Executive obtains other employment. The Company agrees to pay, to the full extent permitted by law, all legal fees and expenses which the may reasonably incur as a result of any contest by the Company or Executive with respect to liability under or the interpretation of the validity or enforceability of, any provision of this Agreement, but only in the event and to the extent that (i) the Executive receives a final, non-appealable judgment in his favor in any such action or receives a final judgment in his favor that has not been appealed by the Company within thirty (30) days of the date of the judgment; or (ii) the parties agree to dismiss any such action upon the Company's payment of the sums allegedly due the Executive or performance of the covenants by the Company allegedly breached by it.

7. PAYMENT CUT-BACK.

(a) Notwithstanding anything to the contrary contained herein, the Company will not pay to Executive any excise tax gross up pursuant to this Agreement or any other agreement between Executive and the Company. Further notwithstanding anything to the contrary contained herein, the Company shall reduce any payment contingent on a Change of Control pursuant to any plan, agreement, or arrangement of the Company that would be considered in determining whether a "parachute payment" (as defined in Section 280G ("Section 280G") of the Code), has occurred ("Change of Control Severance Payment") to 2.99 times Employee's average compensation, as indicated on such Employee's Form W-2, for the five (5) years ending immediately prior to the

year containing the date of the Change of Control (the "Safe Harbor Amount") if, and only if, reducing the Change of Control Severance Payment would provide Executive with a greater net after-tax Change of Control Severance Payment than would be the case if no such reduction took place. The Safe Harbor Amount, as defined herein, is an amount expressed in present value which maximizes the aggregate present value of the Change of Control Severance Payment without causing the Change of Control Severance Payment to be subject to the excise tax under Section 4999 (and related Section 280G) of the Code (the "Excise Tax"), determined in accordance with Section 280G(d)(4). Any reduction in the Change of Control Severance Payment shall be implemented in accordance with Section 7(b).

(b) (i) Any reduction in payments pursuant to Section 7(a) shall apply so as to minimize the amount of compensation that is reduced (i.e., it applies to payments that to the greatest extent represent parachute payments), *provided, however,* no reduction shall be applied to an amount that constitutes a deferral of compensation under Section 409A except for amounts that have become payable at the time of the reduction and as to which the reduction will not result in a non-reduction in a corresponding amount that is a deferral of compensation under Section 409A that is not currently payable.

(ii) For purposes of determining whether the Change of Control Severance Payment will be subject to the Excise Tax and the amount of such Excise Tax:

(A) The Change of Control Severance Payment shall be treated as a "parachute payment" within the meaning of Section 280G(b)(2), and if it is an "excess parachute payment" within the meaning of Section 280G(b)(l), it shall be treated as subject to the Excise Tax, unless, and except to the extent that, in the written opinion of independent compensation consultants, counsel or auditors of nationally recognized standing ("Independent Advisors") selected by the Company and reasonably acceptable to Executive, the Change of Control Severance Payment (in whole or in part) does not constitute a parachute payment, or such excess parachute payment (in whole or in part) represents reasonable compensation for services actually rendered within the meaning of Section 280G(b)(4) in excess of the base amount within the meaning of Section 280G(b)(3) or are otherwise not subject to the Excise Tax.

(B) The value of any non-cash benefits or any deferred payment or benefit shall be determined by the Independent Advisors in accordance with the principles of Sections 280G(d)(3) and (4).

(iii) For purposes of determining reductions in compensation pursuant to this Section 7(b), if any, Executive will be deemed (A) to pay federal income taxes at the applicable rates of federal income taxation for the calendar year in which the compensation would be payable; and (B) to pay any applicable state and local income taxes at the applicable rates of taxation for the calendar year in which the compensation would be payable, taking into account any effect on federal income taxes from payment of state and local income taxes. Compensation will be adjusted not later than the applicable deadline under Section 409A to provide for accurate payments under the cut-back provision of this Section 7(b), but after any such deadline no further adjustment will be made if it would result in a tax penalty under Section 409A.

(c) Furthermore, notwithstanding anything in this Agreement to the contrary, aggregate Severance Payments, separation payments and/or similar payments made to Executive pursuant to this Agreement and otherwise shall be limited to the equivalent of Executive's salary paid during the three (3) completed fiscal years ended prior to the Date of Termination, including any bonuses and guaranteed benefits paid during those years.

8. CONFIDENTIAL INFORMATION.

The Executive and the Company will also be parties to one or more separate agreements respecting confidential information, trade secrets, inventions and non-competition, including but not limited to the Employee Proprietary Information Agreement, (collectively, the "IP Agreements"). The parties agree that the IP Agreements shall not be superseded or terminated by this Agreement and shall survive any termination of this Agreement; provided, however, that to the extent that there is any conflict or overlap between the provisions of this Agreement and any of the IP Agreements, those provisions that provide the Company with the greatest rights and protections shall control.

9. SUCCESSORS.

(a) This Agreement is personal to the Executive and without the prior written consent of the Company shall not be assignable by the Executive otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Executive's legal representatives.

(b) This Agreement shall inure to the benefit of and be binding upon the Company and its successors and assigns.

(c) The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to assume expressly and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession had taken place. As used in this Agreement, "the Company" shall mean CryoLife as hereinbefore defined and any successor to its business and/or assets as aforesaid which assumes and agrees to perform this Agreement by operation of law, or otherwise.

10. COMPLIANCE WITH SECTION 409A.

(a) This Agreement is intended to comply with, or otherwise be exempt from, Section 409A of the Code and any regulations and Treasury guidance promulgated thereunder.

(b) The Company and Executive agree that they will execute any and all amendments to this Agreement as they mutually agree in good faith may be necessary to ensure compliance with Section 409A of the Code.

(c) The Company makes no representation or warranty as to the tax effect of any of the preceding provisions, and the provisions of this Agreement shall not be construed as a guarantee by the Company of any particular tax effect to Executive under this Agreement. The Company shall not be liable to Executive or any other person for any payment made under this Agreement which is determined to result in the imposition of an excise tax, penalty or interest under Section 409A of the Code, nor for reporting in good faith any payment made under this Agreement as an amount includible in gross income under Section 409A of the Code.

11. MISCELLANEOUS.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of Georgia, without reference to principles of conflict of laws. Both the Executive and the Company expressly consent to the exclusive venue of and personal jurisdiction within the state and federal courts located in Georgia for any lawsuit arising from or related to this Agreement

(b) The captions of this Agreement are not part of the provisions hereof and shall have no force and effect. This Agreement may not be amended or modified otherwise than by a written agreement executed by the parties hereto or their respective successors and legal representatives.

(c) All notices and other communications hereunder shall be in writing and shall be given by hand delivery (which shall include delivery via Federal Express or UPS) to the other party or by registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to the Executive:

James M. McDermid
7 Hillcrest Driove
Dellwood, MN 55110

If to the Company:

CryoLife, Inc.
1655 Roberts Boulevard, N.W
Kennesaw, GA 30144
Attention: Chief Executive Officer

or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notice and communications shall be effective when actually received by the addressee.

(d) If any provision of this Agreement or the application of any provision hereof to any person or circumstance is held invalid, unenforceable or otherwise illegal, the remainder of this Agreement and the application of such provision to any other person or circumstance shall not be affected, and the provision so held to be invalid, unenforceable or otherwise illegal shall be reformed to the extent (and only to the extent) necessary to make it valid, enforceable and legal; provided, however, if the provision so held to be invalid, unenforceable or otherwise illegal cannot be reformed so as to be valid and enforceable, then it shall be severed from, and shall not affect the enforceability of, the remaining provisions of the Agreement.

(e) The Company may withhold from any amounts payable under this Agreement such federal, state, local or foreign taxes as shall be required to be withheld pursuant to any applicable law or regulation.

(f) This Agreement supersedes any Change of Control Agreements previously entered into by and between Executive and Company and, along with the Employee Proprietary Information Agreements and other agreements noted herein, embodies the entire agreement between the parties with respect to the subject matter addressed herein.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

/s/ James M. McDermid
James M. McDermid

CRYOLIFE, INC.

By: /s/ J. Patrick Mackin
J. Patrick Mackin
Chairman, President and CEO

LEASE AGREEMENT

1. PARTIES. This lease (the "Lease") is made by and BETWEEN **1300 E. ANDERSON LANE, LTD**., a Texas limited partnership, "LESSOR", and On-X Life Technologies, Inc., a Delaware corporation "LESSEE". LESSOR leases to LESSEE, and LESSEE leases from LESSOR, upon the terms and conditions herein, the premises described below (the "Premises" or the "Demised Premises"). In addition to the Premises, LESSOR hereby leases to LESSEE, the parking spaces attributable to Premises as shown on Exhibit A-1 attached hereto (the "Building B Parking Spaces"). LESSOR further grants to LESSEE during the term of this Lease and any renewals or extensions thereof a non-exclusive license to use the sidewalks, driveways and other Common Areas of the Business Park. "Common Areas" shall mean those areas within the Business Park not leased or held for lease to any tenant on an exclusive basis and reasonably necessary for the proper use and operation of, or access to, the Leased Premises or the Business Park, including without limitation all walkways, sidewalks, landscaping, drive ways (including without limitation the driveways leading from the Business Park to State Highway 183 and to Cameron Road), and the Business Park Monument Sign (defined in Section 10 below), and to the extent part of the Premises is located in any multi-tenant building, any common stairs, corridors, restrooms, elevators, mechanical rooms, electrical rooms, janitor closets, roofs, conference rooms, vending areas, fire control rooms, engineering, cleaning or staging areas, and other service areas of any building.

2. DESCRIPTION OF THE PREMISES. The Premises includes all of Building B located within the 1300 East Anderson Lane Business Park. Building B is sometimes hereinafter referred to as the "Building". The 1300 East Anderson Lane Business Park is located on the real property described on Exhibit B attached hereto (the "Land"). The Land, including the Building, the Building B Parking Spaces, Buildings A, C and D, the parking spaces allocated specifically to Buildings A, C and D, together with all other improvements and buildings located on the Land are hereinafter referred to as the "Business Park" are described as follows:

Land:	As described on Exhibit B
Building Name:	1300 East Anderson, Building B
Building Address:	1300 East Anderson Lane, Building B
City/State/Zip:	Austin, TX 78752

Lessee and Lessor agree that for this and all other purposes, the rentable square footage of the Premises equals approximately [redacted] square feet, and the aggregate rentable square footage of all buildings located on the Land equals approximately [redacted]

3. TERM, COMMENCEMENT, AND ANNIVERSARY. The initial lease term shall be for One Hundred and Twenty Five (125) full calendar months from Commencement Date, plus the remainder of the last month (as extended or renewed, the "Lease Term"). The lease "Commencement Date" shall be (a) November 15, 2009 (the "Move-In Date") or (b) the date which is thirty (30) days after the Tenant Improvements

are substantially completed in accordance with Exhibit C, whichever occurs first; provided that if LESSOR fails to make the Premises available to LESSEE with the Tenant Improvements substantially completed by November 1, 2009 for the purposes of allowing LESSEE to install its cabling and/or its furniture, fixtures and/or equipment, then the Move-In Date shall be delayed for one (1) day for each day LESSEE is delayed by LESSOR in LESSOR making the Premises available to LESSEE in such condition for such installation or any force majeure. If, subject to force majeure, LESSOR is unable to tender possession of the Premises to LESSEE with the Tenant Improvements substantially complete by February 15, 2010 (the "Final Deadline"), then LESSEE shall, as its sole and exclusive remedy, have the right to terminate this Lease on thirty (30) days advance written notice to LESSOR given at any time after the Final Deadline and prior to LESSOR's tender of possession of the Premises to Tenant with the Tenant Improvements substantially completed, provided that if LESSOR shall deliver the Premises to LESSEE with the Tenant Improvements substantially completed prior to the expiration of such 30-day period, LESSEE's notice of termination shall be deemed null and void and this Lease shall continue in full force and effect. In the event this Lease is terminated pursuant to the immediately preceding sentence, (w) such termination shall be effective upon the expiration of the 30-day period described above, (x) the full amount of Lessee's Contribution and Lessee's Additional Contribution (each as defined in Exhibit C hereto) shall be returned to Lessee within twenty (20) days after such termination, (y) Lessee shall have a period of twenty (20) days after such termination within which to remove all of Lessee's equipment, furnishings and other personal property, and (z) neither Lessor nor Lessee shall have any further rights, liabilities or obligations arising under this Lease. The annual anniversary date of this lease shall be the first day of the first full month following the Commencement Date, unless the lease Commencement Date is the first day of the month.

4. BASIC RENT. "Basic Rent" shall be $(See Addendum #1 "Rental Adjustments") per month, payable in advance without demand or set-off, to LESSOR at 510 South Congress, Suite 400, Austin, Travis County, Texas 78704 (or at such other address as may subsequently be furnished in writing by LESSOR for such purpose), *on or before the first of each month. Rent received after the first shall be delinquent, subject to any notice and cure periods provided herein*. If LESSOR does not receive an installment of rent (including Basic Rent, the monthly estimate of Additional Rent, and, if applicable, the TI Rent) on or before the fifth (5th) of the month in which such payment becomes due, LESSEE shall pay a late charge to LESSOR in an amount equal to five percent (5.0%) of the monthly rent. LESSEE shall pay to LESSOR twenty-five and *No/*100 Dollars ($25.00) for each returned check. If the Commencement Date of the Lease Term is not on the first of the month, pro rata rent for the balance of the month shall be due on the Commencement Date at the Basic Rate of [redacted] sq. ft. (subject however to the free Rent period set forth on Addendum #1), and shall be subject to the prescribed late charges if not received on or before day of move-in. Any payments of any kind received by LESSOR from LESSEE or on behalf of LESSEE shall be applied first to non-rent items then due and owing, then to rent. LESSEE's right to possession and all of LESSOR's obligations hereunder, and each of LESSEE's obligations hereunder, constitute independent, unconditional covenants and are not dependant upon performance by the other party hereto of its respective obligations and covenants hereunder.

5. ADDITIONAL RENT ("OPERATING EXPENSES"); TENANT IMPROVEMENT RENT ("TI RENT").

5.1 OPERATING EXPENSES. For the purposes of this Lease, "Operating Expenses" for any calendar year shall mean all (or where specified by Lessor as hereinafter permitted or required, an amortized portion of all as determined in accordance with generally accepted accounting principles consistently applied) expenses, costs and accruals of every kind and nature, computed on an accrual basis, incurred or accrued in connection with, or relating to, the ownership, maintenance, or operation of the Business Park, during such calendar year, including, but not limited to, the items set forth below in paragraphs A through E of this Section 5. Notwithstanding the foregoing, the items set forth on Addendum #9 to this Lease shall not be included in the calculation of Operating Expenses.

Notwithstanding anything to the contrary contained herein, LESSEE shall only be responsible for the payment of LESSEE's Share of such Operating Expenses. "LESSEE's Share" means the proportionate amount of rentable area within the Business Park which is leased to LESSEE based on a fraction, the numerator of which is the total rentable area located within the Premises, and the denominator of which is the total rentable area within all buildings in the Business Park. For purposes hereof, LESSEE's Share shall initially be twenty and 9/10ths percent (20.9%).

A. Insurance. The total premium(s), together with any increases thereof, for LESSOR's policy or policies of insurance insuring the Business Park against damage or destruction by fire or other casualties insured under extended coverage endorsement (or such other coverage as LESSOR shall determine to be necessary, including, but not limited to, umbrella liability coverage). LESSOR will periodically notify LESSEE of LESSEE's Share of said premium(s), and LESSEE's Share of any increases. If actual amounts are unavailable, LESSOR may estimate the amounts of such premiums and increases, subject to reconciliation as provided herein.

B. Taxes. All taxes, assessments and governmental charges of any kind or nature relating to the Business Park, whether or not directly paid by Lessor, whether federal, state, municipal, local or other, and whether they be by taxing districts or authorities presently taxing the Business Park or by others subsequently created or otherwise, and any other taxes, assessments and governmental changes attributable to the Business Park or its operation, and specifically including fifty percent (50%) of any State of Texas franchise or margin tax incurred by LESSOR and calculated on rental income generated from the Business Park, but specifically excluding taxes and assessments attributable to the personal property of any tenants, federal taxes on income, death taxes, and any taxes imposed or measured on or by the income of Lessor from the operation of the Business Park (other than State of Texas franchise or margin tax, 50% of which shall be included in Operating Expenses as provided above); provided, however, that if at any

time during the term of this Lease, the present method of taxation or assessment shall be changed such that the whole or any part of the taxes, assessments, or governmental charges now levied, assessed or imposed on real estate, improvements or personal property shall be discontinued or reduced, in whole or in part, and as a substitute therefore, or in lieu of or in addition thereto, taxes, assessments, or governmental charges shall be levied, assessed or imposed, wholly or partially, on (or shall be calculated with reference to) the rents received from the Business Park, or the rents reserved herein, or the income of Lessor in respect of the Business Park, or any such rents, then such substitute, additional or increased taxes, assessments, or governmental charges, to the extent so levied, assessed or imposed, shall be deemed to be included within the Operating Expenses. Consultation, legal fees and costs in connection with any challenge of tax assessments as reasonably allocated by Lessor shall also be included in Operating Expenses. Lessee will be responsible for and shall timely pay all ad valorem taxes on its personal property and on the value of the leasehold improvements installed in the Premises by or at LESSEE's request to the extent that the same exceed building standard (and if the taxing authorities do not separately assess Lessee's leasehold improvements, Lessor may make a reasonable allocation of the ad valorem taxes allocated to the Business Park to give effect to this sentence. In the case of special taxes and assessments which may be payable in installments, only the amount of each installment accruing during a year shall be included in the Operation Expenses for such year.

C. Common Area and Other Maintenance Type Expenses. In the event LESSOR provides maintenance, security, janitorial, cleaning and/or utility services to the Business Park, or installs equipment devices or material which LESSOR reasonably believes will reduce the Operating Expenses of the Business Park (provided that such belief is based on the documented reasonable opinion of an engineer or other appropriate third-party), or that are required by governmental authority to comply with any laws enacted after the Commencement Date for the Common Areas in the Business Park of any portion of the Demised Premises, then the cost to LESSOR of providing such maintenance, security, janitorial, cleaning, utility services, equipment and/or devices, together with a reasonable allowance for overhead (including but not limited to, management fees not to exceed then current market rates for similar properties to the Business Park). Except as otherwise provided herein, the nature and degree of services rendered by LESSOR in accordance with this subsection, if any, shall be in the sole discretion of LESSOR. LESSOR may estimate such items in advance, subject to reconciliation as provided herein.

D. Utilities. Any utilities supplied to the Common Areas of the Business Park.

As soon as reasonably possible after the end of each calendar year, but in any event not later than ninety (90) days after the end of such calendar year, LESSOR shall deliver to LESSEE a written notice indicating the actual amount of Operating Expenses incurred during such calendar year. In connection with Additional Rent for insurance premiums, taxes and common area maintenance under subsections A., B. and C. above, if LESSOR has estimated the amounts, LESSEE's Share will be adjusted based upon the

actual amounts of premiums, taxes and expenses identified in such notice. LESSEE will be allowed a credit against payments next coming due (or, if the Lease Term has expired, LESSOR will pay to LESSEE at the time LESSOR provides the notice described above in this paragraph) for any estimated payments made in excess of LESSEE's Share of actual Operating Expenses. LESSEE will pay within thirty (30) days after receipt of such written notice from LESSOR any amounts due in excess of estimated payments previously made.

LESSOR shall maintain full, complete and accurate books and records relating to Operating Expenses. LESSEE shall have the right, at its expense, to audit LESSOR's books and records to verify the amount of charges to LESSEE relating to insurance, real property taxes, common area and other maintenance type expenses, utilities and other amounts and any other costs which LESSEE is required to pay a proportionate share. If such audit reveals that the amount charged to LESSEE is incorrect, LESSOR and LESSEE shall make an appropriate adjustment in cash within thirty (30) days after completion of the audit. If such audit reveals that LESSEE was overcharged for such expense by more than five percent (5%) over the actual amount due and owing by LESSEE, LESSOR will also reimburse LESSEE for the cost of such audit.

E. Other Amounts. LESSEE's Share of Operating Expenses, and all other taxes, charges, costs and expenses which LESSEE is required to pay hereunder, together with all interest and penalties that may accrue thereon pursuant to this Lease in the event of LESSEE's failure to pay such amounts, and all damages, costs and expenses to which LESSOR shall be entitled hereunder by reason of any default of LESSEE or failure on LESSEE's part to comply with the terms of this Lease beyond applicable cure periods, and the interest upon unpaid obligations provided hereunder, shall all be deemed to be "Additional Rent" and, in the event of nonpayment by LESSEE beyond any applicable cure periods, LESSOR shall have all the rights and remedies with respect thereto as LESSOR has for the payment of the Basic Rent.

5.2 TI RENT. In consideration for the Basic Rent that LESSOR agrees to pay under the Lease for the Lease Term, LESSOR has agreed to provide LESSEE with an improvement allowance of $500,000.00 ("Allowance") for improvements to the Premises to be made by LESSOR as set forth in Exhibit C attached hereto (the "Tenant Improvements"). In addition, LESSOR has agreed to make available to LESSEE an additional allowance of up to an additional $300,000 (subject to LESSEE having first contributed $400,000 of LESSEE's funds toward the cost of the Tenant Improvements) for the Tenant Improvements (the "Additional Allowance"); provided, however, as consideration for LESSOR providing the Additional Allowance to LESSEE, LESSEE agrees to pay LESSOR, in addition to the Basic Rent, a monthly amount equal to the amount required to fully amortize the Additional Allowance, plus interest on Additional Allowance at the rate of seven percent (7%) per annum from the Commencement Date through the end of the initial Lease Term, such amortization to begin on first day of the sixth full calendar month after the Commencement Date through the end of the initial Lease Term (the "TI Rent"). Assuming LESSEE utilizes the entire $300,000 available as the Additional Allowance, and further assuming the Commencement Date is on the first day of a calendar month, then the monthly TI Rent commencing on the first day of the sixth full month of the Lease Term would be $3,566 per month. Lessor shall notify Lessee of Lessor's calculation of monthly TI Rent (including a copy of the amortization schedule used to calculate such amount) prior to the Commencement Date.

The Basic Rent, Additional Rent, TI Rent and all other amounts of whatever kind or character payable to LESSOR by LESSEE hereunder (all hereinafter included in the term "rent") shall, except as otherwise provided herein, be paid without notice of demand and without abatement, counterclaim, deduction, setoff or defense, and any amounts due and owing hereunder by one party to the other and not paid when due shall bear interest at the rate of twelve percent (12%) per annum (or the highest legal rate provided by then controlling law if less than twelve percent (12%) from the due date until paid).

Subject to the initial period of free Rent set forth on Addendum #1, the initial amount of rent is computed as follows (based on a Premises containing [redacted] square feet):

Annual Rate	Annual Amount	Monthly Amount
Basic Rent [redacted] sq. ft.)	[redacted]	[redacted]
Additional Rent (estimated for 2009):		
Common Area Maintenance [redacted] sq. ft.)	[redacted]	[redacted]
Real Property Taxes [redacted] sq. ft.)	[redacted]	[redacted]
Insurance [redacted] sq. ft.)	[redacted]	[redacted]
Total Rent (does not include TI Rent, if applicable)	[redacted]	[redacted]

6. SECURITY DEPOSIT. Intentionally Deleted.

7. USE AND OCCUPANCY.

A. LESSEE shall use and occupy the Premises for the following purposes and no other: General Office purposes, training, customer support services, and light manufacturing of medical devices and other uses of pyrolitic carbon coatings. Except for LESSEE's limited right to store the equipment described on Exhibit D attached hereto, outside storage of equipment or materials is prohibited. As relates to LESSOR's operation of the Business Park, LESSOR agrees to comply with all applicable laws, including accessibility laws. LESSEE acknowledges that included in the Tenant Improvements are upgrades to the Premises to cause the Building to be in compliance with accessibility laws. LESSEE covenants promptly to observe and comply with all applicable statutes, ordinances and regulations of all governmental entities regarding the use and occupancy of the Premises, including accessibility laws. LESSEE shall not do or suffer anything to be done on the Premises, which will increase the fire insurance rate on the Business Park; provided that so long as LESSEE's operations in the Leased Premises do not materially increase the risk of fire or damage to the Premises compared with the uses made of the Premises within the last two (2) years preceding the Effective Date of this Lease, LESSEE shall not be deemed in violation of this sentence. LESSEE shall not

cause the accumulation of waste or refuse matter within the Premises or anywhere in the Business Park or the immediately surrounding area. LESSEE and LESSEE's agents, employees, guests, visitors or licensees shall observe and comply with rules and regulations of the Business Park as attached, and with such further reasonable rules and regulations LESSOR may prescribe, on written notice to LESSEE, for the *safety, care and cleanliness of the Business Park and the comfort, quiet enjoyment and convenience of other occupants of the Business Park*, provided same are not in conflict with this Lease.

B. As used in this Subparagraph B., the term "Environmental Laws" shall be deemed to include the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act of 1976, the Toxic Substances Control Act, the Federal Insecticide, Fungicide and Rodenticide Act, the Comprehensive Environmental Response, Compensation and Liability Act, the 1986 Super Fund Amendments and Re-authorization Act, the Occupational Safety and Health Act, the National Environmental Policy Act, all State and Local Acts enacted pursuant to any of such Federal laws, and all other Federal, State or Local laws, rules and regulations, whether enumerated or not, dealing with the control and regulation of the environment. In this connection, LESSEE represents, warrants, covenants and agrees as follows:

(i) Other than any Hazardous Materials or substances that are normally associated with the conduct of LESSEE's business and are described on Exhibit E attached hereto, which Hazardous Materials may be used and stored on the Premises but only in compliance with all Environmental Laws, LESSEE will not use, manufacture or store any substances deemed or declared to be hazardous or toxic pursuant to any Environmental Law, without the express written consent of LESSOR, and, if LESSOR so consents, LESSEE agrees to abide by all Environmental Laws applicable thereto.

(ii) LESSEE agrees to comply strictly and exactly with all Environmental Laws applicable to LESSEE's use and occupancy of the Premises.

(iii) LESSEE agrees to indemnify and hold harmless LESSOR of and from any claim, obligation or liability asserted by any third person or governmental entity arising by reason of LESSEE's failure to comply with the provisions of this Subparagraph B.

(iv) The liability insurance policy, which LESSEE is required to maintain pursuant hereto, shall cover LESSEE's liability and obligation under this Subparagraph B.

(v) A default by LESSEE under the provisions of this Subparagraph B. beyond applicable cure periods shall give LESSOR the right to pursue its remedies under this Lease, including termination, provided LESSOR has given LESSEE thirty (30) days after written notice from LESSOR in which to begin diligent efforts to cure the default. Notwithstanding any termination or other remedy exercised by LESSOR, LESSEE, at

LESSEE's sole cost and expense, shall be responsible for any spill, release, discharge or "clean-up" of Hazardous Materials, including, but not limited to, the Hazardous Materials described on Exhibit E, caused by LESSEE, its agents, employees, representatives, invitees, customers or contractors as is required by any Environmental Law, unless it is determined to be caused by the negligence or willful misconduct of LESSOR, its agents, employees, representatives, invitees, customers or contractors or other lessees of the Business Park. LESSEE shall indemnify and hold LESSOR harmless from and against any and all claims, judgments, damages, fines, suits, and costs (including but not limited to attorney and consulting fees) arising from or related to the use, transportation, storage, disposal, spill or discharge of Hazardous Materials in violation of applicable laws on or about the Premises by LESSEE, its agents, employees, representatives, invitees, customers or contractors. As used herein, the term "Hazardous Materials" shall mean pollutants or contaminants, which are or become regulated by all applicable local, state and federal laws, petroleum, asbestos, polychlorinated biphenyls and radioactive materials.

(vi) Upon written notice by Lessee or any governmental authority, LESSOR, at LESSOR's sole cost and expense, covenants to investigate, clean up and otherwise remediate any Hazardous Materials existing at the Business Park as of the Commencement Date of the Lease, and any spill, release or discharge of Hazardous Materials caused by LESSOR, its agents, employees, representatives, invitees, contractors or lessees (other than LESSEE), subject to LESSOR's right to cause any lessee at the Business Park to pay the costs for such investigation or remediation for which such lessee is responsible. LESSOR shall indemnify and hold LESSEE harmless from and against any and all claims, judgments, damages, fines, suits, and costs (including but not limited to attorney and consulting fees) arising from or related to the use, transportation, storage, disposal, spill or discharge of Hazardous Materials on or about the Demises Premises caused by Lessor, its agents, employees, representatives, invitees, contractors or other lessees of the Business Park. As used herein, the term "Hazardous Materials" shall mean pollutants or contaminants, which are or become regulated by all applicable local, state and federal laws, petroleum, asbestos, polychlorinated biphenyls and radioactive materials.

(vii) The provisions of this Subparagraph B are in addition to, and not in limitation of, any other provisions of this Lease and the obligations of LESSEE and the rights of LESSOR under this Lease.

C. LESSOR represents and warrants to LESSEE that to LESSOR's current actual knowledge, without inquiry or investigation, the Premises, the Business Park and the land associated therewith, including without limitation the Building B Parking Spaces, and the condition thereof, does not violate any applicable Environmental Laws. LESSOR further covenants and agrees that the Premises, the Business Park and the land associated therewith, including without limitation the handicap parking spaces attributable to Building B, and building entrances of Building B, will not upon the substantial completion of the Tenant Improvements violate zoning or any other applicable laws (including the Americans with Disabilities Act, the Texas Accessibility

Standards and any other accessibilities laws, Environmental Laws, and any other applicable laws pertaining to health and the environment) or restrictive covenants or encumbrances relating to the Business Park in any material respect, and that when the Demised Premises are delivered to LESSEE for occupancy, the Demised Premises and the use thereof contemplated by this Lease will comply with applicable laws and any such restrictive covenants or encumbrances in all material respects. For purposes of the preceding sentence, a violation will be considered "material" if it impairs the use of, access to or parking for the Demised Premises by LESSEE to any material extent, or would impair such use, access, or parking to a material extent if disclosed to governmental authorities or other parties or if the violation may cause LESSEE or any of LESSEE's officers or employees to be subject to prosecution for civil or criminal liability.

8. CONSTRUCTION OF TENANT IMPROVEMENTS ON THE PREMISES. As part of LESSOR's obligation to construct the Tenant Improvements in accordance with Exhibit C, upon Substantial Completion (as hereinafter defined) of the Tenant Improvements, LESSOR agrees to deliver the Premises and, at LESSOR's sole cost and expense, the Building B Parking Spaces and the Common Areas, in good working order, in compliance with all applicable laws (including ADA and TAS), and including to seal coat and stripe the Building B Parking Spaces at LESSOR's sole cost and expense, and to construct and complete the Tenant Improvements to the extent set out in the attached Exhibit C. Upon Substantial Completion of the Tenant Improvements, Lessor and Lessee shall execute the Acceptance of Premises Memorandum (herein so called) attached hereto as Exhibit C-1.

9. ALTERATIONS AND IMPROVEMENTS. Except as expressly and clearly provided elsewhere herein, all alterations, improvements, additions or remodeling of the Premises during the Term of the Lease shall be done at the expense of the LESSEE and only with the written consent of LESSOR. To the extent any such alterations, improvements, additions or remodeling do not adversely affect the foundation, exterior walls, roof, or any structural issues related to the Premises, such consent shall not be unreasonably withheld, conditioned or delayed. LESSEE is hereby permitted, with LESSOR's consent not to be unreasonably withheld, conditioned or delayed, to install [redacted] and to perform such other alterations and improvements to the Premises which do not adversely affect the structural soundness thereof; provided, however, if the installation of any such supplemental equipment involves the roof, the placing of equipment on the roof or a roof penetration, LESSOR's roofing contractor or consultant, must have the opportunity to be present at all times during such work, and LESSEE shall be obligated to pay all reasonable costs associated with LESSOR's roofing contractor or consultant. Notwithstanding the foregoing, LESSOR's consent shall not be required for any alteration, improvement, addition or remodeling of the Premises that satisfies all of the following criteria: (a) does not affect the foundation, exterior walls, roof, or any structural issues related to the Premises; and (b) the cost thereof does not exceed, in the aggregate for any particular project or series of projects which reasonably can be considered one and the same project, $25,000. Other than LESSEE's equipment,

machines and removable trade fixtures (whether or not the same may be affixed to the Premises so long as the removal thereof can be accomplished without causing permanent damage to the Premises that cannot be repaired to LESSOR's reasonable satisfaction), but specifically excluding any [redacted] installed by LESSEE ("Tenant's Equipments"), all such alterations, improvements, additions or remodeling, whether made by LESSEE or LESSOR at LESSEE's request, including any items nailed, glued, screwed or otherwise attached to the Premises, shall become the property of LESSOR upon the expiration of this Lease, unless otherwise expressly and clearly provided herein. LESSEE shall not, without the written consent of LESSOR, permit any lien to be affixed to the Premises or the Business Park by reason of any remodeling, alterations or other work performed by, or at the request of, LESSEE, by operation of law or otherwise. Other than Tenant's Equipment and except in connection with any alterations permitted hereunder, LESSEE shall not remove at any time any improvements, additions, or any other item nailed, glued, screwed or otherwise attached to the Premises without LESSOR's express written permission, such permission not to be unreasonably withheld, conditioned or delayed. However, not later than the last day of the Term, LESSEE shall, at LESSEE's sole expense, remove all of LESSEE's property, and remove all partitions, counters, railings, etc., which were installed by LESSEE (other than the Tenant Improvements installed pursuant to Exhibit C) and whose removal is specifically requested by LESSOR in writing at the time LESSOR approves the installation thereof, and LESSEE shall repair all injuries done by or in connection with the installation and/or removal of such property. Without limiting the generality of anything herein contained, in the event any federal, state or local law, rule, or ordinance or regulation (including, but not limited to, the Americans with Disabilities Act of 1990, as same may now exist or hereafter be amended or supplemented), shall require any alterations or improvements to the Premises, the Building B Parking Spaces and the Common Areas, it shall be the obligation of LESSOR and not LESSEE to make such alterations or improvements, but, to the extent such alterations are required in order to comply with laws, rules, ordinances or regulations becoming effective after the Commencement Date, such alterations or improvements shall be deemed to be Operating Expenses, and to the extent such alterations or improvements are determined under generally accepted accounting principles to be capital improvements, the amortized cost thereof over the depreciable life such alteration or improvement shall be an Operating Expense.

10. SIGNS AND EQUIPMENT. Subject to the approval of all applicable governmental authorities, LESSEE, at its sole cost and expense (subject to any allowance for Tenant Improvements provided herein), shall (a) have the proportionate right (based on the ratio that the number of rentable square feet contained in the Premises bears to the number of rentable square feet in the Business Park as set forth in Section 2, but in no event shall Lessee's proportionate share for this purpose be less than twenty-five percent (25%) so long as Lessee occupies an entire building in the Business Park) to advertise the name of LESSEE's business on the Business Park monument sign existing as of the Effective Date of this Lease (or any replacement thereof) located adjacent to State Highway 183 (the "Business Park Monument Sign"); (b) have the exclusive right to place its name and corporate logo on up to two (2) sides of the Building, subject however to

maintaining the continuation of the delineation of the Building as “Building B”, and (c) to construct up to two (2) monument signs within the Business Park adjacent to or within the area containing the Building B Parking Spaces for LESSEE’s use, subject however to LESSOR’s right to approve the location of such monument signs, not to be unreasonably withheld, conditioned or delayed. LESSOR shall have the right to approve the design of any such signage, which approval shall not be unreasonably withheld, conditioned or delayed. In the event that LESSEE occupies any other building in the Business Park, LESSEE shall have the same rights provided above with respect to such building, provided that LESSEE occupies fifty percent (50%) or more of the rentable area of such building. LESSEE shall have the right, as part of such signage, to name the Building “The On-X Building”, as long as such re-naming does not eliminate the delineation of the Building as Building B of the Business Park. LESSOR shall not name the Building, the Business Park, or any other building located therein, or permit the usage of any signs located therein to advertise, the name or business of any person or entity whose primary business competes in the manufacture of heart valves. LESSOR shall, at LESSOR’s sole cost and expense, convert the Business Park Monument Sign into a multi-tenant sign as shown on Addendum #5 prior to the Commencement Date, and shall permit LESSEE to occupy the quadrant of such multi-tenant sign which is nearest to State Highway 183 and/or which is the highest panel made available to tenants. LESSEE’s rights under this Section 10 are assignable by LESSEE to any permitted assignee or subtenant. All signs shall conform to the rules and regulations as outlined in Addendum #5. Notwithstanding the foregoing, LESSOR approves LESSEE’s signage design set forth on Addendum #5. No other signs shall be permitted unless by written consent of LESSOR, such consent not to be unreasonably withheld, conditioned or delayed.

11. UTILITIES AND SERVICES.

A. Utilities. LESSEE acknowledges that LESSEE has investigated the Building and that LESSEE has determined and is satisfied that all utilities needed for the proper operation, maintenance and upkeep of the Premises are in place and available to the Premises. Except for the Tenant Improvements contemplated in Exhibit C and the representations and warranties of LESSEE expressly contained in this Lease, LESSEE acknowledges that it is leasing the Building “AS IS, WHERE IS” and “WITH ALL FAULTS”. LESSEE agrees to furnish, to the extent required for LESSEE’s operations, and be responsible for payment for any and all electricity, water, wastewater, gas and other utilities for warehouse, manufacturing and/or office requirements for the use stated in Paragraph 7. Except with respect to the initial Tenant Improvements, to the extent LESSEE’s intended operations at the Premises shall require upgraded electrical equipment or facilities within the Premises, LESSEE shall be responsible for such upgrade at LESSEE’s sole cost and expense. LESSEE shall pay to the City of Austin or any other municipal utility company monthly, as billed, such charges attributable to the Premises as may be separately metered.

B. Cleaning Services. LESSOR shall provide for normal and customary maintenance, trash collection and, if applicable, periodic cleaning for all Common Areas; provided that LESSOR has no obligation to furnish janitorial upkeep or custodial services within the Demised Premises, and it shall be the sole responsibility of the LESSEE to furnish all such services.

C. Intentionally omitted.

D. Remedy. In the event of any interruption in utilities to the Premises which cause all or part of the Premises to be untenantable, all Rent due hereunder shall be proportionately abated for any such periods of interruption in excess of three (3) consecutive business days following written notice of such interruption from LESSEE. LESSOR agrees to use reasonable, good faith efforts to cause the provision of such utilities to be resumed as soon after such interruption as is reasonably practicable, subject to force majeure. In the event that LESSOR does not use reasonable, good faith efforts to restore such utility service as quickly as reasonably practicable, LESSEE shall have the right to do so, and any expenses incurred by LESSEE shall be reimbursed to LESSEE within thirty (30) days after written notice plus, in the event such expenses are not repaid within such thirty (30) day period, interest thereon at the rate of twelve percent (12%) per annum from the date due until paid.

12. ACCESS TO THE BUSINESS PARK AND PREMISES.

A. Access by LESSEE. LESSEE shall have private access to the Premises 24 hours per day 7 days a week with individual keys to the Premises.

B. LESSOR's Right of Access. If LESSEE, his agents or employees, are present, the LESSOR, LESSOR's representative, or servicemen may enter the Premises during LESSEE's normal business hours and upon advance notice for any reasonable business purpose. If such persons are not present, LESSOR, LESSOR's representatives or servicemen will provide LESSEE with twenty four (24) hours notice before such entry (unless in the event of an emergency, no prior notice will be provided by LESSOR to LESSEE, but LESSOR shall notify LESSEE as soon thereafter as is reasonably practicable), in order to enter by duplicate key or master key during LESSEE's normal business hours (or such other hours as LESSOR and LESSEE may mutually schedule) for the following purposes: repairs, extermination, preventive maintenance, security, recovery of tools on loan, safety and fire inspections, showing the Premises to building inspectors, fire marshals, mortgage lenders, prospective purchasers or insurance agents. Notwithstanding anything to the contrary contained herein, LESSOR shall use reasonable, good faith efforts to schedule and perform any such entries, and any work to the Building B Parking Areas, drives or other Common Areas directly adjacent to the Building in such a manner as to minimize the inconvenience to LESSEE's business.

If LESSOR and LESSEE shall not have renewed or extended this Lease prior to the final ninety (90) day period of the Lease Term, LESSOR and its authorized agents shall have the right to erect on or about the Demised Premises a customary sign advertising the property for lease or for sale. During said ninety (90) day period LESSOR and its authorized agents shall have the right to enter the Demised Premises upon not less than one (1) hour notice, and during LESSEE's normal business hours, for

the showing of the Demised Premises to prospective Lessees or purchasers. Notwithstanding the foregoing, LESSEE shall have the right, in connection with any entry of the Premises by LESSOR or any other party under this Section 12.B., to take reasonable precautions, and to require (and LESSOR and such other parties shall observe) reasonable restrictions on access to any areas of the Premises in which LESSEE stores, operates, or uses any proprietary information, applications or processes, or from which such information, applications or processes are visible.

13. PARKING. LESSEE shall, at no additional cost throughout the term of the Lease, including any extensions or renewals thereof, have the exclusive right to use all of the Building B Parking Spaces as denoted on Exhibit A-1 within which LESSEE and its agents and employees and invitees may park vehicles driven by them, and LESSEE covenants and agrees that all such vehicles will be parked only within the Building B Parking Spaces LESSOR agrees, at LESSOR's sole cost and expense, to seal coat and restripe the Building B Parking Spaces prior to the Commencement Date.

14. MAINTENANCE BY LESSOR. LESSOR shall only maintain and repair the roof, foundation, and the structural soundness of the exterior walls (excluding all windows, window glass, plate glass and all doors) of the Demised Premises in good working order and condition, except for reasonable wear and tear. LESSOR shall also maintain the Common Areas (including without limitation all drives, sidewalks, landscaping and the Business Park Monument Sign) of the Business Park in a good and workmanlike manner consistent with the way LESSOR has been maintaining such Common Areas as of the date of this Lease, but in any event in a manner at least as good as comparable developments in the Austin, Texas market, and LESSEE shall reimburse LESSOR for LESSEE's Share of expenses incurred by LESSOR in order to maintain the Common Areas, as stated in Paragraph 5 "Additional Rent". In the event that, during the initial twelve (12) month period following the Commencement Date, any of the equipment serving the Premises is or becomes in need of replacement, and LESSEE's engineer or a third-party service professional reasonably determines that such equipment has reached the end of its useful life and needs to be replaced, LESSOR shall, at LESSOR's sole cost and expense, replace such equipment with new equipment of a similar or better character and quality, and shall assign any warranties for such new equipment to LESSEE; provided, however, if LESSEE elects to move and relocate any such equipment during the initial twelve (12) month period of the Lease Term, the cost to move, relocate, repair or replace (but with respect to a replacement, only in the event that the need to replace such equipment results from moving or relocating such equipment) such moved or relocated equipment shall be paid by LESSEE. After the expiration of such initial twelve (12) month period of the Lease Term and continuing until the first day of month that is nine (9) months prior to the expiration of the Lease Term, if LESSEE's engineer, LESSOR's engineer, or a third-party service professional reasonably determines that such equipment has reached the end of its useful life and needs to be replaced, LESSEE shall, at LESSEE's sole cost and expense, replace such equipment with new equipment of a similar or better character and quality. LESSOR shall be responsible, at LESSOR's sole cost and expense (subject to reimbursement in Operating Expenses, if otherwise permitted hereunder), for any capital replacements required during the final nine (9) months of the Lease Term. If the Premises are in need of any of the limited repairs or

replacements for which LESSOR is liable to perform under the terms of this Lease, LESSEE shall give LESSOR prompt written notice specifically setting forth the nature of such needed repairs or replacements. LESSOR shall not have any liability or obligation to make any repairs or replacements until LESSEE has provided the aforesaid written notice to LESSOR. LESSOR's liability hereunder is expressly limited to the cost of the repairs and replacements, and LESSOR shall have no liability for, and LESSEE agrees to release LESSOR from, any loss, damage, claim or other costs in excess of the cost of the repairs and replacements arising from such repairs, replacements or the cause thereof. LESSOR agrees to use commercially reasonable efforts to complete any such repairs or replacements within thirty (30) days after such written notice; provided, however, if such repairs are not reasonably capable of repair within such thirty (30) day period, LESSOR agrees to timely commence such repairs and replacements and proceed to diligently complete such repairs in a reasonable period of time, using commercially reasonable efforts, acting in good faith. If LESSOR fails to timely complete such repairs and replacements as provided in the preceding sentence (or, in the event of any condition which results, or is reasonably likely to result, in any property damage or personal injury, within ten (10) days after such notice), LESSEE shall have the right to perform such repairs or maintenance, and any expenses incurred by LESSEE shall be reimbursed to LESSEE within thirty (30) days after written notice plus, in the event such expenses are not repaid within such thirty (30) day period, interest thereon at the rate of twelve percent (12%) per annum from the date due until paid. LESSOR reserves the right to place over, under or behind the Demised Premises pipes, wires, lines and other facilities serving other areas of the Business Park, and will not unreasonably interfere with the use of the Demised Premises, provided that LESSOR shall be responsible for maintaining same in good working order and condition.

LESSEE will permit LESSOR and LESSOR's agents, employees or representatives to enter into and upon any and all parts of the Demised Premises upon reasonable advance notice and during LESSEE's normal business hours (unless LESSOR and LESSEE schedule a different mutually agreeable time) to inspect same or make such repairs or alterations as LESSOR reasonably deems necessary, and LESSEE shall not be entitled to any abatement or reduction of rent by reason thereof. LESSOR shall be entitled to make such repairs and alterations of Common Areas and grounds in the Business Park as LESSOR reasonably deems necessary, and LESSEE shall not be entitled to any damages or abatement or reduction of rent by reason thereof even though such repairs or alterations may affect temporarily LESSEE's use of the Demised Premises, provided that LESSOR will not unreasonably interfere with the use of the Demised Premise, and shall use good faith efforts to minimize any inconvenience to LESSEE's business caused by such activities (including, without limitation, scheduling such activities outside LESSEE's normal business hours to the extent possible).

15. MAINTENANCE BY LESSEE. LESSEE shall at its expense and risk maintain all other parts of the Premises and the Building B Parking Spaces in good repair and condition except for normal wear and tear, casualty and condemnation, including but not limited to repairs (including all necessary) to the interior plumbing, windows, window glass, plate glass, doors, fire protection sprinkler system, and the interior of the Demised Premises in general. LESSEE shall provide preventative maintenance to the heating and air conditioning equipment and system. LESSEE will provide and maintain vermin-proof receptacles for LESSEE's own use in the event refuse is temporarily stored

outside of the Demised Premises, and LESSEE will be responsible for the removal of said refuse and will promptly and strictly comply with all health, sanitary or other laws, regulations and ordinances pertaining to the depositing and removal of such refuse from or about the Demised Premises. Such receptacle shall be solely in such areas, if any, designated by LESSOR in LESSOR's reasonable discretion, such areas to be reasonably near the Premises. LESSEE will not use the Common Areas or other area outside of the Premises to store any pallets, cartons, equipment or other materials except solely for the limited equipment approved for outside storage as specifically set forth on Exhibit D. LESSEE further agrees to be responsible for sweeping and cleaning the Demised Premises. LESSEE will maintain, repair and replace when necessary, the air conditioning, plumbing, gas and electrical appurtenances and fixtures in the Demised Premises, and LESSEE will enter into and keep in force throughout the Lease Term a HVAC maintenance contract with a HVAC maintenance contractor reasonably acceptable to LESSOR. LESSOR will not be liable to LESSEE or any other persons whomsoever for injury or damage to persons or property received on or incidental to the use of said Demised Premises during the Term of this Lease, and LESSEE will indemnify, defend and save harmless LESSOR from and against any loss, claim, expense or liability in connection therewith including LESSEE's failure to repair unless caused by the gross negligence or willful misconduct of LESSOR or LESSOR's agents, employees, contractors or representatives. LESSEE shall not be required to make any capital replacements during the final nine (9) months of the Lease Term.

LESSEE shall throughout the Lease Term take good care of the Demised Premises and keep them free from waste, and shall deliver up the Demised Premises broom-clean at the termination of this Lease in at least the condition in which they were in on the Commencement Date, (reasonable wear and tear, casualty and condemnation excepted).

In the event LESSEE should fail to maintain the Demised Premises as required hereunder and such failure continues for more than thirty (30) days after written notice from LESSOR, LESSOR shall have the right (but not the obligation) to cause repairs or corrections to be made and any out of pocket third party costs thereof shall be payable by LESSEE to LESSOR as Additional Rent within thirty (30) days after LESSOR presents LESSEE with a written invoice therefor.

16. TAXES. LESSOR shall pay all real estate ad valorem taxes levied against the Business Park during the Term of this Lease. LESSEE shall pay all taxes on personal property within the Premises, all sales taxes or occupations taxes on LESSEE's business and any and all other taxes attributable to LESSEE or LESSEE's business.

17. INSURANCE AND INDEMNIFICATION; WAIVER OF SUBROGATION. LESSOR shall pay for property insurance coverage (formerly "fire and extended coverage - all-risk") on the Business Park (including the Premises and the leasehold improvements located therein) in an amount equal to the full replacement cost thereof. LESSEE agrees to obtain and maintain during the Lease Term the insurance coverage set forth on Exhibit F attached hereto. LESSEE shall provide LESSOR with a certificate of

such insurance prior to the Commencement Date of this Lease. LESSOR shall provide for commercial general liability insurance for its business operations in the Business Park as follows: bodily injury and property damage of not less than $2.0 Million combined single limits. LESSOR's insurance policies shall comply with the General Insurance Requirements set forth in Sections 2(a)(i), 2(a)(iii) and 2(b)(i) of Exhibit F attached hereto.

LESSOR shall not be liable to LESSEE or LESSEE's agent, employees, guests or invitees, or to any person claiming by or through LESSEE for any injury to any person or damaged property or for the loss or damage to LESSEE's business, occasioned by or through the acts of omissions of LESSOR or any person, or by and other cause whatsoever, except LESSOR's negligence or willful misconduct. Subject to the paragraph immediately following, LESSEE shall indemnify LESSOR and save LESSOR harmless from all suits, actions, damages, liability and expense in connection with personal injuries or property damage arising in or on the Premises or occasioned by any negligence or willful misconduct of LESSEE, LESSEE's agents, contractors, employees, servants, invitees or licensees which may occur during the term of this Lease, except if it is determined to be caused by LESSOR, LESSOR's agents, contractors, employees, servants, invitees or licensees. Subject to the paragraph immediately following, LESSOR shall indemnify LESSEE and save LESSEE harmless from all suits, actions, damages, liability and expense in connection with personal injuries or property damage arising in or on the Business Park or occasioned by the negligence or willful misconduct of LESSOR, LESSOR's agents, contractors, employees, servants, invitees or licensees which may occur during the term of this Lease, except if it is determined to be caused by LESSEE, LESSEE's agents, contractors, employees, servants, invitees or licensees.

Notwithstanding anything in this Lease, or in any insurance policy to be obtained under this Lease, to the contrary, LESSOR and LESSEE each hereby WAIVES any and all rights of recovery, claim, action or cause of action against the other, its partners and affiliates, and its and their agents, servants, shareholders, officers, directors, managers, members, principals or employees and their respective insurance carriers, for any loss or damage that may occur to the Premises, the Business Park, or any personal property or fixtures of such party therein or thereon, by reason of fire, the elements, or any other cause, in each case only to the extent same is insured against or required to be insured against under the terms of the insurance policies referred to in this Paragraph 17, regardless of cause or origin, including, without limitation SOLE, JOINT OR CONCURRENT NEGLIGENCE, SOLE, JOINT OR CONCURRENT GROSS NEGLIGENCE, WILLFUL MISCONDUCT, STRICT LIABILITY, OR OTHER FAULT OF EITHER OR BOTH OF THE PARTIES HERETO AND THEIR RESPECTIVE AGENTS, SERVANTS, EMPLOYEES, OFFICERS, DIRECTORS, SHAREHOLDERS, PARTNERS, ARCHITECTS, CONTRACTORS, SUBCONTRACTORS, ATTORNEYS, CUSTOMERS AND INVITEES. Each party waives and covenants that no insurer shall hold (and hereby waives on behalf of such insurer) any right of subrogation against such other party as a result of such claims. If the respective insurer of LESSOR and LESSEE does not permit such a waiver without an appropriate endorsement to such party's insurance policy, then LESSOR and LESSEE

each shall notify its insurer of the waiver set forth herein and shall secure from such insurer an appropriate endorsement to its respective insurance policy with respect to such waiver. The foregoing waiver of recovery and subrogation provisions shall also apply to any other insurance obtained and maintained by either LESSOR or LESSEE, except such waivers shall be limited to liabilities and indemnities assumed under this Lease by LESSOR and LESSEE, respectively.

18. DESTRUCTION OR CONDEMNATION. In the event of total damage or destruction of the Premises, both LESSOR and LESSEE shall have the option to terminate this Lease in its entirety. In the event of partial damage or destruction of the Premises by fire or other cause, LESSOR shall deliver to LESSEE, within thirty (30) days of such damage or destruction, a written opinion from LESSOR's architect stating the estimated time needed to repair or rebuild the Premises to its condition immediately prior to the occurrence of such damage or destruction. In the event that such notice states that such repair or reconstruction of the Premises to its previous condition shall take longer than one hundred eighty (180) day after the occurrence of such damage or destruction, both LESSEE and LESSOR shall have the option to terminate the Lease in its entirety by notifying the other in writing within fifteen (15) days after such notice is delivered. In the event that this Lease is not so terminated, LESSOR shall be obligated to reconstruct and repair the Premises to a condition substantially the same as that existing prior to the casualty, and shall promptly commence and proceed with due diligence in such repair or reconstruction and use commercially reasonable efforts (including, without limitation, performing such work on weekends if reasonably necessary to timely complete the work) to complete such work as soon as is reasonably practicable, provided that if such repair or reconstruction is not completed within one hundred eighty (180) days after the date of such casualty, LESSEE shall have the option to terminate this Lease; provided further, however, if the repair or reconstruction work is at least ninety percent (90%) complete on the 180th date after such casualty, LESSEE shall not have the right to terminate this Lease as long as LESSOR substantially completes the repair or reconstruction within thirty (30) days thereafter. In the event that this Lease is not terminated as provided above, Rent shall abate proportionately from the date of such damage or destruction until the Premises is repaired or reconstructed to a condition substantially the same as that existing prior to the casualty. In the event that this Lease is terminated under this Paragraph 18, such termination shall be effective as of the date of the casualty. LESSOR shall not be responsible for damage or destruction to LESSEE's trade fixtures, furniture and/or equipment; and LESSEE shall have the sole responsibility of carrying insurance or the risk of loss thereof.

LESSOR shall promptly notify LESSEE in writing of any condemnation or threatened condemnation affecting the Business Park. If the entire Premises are taken in condemnation, this Lease shall terminate one (1) day prior to such taking. If part of the Premises (but less than all of the Premises) or any parking areas associated therewith or access thereto is taken in condemnation (a ''Partial Taking"), and such Partial Taking will, in LESSEE's reasonable judgment, materially and adversely affect LESSEE's ability to use the Premises for the purposes of carrying on LESSEE's business to the same extent as carried on prior to such Partial Taking, then LESSEE may terminate this

Lease by written notice to LESSOR given within 30 days after LESSEE receives actual notice of the Partial Taking, such termination to be effective one (1) day prior to such Partial Taking In the event of a Partial Taking, and if this Lease is not terminated as provided above, LESSOR shall repair and reconstruct the Premises to the extent necessary to allow LESSEE to continue operating LESSEE's business from the portion of the Premises remaining, and rent shall be permanently abated to the extent that such partial taking reduces the usable space of the Premises or LESSEE's parking rights or access to the Premises. LESSEE shall not participate in any of the condemnation award, provided that LESSEE shall have the right to assert a claim for and recover from the condemning authority, but not from LESSOR, such compensation as may be awarded on account of LESSEE's moving and relocation expenses, loss to any of LESSEE's property, and depreciation to and loss of any leasehold improvements constructed by or on behalf of LESSEE. Except as provided above, all awards or compensation received during the Term of this Lease by reason of condemnation by any government or governmental agency (or private sale in lieu of such condemnation) of all or any portion of the Premises, the Business Park or land upon which it is situated shall belong entirely to LESSOR; and LESSEE hereby assigns its interest, if any, in such awards to LESSOR.

19. DEFAULT BY LESSOR. LESSOR shall not be in default under this Lease, and LESSEE shall not be entitled to exercise any right, remedy or recourse against LESSOR or otherwise as a consequence of any alleged default by LESSOR under this Lease, unless and until LESSOR fails to perform any of its obligations hereunder and said failure continues for a period of 30 days after LESSEE gives LESSOR written notice thereof specifying, with reasonable particularity, the nature of LESSOR's failure; provided, however, that if the failure can be cured but not within the 30 day time period, LESSOR shall not be in default hereunder if LESSOR commences to cure the failure within such 30 days and thereafter in good faith pursues the curing of same diligently to completion. If LESSOR defaults under this Lease, and, as a consequence of the default, LESSEE recovers a money judgment against LESSOR, the judgment shall be satisfied only out of, and LESSEE hereby agrees to look solely to, the interest of LESSOR in the Business Park as the same may then be encumbered, and any proceeds thereof, and LESSOR shall not otherwise be liable for any deficiency. In no event shall LESSEE have the right to levy execution against any property of LESSOR other than its interest in the Business Park or any proceeds thereof. The foregoing shall not limit any right that LESSEE might have to obtain specific performance of LESSOR's obligations hereunder.

20. DEFAULT BY LESSEE. The occurrence of any of the following beyond the applicable cure periods shall constitute a default (an "Event of Default") by LESSEE:

A. Failure to pay rent or any other amounts to be paid by LESSEE, when due, if failure continues for ten (10) days after due date and an additional five (5) days after written notice by LESSOR, or

B. LESSEE shall admit in writing its inability to pay its debts and obligations as they come due, or shall make an assignment for the benefit of creditors.

C. LESSEE shall file a petition under any section or chapter of the Federal Bankruptcy Code, as amended, or under any similar law or statute of the United States or any State thereof, or LESSEE shall be adjudged bankrupt or insolvent in proceedings filed against LESSEE thereunder.

D. A receiver or trustee shall be appointed for all or substantially all of the assets of the LESSEE and shall not be discharged within sixty (60) days after such appointment.

E. LESSEE's failure to perform any other provisions of this Lease if the failure to perform is not cured within thirty (30) days after written notice by LESSOR to LESSEE has been given. Provided, however, if the LESSEE's breach cannot reasonably be cured in the thirty (30) days provided above, LESSEE shall not be in default of this Lease if LESSEE commences to cure the default within the 30-day period and diligently proceeds in good faith to cure the breach.

21. LESSOR's REMEDIES. Upon the occurrence of any of such Events of Default after the expiration of any applicable notice and cure period, LESSOR shall have the option to pursue any one or more of the following remedies without any notice or demand whatsoever:

A. Terminate this Lease by giving LESSEE written notice thereof, whereupon LESSOR may alter the locks or other security devises at the Premises and may peaceably remove all persons and property therefrom as allowed by law, for this purpose without being guilty in any manner of trespass or otherwise; and any such termination or re-entry on the part of LESSOR shall be without prejudice to and remedy available to LESSOR for arrears of rent and charges owed LESSOR by LESSEE, breach of contract, damages or otherwise. Termination pursuant hereto shall not relieve LESSEE's obligation for damages suffered by LESSOR as a result of LESSEE's breach.

B. Without terminating this Agreement, enter upon the Premises without disturbing the peace, by changing the locks and other security devices at the Premises or such other peaceable method as LESSOR may desire, and without being guilty in any manner of trespass or otherwise, and do or perform whatever LESSEE is obligated hereunder to do or perform under the terms of this Lease; and the LESSEE shall reimburse the LESSOR on demand for any expenses or other sums which LESSOR may reasonably incur or expend, thus effecting compliance with the terms and provisions of this Lease; provided, however, nothing in this subsection shall be deemed an obligation or undertaking by LESSOR to remedy any such defaults of LESSEE. In the event LESSOR elects to re-enter without terminating this Agreement pursuant to this subsection, LESSOR shall have the right, but not the obligation, to relet the LESSEE's right to the Premises upon such terms, conditions and covenants as are deemed proper by LESSOR for the account of LESSEE and in such event, LESSEE shall pay to LESSOR all reasonable costs of renovating and altering the Premises for a new Lessee or Lessees, in addition to all brokerage fees, if any, incurred in connection therewith, together with the difference between the rent recovered by LESSOR from such reletting and that owed by LESSEE.

C. Pursuit of any of the foregoing remedies by LESSOR shall not preclude pursuit of any other remedies herein provided LESSOR or any other remedies provided by law, nor shall pursuit of any of the other remedies herein provided constitute a forfeiture or waiver of any fee or charge due LESSOR hereunder or of any damages accruing to LESSOR by reason of the violation of any of the terms, provisions and covenants herein contained. Forbearance by either party hereto to enforce one or more of the remedies herein provided upon a default of the other shall not be deemed or construed to constitute a waiver of such default.

No re-entry or taking possession of the Premises by LESSOR shall be considered as an election on LESSOR's part to terminate this Lease unless written notice of such termination *is* given to LESSEE. Notwithstanding any reletting without termination subsequent to LESSEE's default, LESSOR may at any time thereafter elect to terminate this Lease for the previous breach. If LESSEE is in default beyond any applicable cure periods, LESSOR shall not be obligated to continue any utilities, which are furnished or paid for by LESSOR.

If LESSEE is more than ten (10) days delinquent in rent payments, LESSEE's failure to pay rent in full within five (5) days after written demand therefore shall entitle LESSOR to change or modify door locks on the Premises, provided LESSOR leaves a written notice on the door informing LESSEE where a new key can be picked up by LESSEE, during reasonable business hours, if and only if, the delinquency in rent payments along with all other damages (late fees, locksmith, etc.) are paid in full. Such modification of the locks shall not in any way be considered constructive eviction. LESSOR may report unpaid rentals or unpaid damages to any credit bureau for permanent recordation in LESSEE's credit record, only in the case of default by LESSEE beyond applicable cure periods, as defined in Paragraph 20. "Default by LESSEE".

22. SURRENDER AND HOLDOVER. In the event LESSEE remains in possession of the Premises after the expiration of this Lease without the execution of a new lease, it shall be deemed to be occupying the Premises as a tenant at sufferance, subject however to all of the terms, conditions, provisions and obligations of this Lease, except the monthly rent during such holdover shall be equal to the rent payable during the last month of the Lease Term immediately prior to the holdover (including Basic Rent and Additional Rent) plus fifty percent (50%) of such amount; provided, however, if LESSEE holds over for more than three months after the expiration of the Lease Term, the monthly rent payable during any remaining holdover period shall be equal to the greater of (i) one hundred fifty percent (150%) of the rent payable during the last month of the Lease Term immediately prior to the holdover (excluding, however, TI Rent), or (ii) one hundred thirty percent (130%) of the then current fair market rental rate for the Premises. The foregoing shall not constitute LESSOR's consent for LESSEE to holdover for any period of time. If LESSEE remains in possession of the Premises after the expiration of this Lease without LESSOR's consent, LESSEE shall also pay to LESSOR all damages sustained by LESSOR resulting from retention of possession by LESSEE, including without limitation, the loss of any proposed subsequent third-party tenant for all or any

portion of the Premises, provided that LESSOR shall not be liable for any such damages resulting from the loss of any proposed subsequent third-party tenant unless LESSEE holds over for thirty (30) days or longer after LESSOR has notified LESSEE in writing that the LESSOR has entered into a new lease for the Premises with such subsequent third-party tenant

Not later than the last day of the Term, LESSEE shall surrender the Premises in as good condition as they were at the beginning of the Term, ordinary wear and tear, casualty and condemnation excepted; however, such exception for ordinary wear and tear shall in no way relieve LESSEE of its obligations for repair, replacement and maintenance during the term of this Lease. LESSEE shall also comply with any requirements under this Lease.

23. SALE OF ABANDONED PROPERTY. If, upon the expiration or termination of the Lease Term or LESSEE's right of possession to the Premises, LESSEE has abandoned any furniture, fixtures, equipment or other personal property at the Premises, then in such event, LESSOR or his representative may enter the Premises and remove and store all property of every kind found therein. For purposes hereof, LESSEE shall not be deemed to have abandoned such personal property unless and until LESSEE fails to remove such personal property for a period of ten (10) days after written notice from LESSOR stating that LESSOR shall consider such personal property to be abandoned unless LESSEE removes it within ten (10) days of such notice. LESSOR shall be entitled to reasonable charges for parking, removing or storing such abandoned or seized property, and may sell same at public or private sale after fifteen (15) days' written notice of time and place of sale is sent by certified mail, return receipt requested, to LESSEE at the address provided in Paragraph 29 unless LESSEE shall reclaim such property prior to the expiration of such fifteen (15) day period by reimbursing LESSOR for the expenses incurred in parking, removing or storing such property. Sale shall be to the highest cash bidder. Proceeds shall be applied first to costs of sale and then to amounts owed by LESSEE to LESSOR under this Lease, if any, and any remaining amount shall be remitted to LESSEE.

24. SUBORDINATION. LESSEE agrees that its rights under this Lease shall be automatically subordinate to the lien of any existing or future recorded mortgage or deed of trust or other lien applicable to the Premises or its contents, provided that LESSEE's possession of the Premises and the Building B Parking Spaces shall not be disturbed by LESSOR, the holder of such mortgage, deed of trust or other lien, or any other party so long as LESSEE is not in default of this Lease beyond applicable cure periods. LESSEE shall from time to time upon the request of LESSOR execute and deliver such subordination, non-disturbance and attornment agreements (each, an "SNDA") as LESSOR's mortgagee may reasonably require from time to time, provided that LESSEE shall have the right to reasonably object to any provisions therein which are not customarily included in SNDAs or which materially reduce LESSEE's rights or materially increase LESSEE's obligations or liabilities under this Lease (provided that any such objections shall not affect the automatic subordination of this Lease provided above). Without limiting the generality of the provisions of this Paragraph 24, LESSEE

acknowledges and agrees that LESSOR's mortgagee shall never have any liability to perform any of LESSOR's obligations under this lease unless and until such mortgagee forecloses on such mortgage or deed of trust or accepts a deed in lieu thereof, and LESSEE's remedy shall be against LESSOR only until such time. LESSOR represents and warrants that no lender or other party currently holds a mortgage, deed of trust or other lien against the Premises.

25. TRANSFER OF LESSOR's RIGHTS. LESSOR shall have the right to transfer and assign, in whole or in part, all and every feature of its rights and obligations hereunder and in the building and property referred to herein, and in such event, the transferee shall be obligated to assume all of the obligations of LESSOR under this Lease arising from and after the date of transfer. Such transfers are to be in all things respected and recognized by LESSEE.

26. NO IMPLIED WARRANTIES. LESSOR's duties regarding maintenance, repairs, condition of the Premises, security, fitness of the Premises for any particular purpose, or any other duties are limited to those expressly itemized in this Lease and shall not include any implied duties or warranties whatsoever. LESSEE expressly waives any and all implied warranties by LESSOR, including, but not limited to, any warranties that may now exist or later be created by law, or warranties regarding fitness of the Premises, security of the Premises, etc. This waiver is made voluntarily, knowingly, and for good and valuable consideration. It is expressly recognized that were it not for this waiver and disclaimer of warranties and implied duties, the rental hereunder would be higher. Except for any latent defects or improvements which LESSOR is expressly obligated to make pursuant to the terms of this Lease, LESSEE accepts the Premises in their present condition, and by execution of this Lease agrees that the Premises are suitable for LESSEE's intended use.

27. NO WAIVER. No acceptance of rent by LESSOR or delay by either party in enforcing any obligation shall be construed as a waiver of any default in the performance of any obligation to be undertaken by the other party hereto. A party's failure to enforce the default provisions hereof in the event of the other party's default hereunder shall not act as a waiver of such party's right to enforce the default provisions hereof in the event of a subsequent breach thereof.

No provision of this Lease shall be deemed to have been waived by either party by custom or practice, or otherwise, unless such waiver is in writing, signed by the waiving party.

28. ASSIGNMENT AND SUBLETTING. LESSEE shall have the right to sublease or assign the Lease without Owner's consent to any affiliated company or any entity resulting from the merger, sale, consolidation or restructuring of LESSEE or in the connection with a sale of the assets used in connection with the business operated by LESSEE at the Building.

Except as provided above, LESSEE shall not assign or in any manner transfer this Lease or any estate or interest therein, or allow same to be assigned by operations of law or otherwise, or sublet the Demised Premises or any part thereof, or use or permit same to be used for any other purpose than stated in the use clause hereof without written consent of LESSOR which shall not be unreasonably withheld. LESSOR shall notify LESSEE in writing of LESSOR's consent or rejection (along with the reasons therefor in reasonable detail) within ten (10) days after LESSEE requests LESSOR's consent to such transfer. If LESSOR shall consent in writing to such assignment or subletting, such assignment or subletting shall not be for any use more hazardous on account of fire or otherwise, nor for a use that will cause wear and tear more than the use for which the Demised Premises are leased as defined above. The LESSEE shall remain principal obligor to the LESSOR for the full performance of all the terms, conditions and covenants of this Lease by which LESSEE herein is bound; and the acceptance of an assignment or subletting of the Demised Premises by any firm, person or corporation shall be construed as a promise on the part of such assignee or Sub Lessee to be bound by and perform all of the terms, conditions and covenants by which LESSEE is herein bound. No such assignment or subletting shall be construed to constitute a novation. In the event of default by LESSEE while the Demised Premises are assigned or sublet, LESSOR, in addition to any other remedies provided herein (or provided by law), may at LESSOR's option, collect directly from such assignee or Sub Lessee all rents becoming due to LESSEE under such assignment or subletting and LESSOR may apply such rent against any sums due to LESSOR by LESSEE hereunder. No direct collection by LESSOR from any such assignee or Sub Lessee shall release LESSEE from the further performance of its obligations hereunder.

29. NOTICES. Any notice by either party to the other shall be in writing and shall be deemed to have been duly given only if delivered (a) personally, (b) by Federal Express or other overnight delivery service requiring proof of receipt, or (c) sent by certified mail, return receipt requested. If to LESSEE, to the attention of Bill McClellan at the above described Premises (provided that LESSEE's address for notices prior to the Commencement Date shall be 8200 Cameron Road, Suite A-196, Austin, Texas 78754-3823, Attn: Bill McClellan); if to LESSOR at 510 South Congress, Suite 400, Austin, Travis County, Texas 78704, or to either, at such other address as LESSOR or LESSEE, respectively, shall designate in writing.

30. ESTOPPEL CERTIFICATES. LESSEE shall execute and return to LESSOR estoppel certificates in substantially the form attached hereto as Exhibit G or such other form that may be reasonably requested by LESSOR or by any current or prospective purchaser of the Premises or lienholder in writing within ten (10) business days following such written request, provided that LESSEE may make modifications to accurately state the circumstances and LESSEE's rights under this Lease shall not be diminished and its obligations and liabilities shall not be increased. Provided that any such written request contains the Notice Statement (defined below) in bold and capitalized text at the top of such notice, LESSEE's failure to deliver such statement within such time shall be deemed conclusive upon LESSEE (i) that this Lease is in full force and effect, without modification, (ii) that there are no uncured defaults in

LESSOR's performance, and (iii) that not more than one (1) month's rent has been paid in advance; provided that such deemed statements shall be for the benefit of only any such current or prospective purchaser or lienholder, and only if such party has no actual knowledge that such statements are incorrect, and provided further that LESSOR shall not be entitled to rely on any such deemed statements. LESSEE's failure to timely deliver an estoppel certificate shall constitute a default by LESSEE under this Lease. It is intended that any such estoppel certificate may be relied upon by any person proposing to acquire LESSOR's interest in this Lease or any prospective mortgages or assignee of any mortgage upon such interest. The "Notice Statement" shall read as follows: **THIS IS A REQUEST TO CONFIRM THE TERMS OF YOUR TENANCY OF 1300 EAST ANDERSON, BUILDING B, AUSTIN, TEXAS. YOUR FAILURE TO RESPOND TO THIS REQUEST WITHIN 10 BUSINESS DAYS MAY AFFECT YOUR RIGHTS UNDER YOUR LEASE, AS SET FORTH IN SECTION 30 THEREOF.**

31. MECHANIC'S AND MATERIALMAN'S LIENS. LESSEE agrees to insure that no mechanic's or materialman's lien will be filed against the Demised Premises for any work claimed to have been done or for any material claimed to have been furnished to LESSEE and, if such liens are filed against the Demised Premises, LESSEE will discharge same within thirty (30) days after written notice from LESSOR by bonding or otherwise. If LESSEE shall fail to cause such lien, encumbrance, or charge to be discharged within the thirty-day period, LESSOR may, but shall not be obligated to, discharge the lien, whether by paying the amount claimed to be due or by pursuing the discharge of the lien through judicial proceedings. LESSEE agrees to pay LESSOR within thirty (30) days after notice, as Additional Rent, the sum paid by LESSOR to discharge the mechanic's or materialman's lien and/or the expenses of LESSOR in pursuing the discharge of the lien through judicial proceeding after the 30 day cure period described above.

32. INTENTIONALLY DELETED.

33. FORCE MAJEURE. Except for LESSEE's obligation to pay Rent hereunder, neither party hereto shall be in default of their obligation to perform any term, condition or covenant in the Lease so long as such performance is delayed or prevented by force majeure, which shall mean Acts of God, strikes, lockouts, material or labor restrictions by any governmental authority, civil riot, floods and any other cause not reasonably within the control of such party and which, by the exercise of due diligence, such party is unable, wholly or in part, to prevent or overcome. Time is otherwise of the essence with regard to this Lease.

34. EXHIBITS. All exhibits, attachments, annexed instruments and addenda referred to herein shall be considered a part hereof for all purposes with the same force and effect as if copied at full length herein.

35. ENTIRE AGREEMENT. It is expressly agreed by LESSEE and LESSOR, as a material consideration for the execution of this Lease, that there are, and were, no verbal representations, understandings, stipulations, agreements, warranties or promises pertaining thereto not incorporated in writing herein, and it is likewise agreed that this Lease shall not be altered, waived, amended or extended otherwise than provided herein, except same may be done in writing signed by the proper authority. LESSOR disclaims all warranties, expressed or implied, not specifically set forth in this Lease.

36. SEVERABILITY. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws effective during the Term of this Lease, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby, and it is also the intention of the parties to this Lease that in lieu of each clause or provision that is illegal, invalid or unenforceable there be added as a part of this Lease a clause or provision as similar in terms of such illegal, invalid or unenforceable clause or provision as may be possible and be legal, valid and enforceable. The caption of each paragraph hereof is added as a matter of convenience only and shall be considered to be of not effect in the construction of any provision or provisions of this Lease.

37. SUCCESSORS. The terms, conditions and covenants contained in this Lease, shall apply to, inure to the benefit of, and be binding upon the parties hereto and their respective successors in interest and legal representatives except as otherwise herein expressly provided. All rights, power, privileges, immunities and duties of LESSOR under this Lease, including but not limited to any notices required or permitted to be delivered by LESSOR to LESSEE hereunder, may at LESSOR's option, be exercised or performed by LESSOR's agent or attorney.

38. ATTORNEY'S FEES. In any lawsuit by LESSOR, LESSEE or their agents arising out of this Lease, the prevailing party shall be entitled to recover reasonable attorney's fees and court costs from the non-prevailing party, including all reasonable out-of-pocket costs of litigation, travel, depositions, witness expense and other litigation costs.

39. REAL ESTATE COMMISSIONS.

1. **Agreement to Pay Commission**. LESSOR hereby agrees to pay a cash real estate commission equal to a total of [redacted] percent[redacted]%) of the Basic Rent to be received by the LESSOR during the initial one hundred twenty five (125) month Lease Term with [redacted] percent [redacted]%) being paid to [redacted] of Commercial Real Estate Solutions and [redacted] percent[redacted] %) being paid to Tarantino Properties, Inc. (collectively, the "Brokers"). No commissions shall be due related to either Additional Rent or TI Rent.

2. **Payment of Commission**. The commission shall be due and payable to Brokers as follows: (i) one half (1/2) at the time the Lease is signed and (ii) the balance on the Commencement Date of the Lease Term.

40. COVENANT OF QUIET ENJOYMENT. LESSEE, upon payment of the rents herein reserved and the performance of the terms, conditions, covenants and agreements herein contained, may peaceably and quietly have, hold and enjoy the Demised Premises during the full term of this Lease, including any extension thereof, without hindrance or interruption by LESSOR or any other person or entity.

41. MISCELLANEOUS PROVISIONS. The provisions of this Lease shall apply to, bind and inure to the benefit of the LESSOR and LESSEE, and their respective heirs, successors, legal representatives and assigns, subject, however, to the provisions of Paragraphs 25 and 28. The paragraph headings in this Lease are intended for convenience and shall not be taken into consideration in the interpretation of this Lease or any of its provisions. Any portion of this Lease or attachments hereto declared invalid by law shall not invalidate the remainder. No oral agreements have been made. This contract is the entire agreement between the parties, and it may be modified only in writing signed by all parties, except for reasonable rule and regulation changes pursuant to Paragraph 7. This contract is to be performed in Travis County, Texas.

42. LANDLORD APPROVALS. Except as otherwise specifically set forth herein, wherever in this Lease LESSOR's consent or approval is required or provided for, such approval shall not be unreasonably withheld, conditioned or delayed.

43. OFFSET RIGHTS. Notwithstanding anything to the contrary contained herein, in the event LESSEE obtains a final judgment for monetary damages against LESSOR, LESSEE shall have the right to offset such amount against LESSEE's rent obligations next coming due. Except in the limited circumstance set forth in the preceding sentence, LESSEE acknowledges that LESSEE does not have the right to offset any amounts against LESSEE's rent obligations.

44. WAIVER OF LANDLORD LIENS. LESSOR waives any statutory, constitutional or other liens, security interests or claims against the assets or property of LESSEE within the Premises. The foregoing waiver shall not apply to, and LESSOR shall be entitled to enforce against the assets and property of LESSEE, any judgment obtained by LESSOR against LESSEE.

45. SPECIAL CONDITIONS AND WRITTEN ADDENDA. Special conditions and provisions, if any, are contained in an attached Addendum or Exhibit as identified below:

- Exhibit A-Depiction of Premises
- Exhibit A-1- Depiction of Building B Parking Spaces
- Exhibit B-Legal Description
- Exhibit C-Tenant Improvements Work Letter
- Exhibit C-1- Acceptance of Premises Memorandum
- Exhibit D - List of Equipment Approved for Storage Outside the Premises
- Exhibit E - List of Tenant's Approved Hazardous Materials Stored on the Premises
- Exhibit F - Lessee's Insurance
- Exhibit G - Estoppel Certificate
- Addendum #1-Basic Rental Adjustment Schedule

- Addendum #2-Intentionally Omitted
- Addendum #3-Renewal Option
- Addendum #4-Rules and Regulations
- Addendum #5-Sign Specifications
- Addendum #6-HVAC Maintenance Contract
- Addendum #7-Move-Out Conditions
- Addendum #8-Low Voltage Cabling Installation and Removal
- Addendum #9-Exclusions from Operating Expenses
- Addendum #10-Limited Right of First Refusal
- Addendum #11- Right of First Refusal to Purchase
- Addendum #12-Lessee’s Exclusive / Non-Compete

IN WITNESS WHEREOF, the parties hereto have executed this Lease Agreement and affixed their signatures as of this the 2nd day of March, 2009 (the "Effective Date".

PLEASE NOTE: ALL ATTACHMENTS OR EXHIBITS SHOULD BE SIGNED OR INITIALED BY THE PARTIES EXECUTING THIS LEASE.

LESSOR:

1300 E. ANDERSON LANE, LTD.,
Texas limited partnership

By: JDB Real Properties, Inc., a Texas corporation, its General Partner

By: /s/ Darline Boultinghouse
Darline Boultinghouse
Vice President

LESSEE:

On-X Life Technologies, Inc., a Delaware corporation

By: /s/ William D. McClellan
Name: William D. McClellan
Title: CFO, EVP Finance

EXHIBIT A

1300 E. Anderson Lane, Building B, Suite [redacted], Austin, TX
Approximately [redacted] sf

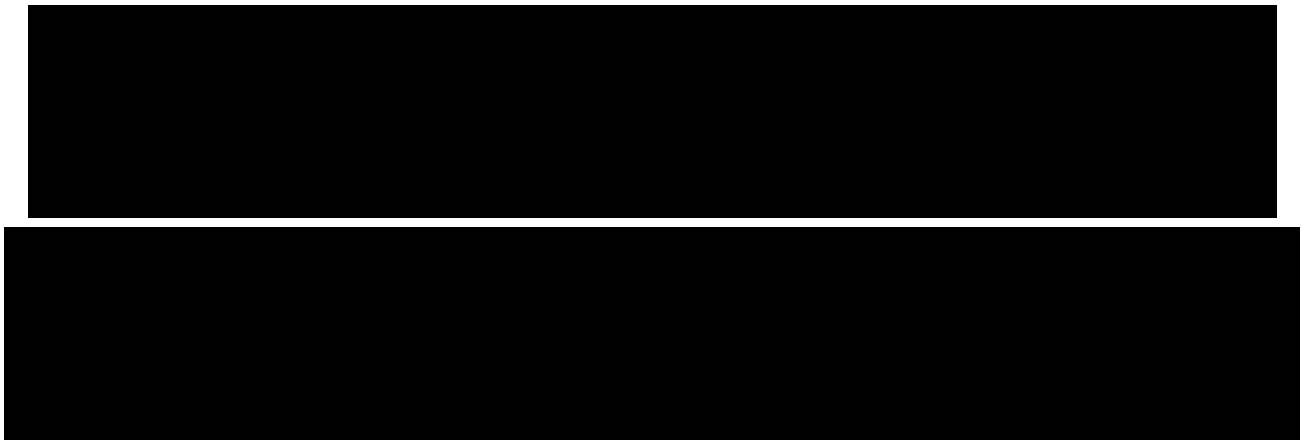


EXHIBIT A-1
DEPICTION OF BUILDING B PARKING SPACES

EXHIBIT B

LEGAL DESCRIPTION OF REAL PROPERTY

14.151 ACRE TRACT

ALL OF THAT CERAIN TRACT OR PARCEL OF LAND OUT OF THE JAMES P. WALLACE SURVEY NO. 57 IN TRAVIS COUNTY, TEXAS, BEING A PORTION OF THAT CERTAIN TRACT OF LAND AS CONVEYED TO EDWARD JOSEPH TRUSTEE BY DEED RECORDED IN VLUME 1656, PAGE 521 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING FOR REFERENCE at an iron stake found at the Northwest corner of that tract of land as conveyed to Edward Joseph Trustee by Deed recorded in Volume 1656, Page 521 of the Deed Records of Travis County, Texas, being in the South R.O.W. line of Rutherford Lane;

THENCE with the West line of the said Joseph tract, 5 29° 39’ W for a distance of 15.0 feet pass an Iron stake found at the Northwest corner of that certain 15.275 acre tract of land as conveyed to Gulf States Theatres, Inc., by Deed Recorded in Volume 3499, Page 1772 of the Deed Records of Travis County, Texas and continue for a total distance of 390.00 feet to an Iron stake found at the Southwest corner of the said 14.275 acre tract of land for the Northwest corner and PLACE OF BEGINNING hereof;

THENCE with the Southerly line of the said 15.275 acre tract of land, S 60° 23’ E for a distance of 787.54 feet to an Iron stake set for the Northeast corner hereof;

THENCE S 30° 18’ W for a distance of 732.00 feet to an Iron stake set for a Southeasterly corner hereof;

THENCE N 60° 23’ W for a distance of 82.60 feet to an Iron stake set in the North r.o.w. line of U.S. Highway No. 183 for the most Southerly Southeast corner hereof;

THENCE S 29° 37’ W for a distance of 535.72 feet to an Iron stake set in the North r.o.w. line of U.S. Highway No.183 for the most Southerly Southeast corner hereof;

THENCE with the North line of the said U.S. Highway No. 183, N 47° 28’ W for a distance of $2.07 feet to a concret monument found for the most Southerly Southwest corner hereof;

THENCE N 29° 37’ E for a distance of 517.40 feet to an Iron stake set for an inside corner hereof;

THENCE N 60° 23’ W for a distance of 619.29 feet to an Iron stake set in the West line of the said Edward Joseph Trustee tract, for the Southwest corner hereof;

THENCE with the West line of the said Joseph tract, N 29° 51’ E for a distance of 732.00 feet to the PLACE OF BEGINNING and containing 14.151 acres of land, more or less.

EXHIBIT C

TENANT IMPROVEMENTS WORK LETTER

This Work Letter (herein so called) is attached to and a part of that certain Lease Agreement dated as of March 2, 2009 (the "Lease"), executed by and between 1300 East Anderson Lane, Ltd., a Texas limited partnership ("Lessor") and On-X Life Technologies, Inc., a Delaware corporation ("Lessee"). Any capitalized term not defined herein shall have the meaning assigned to it in the Lease.

I. Dates and Allowances.

Space Plan Date:	Fifteen (15) days from the Effective Date
Lessor's Approval of Space Plan:	Five (5) days after Lessee delivers Space Plan to Lessor
Construction Drawings Date:	Forty-five (45) days from the date Lessor approves the Space Plan
Lessee's Approval of Construction Drawings:	Five (5) days after Lessor delivers Construction Drawings to Lessee
Bids and Finalizing Construction Costs:	Fifteen (15) days from Lessee's approval of the Construction Drawings
Lessee's Value Engineering and Approval of Bids and Construction Contracts:	Ten (10) days from Lessor's delivery of bids to Lessee
Permitting:	Fifteen (15) days from Lessee's approval of final bids and construction contract
Construction Period:	Five (5) months from issuance of permits and finalizing construction costs
Allowance:	$500,000 (initial amount to be advanced by Lessor)
Lessee Contribution:	Up to $400,000 (based on cost of Tenant Improvements)
Additional Allowance:	Up to $300,000 (based on cost of Tenant Improvements; after Lessee's entire $400,000 has been expended in the construction of the Tenant Improvements)

II. Construction Representatives, Space Planner, Architect and Engineer. Lessor's and Lessee's construction representatives for coordination of planning, construction, approval of change orders, substantial and final completion, and other such matters (unless either party changes its representative upon written notice to the other), and the other parties involved in planning Tenant Improvements, are:

Lessor's Representative:	[redacted]
Address:	Byram Properties 510 South Congress, Suite 400 Austin, Texas 78704
Telephone:	[redacted]
Mobile	[redacted]
Fax:	[redacted]
Lessee's Representative:	[redacted]
Address:	On-X Life Technologies, Inc. 8200 Cameron Road, Suite A-196 Austin, Texas 78754-3832
Telephone:	[redacted]
Mobile:	[redacted]
Fax:	[redacted]
Space Planner:	R. Craig Nasso
Architect:	R. Craig Nasso
Engineer:	Bay & Associates, Inc. (MEP) Way Engineers (Structural)

III. **Plans.** The term "Plans" herein shall refer to the Space Plan and Construction Drawings collectively. The term "Planner" herein shall refer to the Space Planner, Architect or Engineer, as appropriate. Lessee has sole responsibility to cause the Space Planner to prepare and provide the Space Plan to the Architect sufficient to allow the Architect to prepare the Construction Drawings. The Plans shall be signed or initialed by Lessee and Lessor, and shall be prepared and approved in accordance with the following provisions:

(a) Space Plan. By the Space Plan Date, Lessee shall cause Space Planner to complete Lessee's Space Plan, including **MEP** plans and "best fit" plan, and otherwise provide Lessor with all information concerning Lessee's requirements for the Premises in order for the Architect to prepare the Construction Drawings. Within five (5) days after receipt of the Space Plan and such additional information, Lessor shall approve or disapprove of the Space Plan in writing, any such disapproval to be accompanied by specific reasons for disapproval. If Lessor disapproves the Space Plan, Lessee shall make such revisions to the Space Plan as are necessary to address Lessor's objections, and shall resubmit the Space Plan to Lessor within five (5) days after such disapproval notice (and such approval period shall be repeated until such Space Plans are approved). Upon the approval of the Space Plans, Lessor shall provide three copies of the Space Plan to Architect. "Space Plan" herein means a floor plan, drawn to scale, showing (i) demising walls, interior walls and other partitions, including type of wall or partition and height, (ii) doors and other openings in such walls or partitions, including type of door and hardware, (iii) any floor or ceiling openings; (iv) electrical outlets, and any restrooms, kitchens, computer rooms, file cabinets, file rooms and other special purpose rooms, and any sinks or other plumbing facilities, or other electrical, HVAC, plumbing or other facilities or equipment, including all special loading, (v) communications system, including location and dimensions of equipment rooms, and telephones and computer outlet locations, (vi) special cabinet work or other millwork items, (vii) any space planning considerations under the Disability Acts, (viii) finish selections (i.e., color selection of painted areas, and selection of floor and any special wall coverings from Lessor's available Building Standard selections (which selections Lessee may defer until the Construction Drawings Date), and (ix) any other details or features reasonably required in order to obtain a preliminary cost estimate as described in Section IV or otherwise reasonably requested by Architect, Engineer or Lessor in order for the Space Plan to serve as a basis for preparing the Construction Drawings.

(b) Construction Drawings. By the Construction Drawings Date, Lessor shall cause Architect and Engineer to complete the Construction Drawings. "Construction Drawings" herein means fully dimensioned architectural construction drawings and specifications, and any required engineering drawings (including mechanical, electrical, plumbing, air-conditioning, ventilation and heating), prepared using the Space Plan as a basis, showing in detail the Tenant Improvements to be made to the Premises and shall include all details reasonably required in order for Lessor to obtain bids as described in Section IV or otherwise reasonably requested by Architect, Engineer, Lessee or Lessor in order for the Construction Drawings to serve as a basis for contracting the construction of Tenant Improvements.

(c) Approval of Construction Drawings. On or before the Construction Drawings Date, Lessor shall deliver the Construction Drawings to Lessee for review and approval. Lessee shall, within five (5) days after receipt of the Construction Drawings, either approve the Construction Drawings or disapprove of the same with reasonable suggestions for making the same acceptable. If Lessee reasonably disapproves the Construction Drawings, Lessor shall cause such revisions to be made as are necessary to address Lessee's objections, and shall resubmit the Construction Drawings to Lessee within five (5) days after such disapproval notice (and such approval period shall be repeated until such Construction Drawings are approved). Upon the approval of the Construction Drawings, Lessor and Lessee shall acknowledge same in writing.

(d) Within fifteen (15) days from approval of the Construction Drawings, Lessor shall obtain bids from at least two (2) contractors reasonably approved by Lessee in advance for the construction of the Tenant Improvements and deliver such bids and proposed construction contracts (on the appropriate AIA stipulated sum form, which shall be modified to provide that any increase in the contract price (whether as a result of concealed conditions or otherwise) shall require a change order signed by Lessee in advance, and shall otherwise be reasonably acceptable to Lessee and Lessor) to Lessee for review and approval. Lessee shall, within five (5) days after receipt of the bids and construction contracts, either approve the bids and construction contracts, or disapprove of the same with reasonable suggestions for making the same acceptable or making modifications to the Construction Drawings to value engineer the Tenant Improvements to result in a reduction in the bids and construction contracts. Lessor and Lessee shall cooperate to make modifications in the Construction Drawings and the bids and approve the bids and the final cost of the Tenant Improvements within ten (10) days from Lessor's delivery of the bids and construction contracts to Lessee. Upon the approval of the bids and construction contracts, (i) Lessor and Lessee shall acknowledge same in writing, and (ii) Lessor will enter into the construction contracts with the approved bidder.

(e) Governmental Approval of Plans. Lessor shall, within fifteen (15) days after the bid for the Tenant Improvements is approved by Lessor and Lessee, cause its contractor to apply for any normal building permits required for the Tenant Improvements which are issued pursuant to a local building code as a ministerial matter. If the Plans must be revised in order to obtain such building permits, Lessor shall notify Lessee in writing, and shall arrange for the Plans to be revised to satisfy the building permit requirements. Lessor shall have no obligation to apply for any zoning, parking or sign code amendments, approvals, permits or variances, or any other governmental approval, permit or action (except normal building permits as described above).

(f) Changes After Plans Are Approved. If Lessee desires any changes, alterations, or additions to the Plans after they have been approved, Lessee shall submit a detailed written request or revised Plans (the "Change Order") to Lessor for approval. If reasonable, practicable and generally consistent with the Plans theretofore approved, Lessor shall not unreasonably withhold approval. In the event that a bid for the Tenant Improvements has already been accepted at the time such Change Order is approved, then upon Lessor's approval thereof, Lessor shall require the contractor to identify the additional costs resulting from such Change Order, and Lessor shall notify Lessee of such cost in writing. In such event, such Change Order shall not be effective unless Lessee approves the cost of such Change Order in writing.

IV. Cost of the Work, Allowance and Lessee's Contribution.

(a) Intentionally Deleted.

(b) Cost of the Work. The entire cost to design and construct the Tenant Improvements (the "Cost of the Work") shall include all third-party costs necessary for the completion of the Tenant Improvements and authorized pursuant to the terms of this Work Letter or the Lease, including without limitation: (1) construction of the Tenant Improvements, including, without limitation, costs of labor, hardware, equipment and materials, contractors' charges for overhead and fees, so-called "general conditions" (including rubbish removal, utilities, hoisting, field supervision, building permits, occupancy certificates, inspection fees, utility connections, bonds, insurance, sales taxes, and the like), and all costs associated with obtaining the building permits, including reports required by the City of Austin as a pre-requisite to obtaining the necessary building permits, and (2) the Plans, including, without limitation the costs of Lessee's architect, [redacted], and all revisions to the Plans, and engineering reports, or other studies, reports or tests, air balancing or related work in connection therewith. ''Tenant Improvements" herein means: (i) the improvements and items of work shown on the final Plans approved by Lessor and Lessee (including changes thereto), and (ii) any demolition, removal, preparation or other work required in connection therewith, including without limitation, structural or mechanical work, [redacted], or modifications to any building, mechanical, electrical, Plumbing or other systems and equipmant or relocation of any existing [redacted], either within or outside the Premises required as a result of the layout, design, or construction of the work to be performed within the Premises or in order to extend any mechanical distribution, fire protection or other systems from existing points of distribution or connection, accessibility compliance, or in order to obtain building permits or certificates of occupancy for the work to be performed within the Premises. Notwithstanding anything to the contrary contained herein or in the Lease, Tenant Improvements shall not include seal coating and restriping the Building B Parking Spaces, work required to bring the Building B Parking Spaces into good working order and condition and/or into compliance with applicable laws, including without limitation accessibility laws, any asbestos reports or remediation of asbestos or any other hazardous materials existing in the Premises or any other work which, pursuant to the express terms of the Lease, is required to be completed at Lessor's sole cost and expense.

(c) Allowance; Lessee Contribution; Additional Allowance; Construction Account. As of February 6, 2009, based on the preliminary drawings and discussions between Lessor and Lessee, the parties have estimated Cost of the Work to be approximately $1,217,810. Lessor and Lessee acknowledge that this amount is just an estimate and will change once the Plans have been completed and approved by Lessor and Lessee, and Lessor has obtained bids acceptable to Lessee.

1. Lessor is responsible for the first $500,000 of the Cost of the Work (the “Allowance”).

2. Lessee is responsible for up to the next $400,000 of the Cost of the Work, if the Cost of the Work exceeds $500,000 (the “Lessee’s Contribution”).

3. Lessor is responsible for up to the next $300,000 of the Cost of the Work, if the Cost of the Work exceeds $900,000 (the ,“Additional Allowance”). The Additional Allowance will be recovered by Lessor as TI Rent as set forth in Section 5.2 of the Lease.

4. If the Cost of the Work is in excess of $1,200,000, Lessee acknowledges that, except as provided in the immediately following sentence, Lessee is solely responsible for the entire Cost of the Work in excess of $1,200,000 (“Lessee’s Additional Contribution”). In the event that the Cost of the Work exceeds $1,200,000, the parties agree that any costs included in the Cost of the Work and attributable to bringing the Premises into compliance with applicable laws, including without limitation any accessibility requirements (“Legal Compliance Costs”), shall be paid 50% by Lessee and 50% by Lessor.

Upon the approval by Lessor and Lessee of the bids and construction contracts for the Tenant Improvements, Lessor shall create a construction account with a bank or financial institution selected by Lessor (the “Construction Account”).

(d) Funding the Cost of the Work

Estimated Cost of the Work	Funds Provided
Up to $500,000	Allowance fully funded by Lessor
$500,001 to $900,000	Allowance by Lessor ($500,000) Lessee’s Contribution (up to $400,000)
$900,001 to $1,200,000	Allowance by Lessor ($500,000) Lessee’s Contribution ($400,000) Additional Allowance by Lessor (up to $300,000)
More than $1,200,000	Allowance by Lessor ($500,000) Lessee’s Contribution ($400,000) Additional Allowance by Lessor (up to $300,000) Lessee’s Additional Contribution (excess, subject to 50% contribution from Lessor for Legal Compliance Costs

Within five (5) days after Lessee notifies Lessor in writing that Lessee has approved the bids for the Tenant Improvements and agreed on the estimated Cost of the Work (the “Funding Period”), Lessee shall deliver to Lessor Lessee’s Contribution and, if applicable, Lessee’s Additional Contribution. Lessor shall deposit the Allowance and, if applicable, the Additional Allowance into the Construction Account, and shall also deposit all funds provided by Lessee into the Construction Account. If, after final completion of the Tenant Improvements, the actual amount of Cost of the Work exceeds both (i) $1,200,000, and (ii) the estimated amount of the Cost of the Work, then Lessee shall pay the difference to Lessor (subject to Lessor’s obligation to contribute 50% of Legal Compliance Costs) within fifteen (15) days after Lessor delivers to Lessee a detailed itemization of the total Cost of the Work, together with supporting invoices. If, after

final completion of Tenant Improvements, the actual Cost of the Work is more than $900,000 but less than $1,200,000, Lessor shall notify Lessee in writing of the total Cost of the Work and the actual amount of the Additional Allowance for purposes of calculating the TI Rent. If, after final completion of Tenant Improvements, the actual Cost of the Work is less than $900,000, then Lessor shall promptly refund any unused portion of the Lessee's Contribution and, if applicable, Lessee's Additional Contribution, to Lessee from the Construction Account as soon as practicable.

(e) Weekly Meetings; Bank Statements and Records. Lessor and Lessee shall attend weekly status meetings to review the status of the Tenant Improvements and a ledger showing a running total of the Cost of the Work. Lessor agrees to provide copies of all invoices, bank statements (monthly) for the Construction Account, lien waivers and cancelled checks and all invoices, with appropriate supporting information, related to the construction of the Tenant Improvements at such meetings.

(f) Lessee's Evidence of Financial Commitment. At time of the execution of this Lease, Lessee shall provide to Lessor a letter from Lessee's bank or other evidence reasonably acceptable to Lessor confirming Lessee's ability to fund Lessee's Contribution.

V. Construction.

(a) Lessor to Arrange Work. Provided Lessee is not in violation of the Lease (including this exhibit) beyond applicable cure periods, Lessor shall use reasonable efforts to cause Lessor's contractor to achieve Substantial Completion of Tenant Improvements as soon as is reasonably practicable, but in any event by November 15, 2009, subject to force majeure. Lessor reserves the right to substitute comparable or better materials and items for those shown in the Plans, so long as they do not materially and adversely affect the appearance, use or operation of the Premises or increase the Cost of the Work or delay Substantial Completion in any material respect.

(b) Substantial Completion and Walk-Through. "Substantial Completion" of the Tenant Improvements shall mean the sufficient completion of Tenant Improvements in accordance with the approved Plans to allow Lessee to use the Premises for the permitted uses and the issuance of any certificate of occupancy required by applicable governmental authorities for the occupancy of the Premises. When Lessor notifies Lessee that Substantial Completion of Tenant Improvements has been achieved, Lessor shall provide a list of the portions of the Tenant Improvements which, notwithstanding such Substantial Completion, have not been completed, and Lessor and Lessee shall perform a joint walk-through inspection in order for Lessee to identify any additional necessary final completion or other "punchlist" items. Neither party shall unreasonably withhold approval concerning such items. If Lessee fails to participate in a walk-through as provided above, or otherwise fails to object to Lessor's notice of Substantial Completion in writing within five (5) business days thereafter specifying in detail the items of work needed to be performed to achieve Substantial Completion, Lessee shall be deemed conclusively to have agreed that Substantial Completion of Tenant Improvements has occurred on the date provided in Lessor's notice. If there is any dispute as to whether Substantial Completion of Tenant Improvements has occurred, Lessor may request a good faith decision by the Architect which shall be final and binding on the parties.

(c) Final Completion. Substantial Completion shall not prejudice Lessee's rights to require full completion of any remaining items of Tenant Improvements, which Lessor shall cause to be completed as soon after Substantial Completion as is reasonably practicable, but in no event later than thirty (30) days after Substantial Completion has occurred, subject to force majeure; provided, however, if any such punchlist item is not reasonably capable of being completed within thirty (30) days after Substantial Completion, Lessor shall not be in default of its obligation to complete such punchlist items within thirty (30) days after Substantial Completion as long as Lessor has commenced to correct such items within such thirty (30) day period and diligently, and in good faith, pursues completion of such items in a timely manner. If Lessor notifies Lessee in writing that the Tenant Improvements are fully completed, and Lessee fails to object thereto in writing within ten (10) business days thereafter specifying in detail the items of work needed to be completed and the nature of work needed to complete such items, Lessee shall be deemed conclusively to have accepted Tenant Improvements as fully completed (or such portions thereof as to which Lessee has not so objected). If Lessee timely notifies Lessor in writing that it objects to specific items of the Tenant Improvements not being fully complete, Lessor shall withhold a reasonable amount necessary to cause the applicable contractor to fully complete such incomplete items, and Lessor shall timely cause such incomplete items to be fully completed, but Lessor shall otherwise have the right to pay all contractors all remaining amounts due under the construction contracts for the completion of the Tenant Improvements upon the expiration of the 10-business day period described above. Lessor shall withhold the final payment for the incomplete items until such time as Lessee has reasonably agreed to Lessor's determination that the Tenant Improvements have been finally completed, provided that Lessee shall be deemed to have agreed with Lessor's determination if Lessee does not object thereto with such 10 business day period. Lessor shall assign all warranties for the Tenant Improvements to Lessee upon final completion thereof.

(d) Lessor's Role. The parties acknowledge that neither Lessor nor its managing agent is an architect or engineer, and that the Tenant Improvements will be designed and constructed by independent architects, engineers and contractors. Lessor does not guarantee that the Plans or Tenant Improvements will be free from errors, omissions or defects, and shall have no liability therefor.

VI. Lessee's Contractors. If Lessee should desire to enter the Premises or authorize its contractors or consultants to do so prior to the Commencement Date of the Lease, to install cabling, equipment, furniture or fixtures, Lessor shall permit such entry, and shall cause its contractor(s) to reasonably cooperate with such entry, provided that:

(a) Lessee and its contractors and consultants who may enter the Premises (collectively, "Lessee's Contractors") work in harmony with and do not unreasonably disturb or interfere with Lessor's architects, engineers, contractors, workmen, mechanics or other agents or independent contractors in the performance of their work (collectively, "Lessor's Contractors"), it being understood and agreed that if Lessee or any of Lessee's Contractors does unreasonably disturb or interfere with Lessor or any of Lessor's Contractors, then Lessor may, with notice, refuse admittance to Lessee or Lessee's Contractors causing such disturbance or interference; and

(b) Lessee has provided Lessor proof of the insurance Lessee is required to carry under this Lease, and Lessee's Contractors have provided Lessor sufficient evidence that each is covered under such worker's compensation, general liability, automobile liability and property damage insurance as Lessor may reasonably request for its protection.

Lessor shall not be liable for any injury, loss or damage to any of Lessee's installations made prior to the Commencement Date and not installed by Lessor. Lessee shall defend, indemnify and hold harmless Lessor and Lessor's Contractors from and against any and all costs, expenses (including reasonable attorney's fees), claims, liabilities and causes of action arising out of or in connection with work performed in the Premises by or on behalf of Lessee (but excluding work performed by Lessor or Lessor's Contractors). Lessor is not responsible for improvements, cabling, equipment, cabinets or fixtures not installed by Lessor.

EXHIBIT C-1

ACCEPTANCE OF PREMISES MEMORANDUM

This Acceptance of Premises Memorandum is being executed pursuant to that certain Lease Agreement (the "Lease") dated MARCH 2, 2009, between 1300 East Anderson Lane, Ltd., a Texas limited partnership ("Lessor") and On-X Life Technologies, Inc., a Delaware corporation ("Lessee"), pursuant to which Lessor leased to Lessee and Lessee leased from Lessor Building B in 1300 East Anderson Lane Business Park (the "Premises"). Lessor and Lessee hereby agree that:

1. Except for latent defects and the punch list items shown on the attached Punch List (the "Punch List Items"), Lessor has fully completed the construction of the Tenant Improvements.

2. Lessee hereby accepts delivery of the Premises and acknowledges that the Premises are tenantable. Lessee further acknowledges that Lessor has no further obligation for construction (except with respect to Punch List Items) and that Building B, the Premises and Tenant Improvements are satisfactory in all respects, except for the Punch List Items, and are suitable for the Lessee's permitted uses. Lessee acknowledges that Lessee has inspected the Premises and subject to completion of the Punch List Items and latent defects, Lessee hereby accepts the Premises for all purposes.

3. The Commencement Date of the Lease is «CommencementDate» , .

4. The expiration date of the initial Lease Term is , .

5. All capitalized terms not defined herein shall have the respective meanings assigned to them in the Lease.

6. The monthly amount of TI Rent, calculated in accordance with the amortization schedule attached hereto as Schedule 1, is $.

Agreed and executed this day of , 200 .

LESSOR:

1300 East Anderson Lane, Ltd.,
a Texas limited partnership

By: JDB Real Properties, Inc., a Texas corporation, its General Partner

By: _____
Darline Boultinghouse
Vice President

LESSEE:

On-X Life Technologies, Inc.,
a Delaware corporation

By: _____
Name: _____
Title: _____

[Attach Amortization Schedule as Schedule 1]

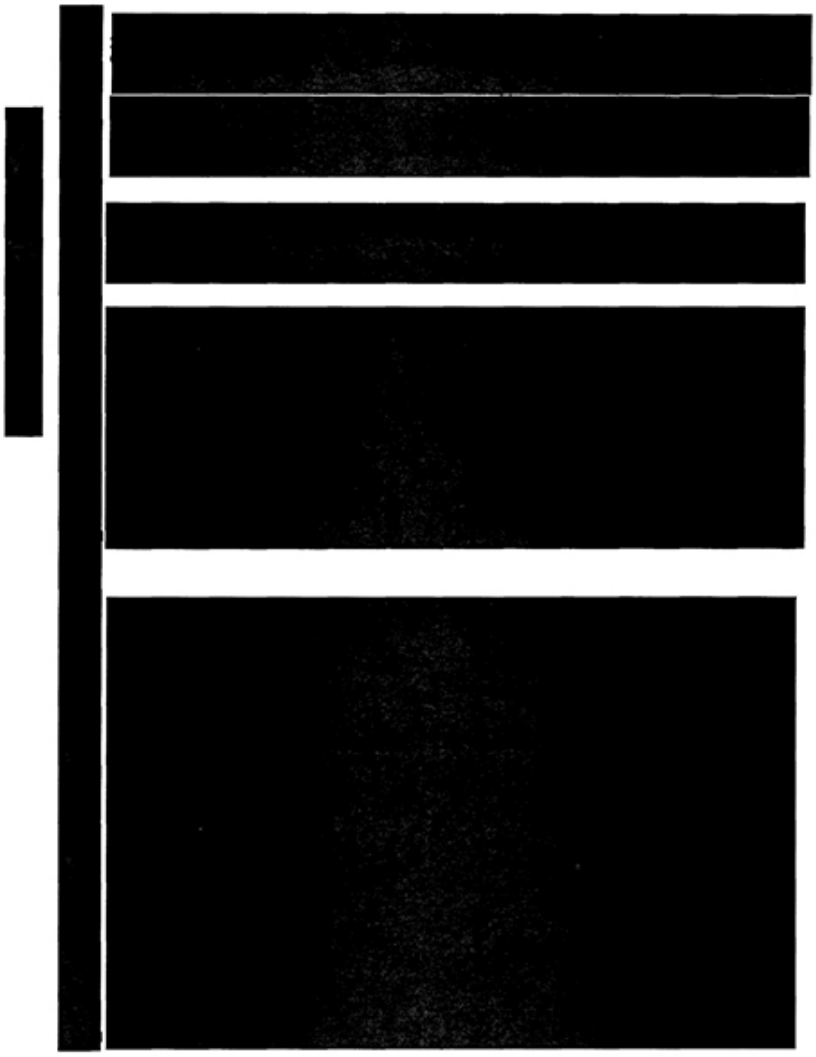
EXHIBIT D

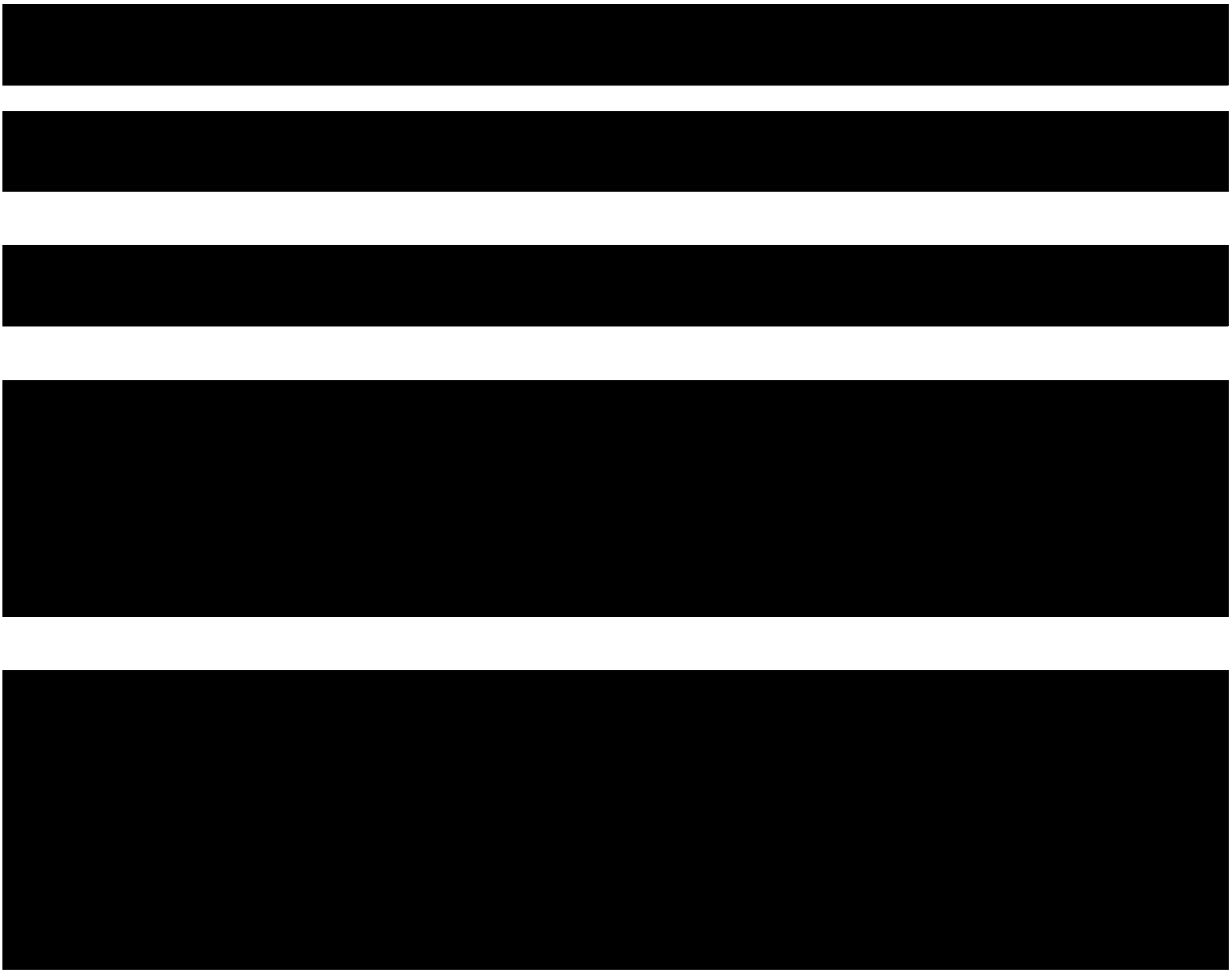
List of Equipment Approved for Outside Storage

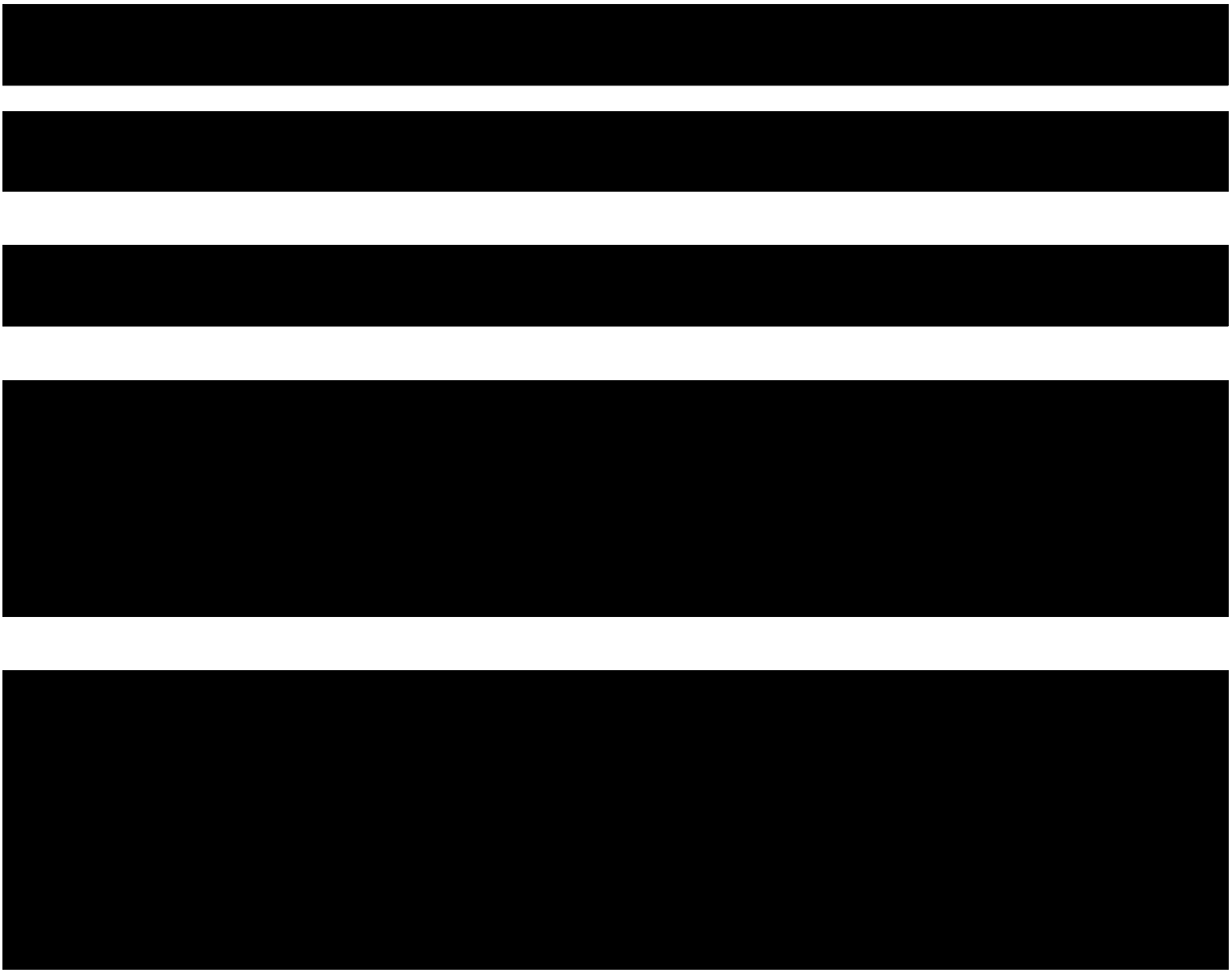
[redacted]

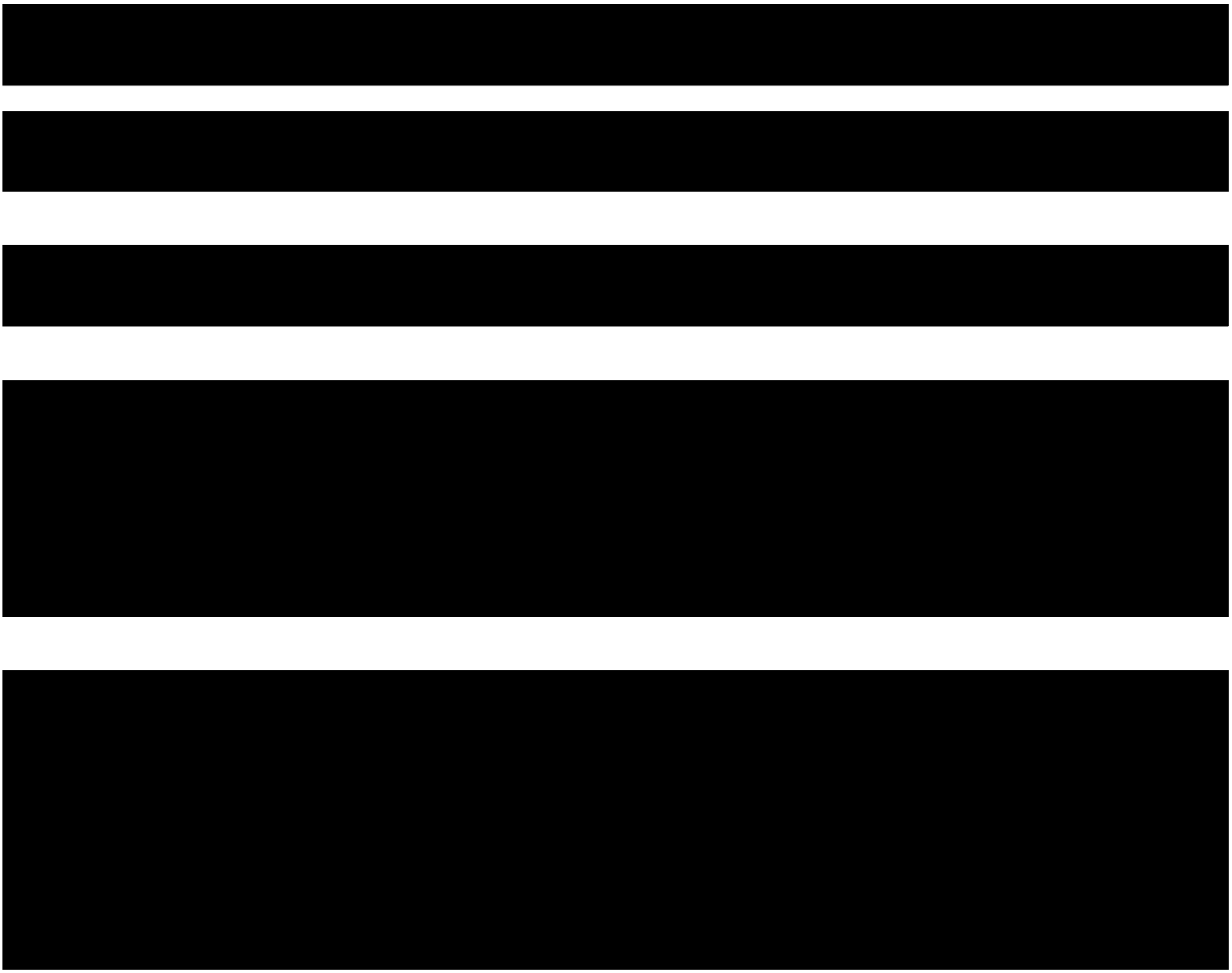
EXHIBIT E

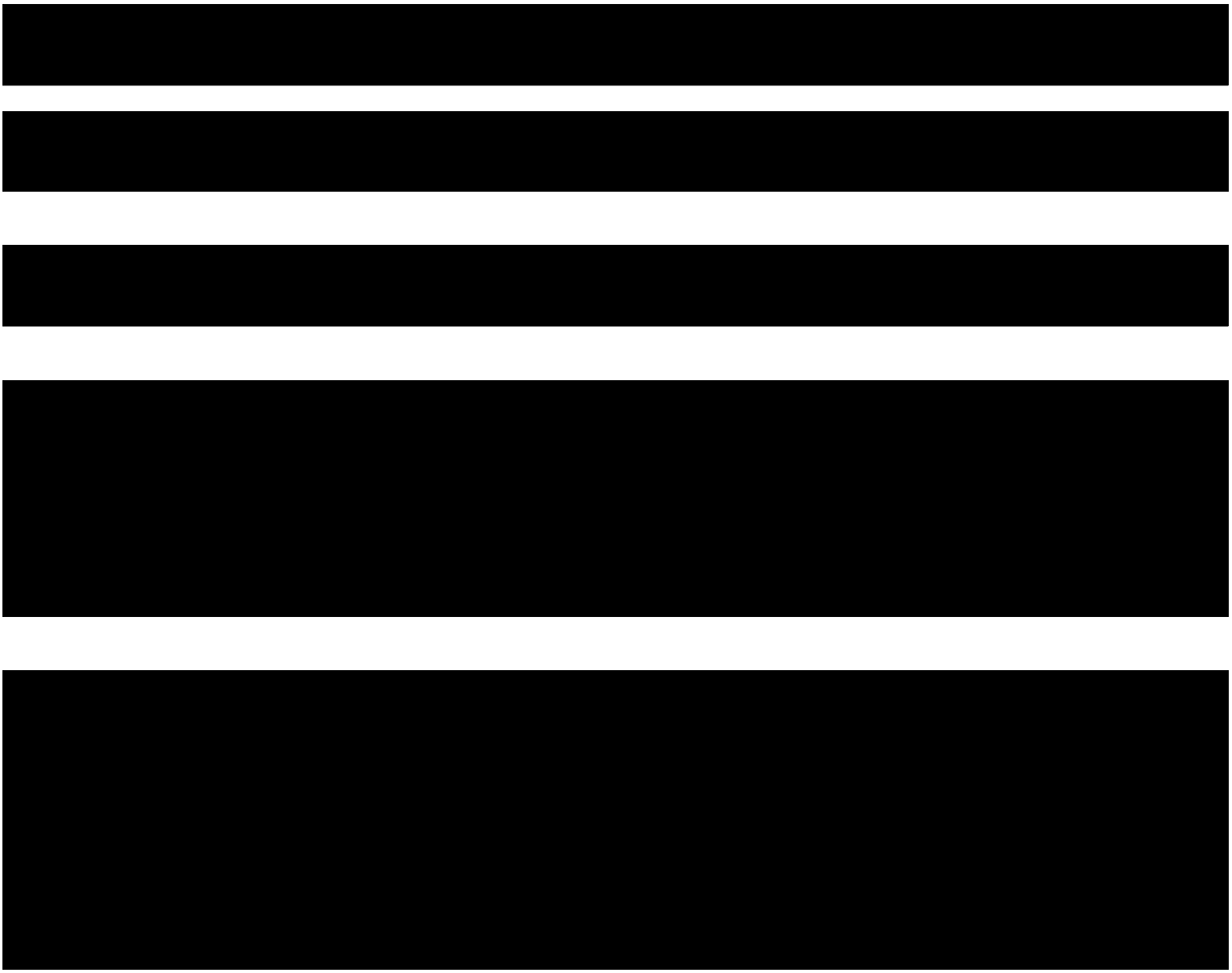
List of Tenant's Approved Hazardous Materials Stored on the Premises

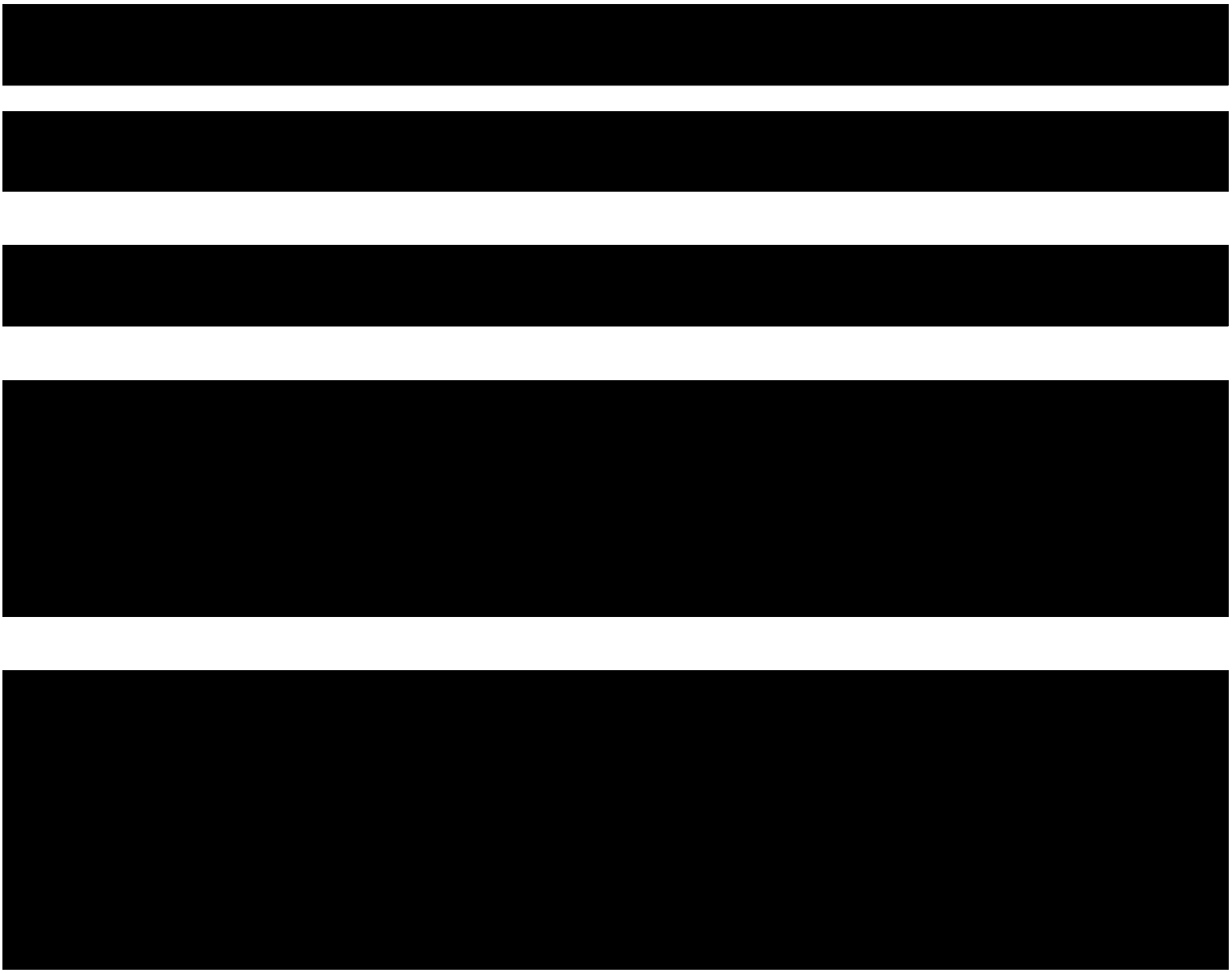












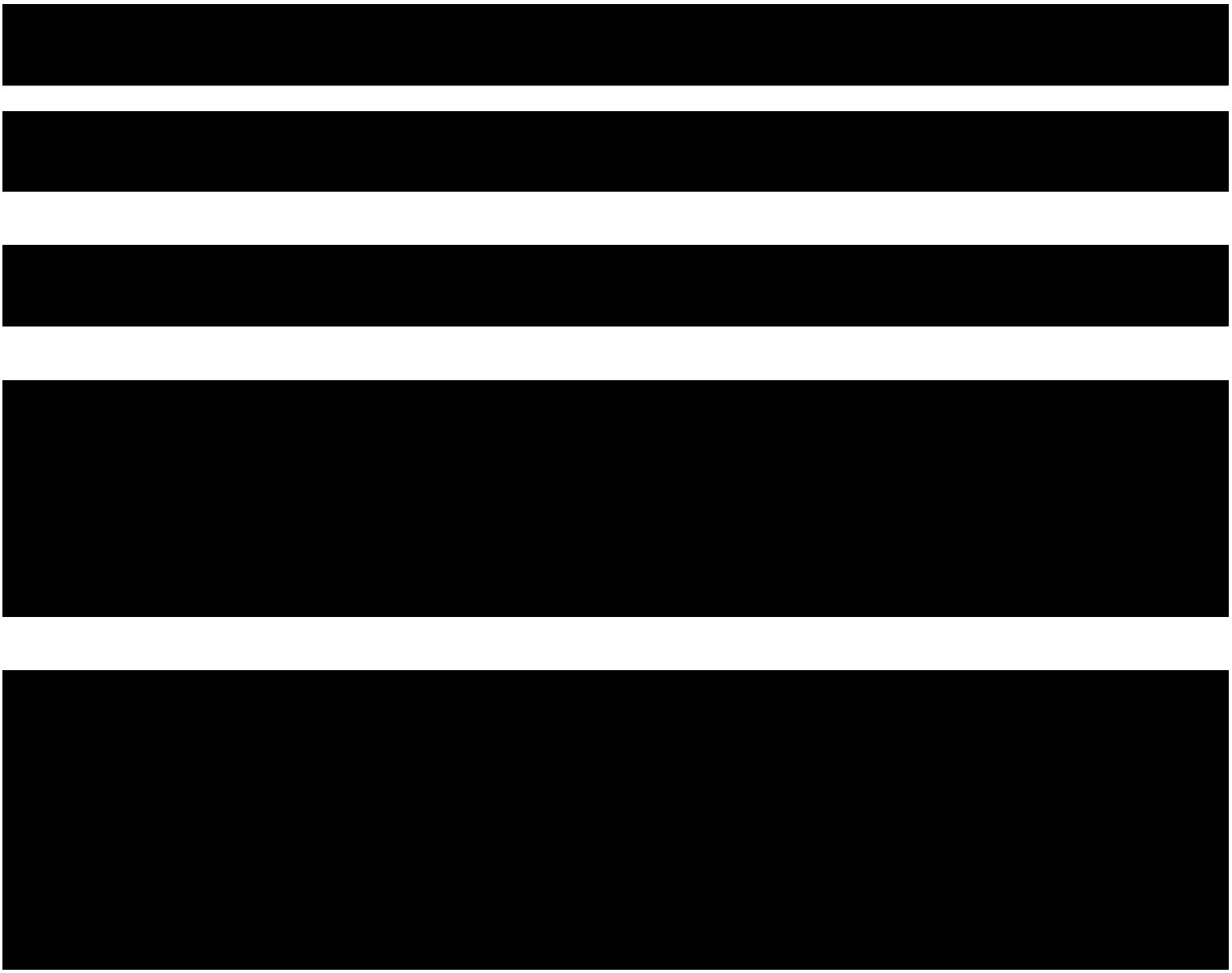


EXHIBIT F

LESSEE'S INSURANCE

1. Specific Requirements.

INSURANCE	COVERAGES	OTHER REQUIREMENTS
Worker's Compensation	Statutory Limits	1. No "alternative" forms of coverage permitted.
Employer's Liability	$1,000,000 each accident for bodily injury by accident $1,000,000 each employee for bodily injury by disease	
Commercial General Liability (Occurrence Basis)	$1,000,000 per occurrence $2,000,000 general aggregate $1,000,000 personal and advertising injury limit $50,000 damage to premises rented to you limit $5,000 medical expense limit	1. ISO form CG 0001 0798, or equivalent. 2. The contractual liability exclusion with respect to personal injury will be deleted.
Business Automobile Liability (Occurrence Basis)	$1,000,000 combined single limit	1. ISO form CA 0001 1001 or equivalent. 2. Includes liability arising out of operation of owned, hired and non-owned vehicles.
Umbrella Liability Insurance (Occurrence Basis)	$2,000,000	1. Written on an umbrella basis in excess over and no less broad than the liability coverages referenced above. 2. Inception and expiration dates will be the same as commercial general liability insurance. 3. Coverage must "drop down" for exhausted aggregate limits under the liability coverages referenced above. 4. Coverage must "drop down" for exhausted aggregate limits under commercial general liability insurance.
Causes of Loss-Special Form (formerly "all risk") Property Insurance	100% replacement cost, as modified below, of all of Lessee's furniture, fixtures and equipment	1. ISO form CP 1030, or equivalent. 2. Contain only standard printed exclusions. 3. Waiver of subrogation in favor of Landlord Parties. 4. Equipment floater to cover Lessee's equipment.
Business Income and Extra Expense Coverage	No less than 9 months of income and ongoing expenses.	1. Waiver of subrogation in favor of Landlord Parties. 2. Endorsement to cover losses arising from interruption of utilities outside the Premises.

2. General Insurance Requirements.

(a) Policies. All policies must:

(i) Be issued by carriers having a Best's Rating of A or better, and a Best's Financial Size Category of VIII, or better, and/or *Standard & Poor Insurance Solvency Review A-*, or better, and admitted to engage in the business of insurance in the State in which the Building is located;

(ii) Be endorsed to be primary with the policies of LESSOR being excess, secondary and noncontributing;

(iii) Be endorsed to provide a waiver of subrogation in favor of LESSOR;

(iv) With respect to all liability policies except workers' compensation/employer's liability, be endorsed to include LESSOR as "additional insureds" (The additional insured status under the commercial general liability policy will be provided on ISO form CG 2026 1185); and

(v) Contain a provision for 30 days' prior written notice by insurance carrier to LESSOR required for cancellation, non-renewal, or substantial modification.

(b) Limits, Deductibles and Retentions.

(i) Except as expressly provided above, no deductible or self-insured retention in excess of $10,000 without the prior written approval of LESSOR.

(ii) No policy may include an endorsement restricting, limiting or excluding coverage in any manner without the prior written approval of LESSOR.

(c) Forms

(i) If the forms of policies, endorsements, certificates, or evidence of insurance required by this Exhibit "C" are superseded or discontinued, LESSOR will have the right to require other equivalent forms; and

(ii) Any policy or endorsement form other than a form specified in this Exhibit "C" must be approved in advance by LESSOR.

(d) Evidence of Insurance. Insurance must be evidenced as follows:

(i) ACORD Form 25 Certificates *of Liability Insurance* for liability coverages;

(ii) ACORD Form *27 Evidence of Property Insurance* for property coverages;

(iii) Evidence to be delivered to LESSOR prior to commencing operations at the Property and at least 30 days prior to the expiration of current policies; and

(iv) ACORD forms must

(A) Show the LESSOR as a certificate holder (with LESSOR's mailing address);

(B) Show LESSEE as the "Named Insured;"

(C) Show the insurance companies producing each coverage and the policy number and policy date of each coverage;

(D) Name the producer of the certificate (with correct address and telephone number) and have the signature of the authorized representative of the producer;

(E) Specify the additional insured status and/or waivers of subrogation;

(F) State the amounts of all deductibles and self-insured retentions;

(G) Show the primary status and aggregate limit per project where required;

(H) Be accompanied by copies of all required endorsements; and

(I) The phrases “endeavor to” and “but failure to mail such notice will impose no obligation or liability of any kind upon Company, its agents or representatives” must be deleted from the cancellation provision of the ACORD 25 certificate and the following express provision added: “This is to certify that the policies of insurance described herein have been issued to the Insured for whom this certificate is executed and are in force at this time. In the event of cancellation, non-renewal, or material reduction in coverage affecting the certificate holder, 30 days’ prior written notice will be given to the certificate holder by certified mail or registered mail, return receipt requested.”

(e) Copies of Policies. LESSEE will provide to LESSOR a complete copy of any or all insurance policies or endorsements required by this Lease.

EXHIBIT G

ESTOPPEL CERTIFICATE

Re: Lease between 1300 East Anderson Lane, Ltd., a Texas limited partnership ("Lessor") and On-X Life Technologies, Inc., a Delaware corporation ("Lessee") dated March 2, 2009, with respect to the Building B, 1300 East Anderson Lane Business Park, Austin, Travis County, Texas (the "Premises")

Gentlemen:

We, the undersigned Lessee, under the Lease described above (the "Lease"), certify to ("Beneficiary") and its successors and assigns, the following:

1. Attached hereto as Exhibit "A" is a true, correct, and complete copy of the Lease, including all amendments, exhibits, and addenda thereto.

2. There has not been a cancellation, modification, assignment, renewal, extension, or amendment to the Lease, except the following (true and correct copies of all of which are attached hereto and initialed by Lessee): _____.

3. All of the current Basic Rent (in the amount of $,(Additional Rent (in the amount of $), and TI Rent (in the amount of $) provided in the Lease had been paid through _____, 20 . A Security Deposit in the amount of $_____ has been paid to Lessor.

4. Other than the Lease and any cancellation, modification, assignment, renewal extension, or amendment to the Lease identified above, there are no other agreements, written or oral, between Lessor and Lessee regarding the Premises or Lessee's obligation to pay rentals under the Lease, and Lessee does not claim a right to any concessions, free rent, or rental abatement other than as set forth in the Lease, except as follows: _____.

5. Lessee currently pays for all utilities used in the Premises.

6. The Lease commenced on , 2009, and the rent commenced on , 200 . The Lease terminates on , 20 , and the Lessee is not entitled to any renewal options except two (2) options to renew the Lease for a period of five (5) years each.

7. Except as otherwise stated herein, the interest of Lessee in the Lease has not been assigned or encumbered, and no part of the Premises has been sublet. Lessee is not aware of any defaults of Lessor under the Lease as of the date of Lessee's execution hereof.

8. The Lease is in full force and effect and Lessee is not aware of any presently existing claims against Lessor or any offsets against rent due under the Lease. There are currently no (i) known defaults of Lessor or Lessee under the Lease, (ii) existing circumstances which with the passage of time, or notice or both, would give rise to a default by Lessor or Lessee under the Lease, (iii) existing rights to abate, reduce or offset sums against the rent or terminate this Lease because of any other condition, or (iv) existing circumstances which with the passage of time, or notice, or both, would give rise to a right to abate, reduce or offset sums against rent or terminate the Lease.

9. The Premises have been completed and accepted and are in conformity with the terms of the Lease.

10. The Lessee has not filed a petition in bankruptcy that has not been dismissed as of the date hereof, has not been subject to an involuntary petition in bankruptcy which has not been dismissed, has not made an assignment for the benefit of any creditor(s), or has not been adjudged to be bankrupt or insolvent by a court of competent jurisdiction.

11. The undersigned has all requisite authority to execute this Estoppel Certificate on behalf of Lessee. The undersigned acknowledges that Beneficiary has requested the information contained herein for purposes of confirming and clarifying certain provisions of the Lease and is relying (and will rely) on the truth and accuracy of the representations made herein and upon the authority of the undersigned to execute this Estoppel Certificate on behalf of Lessee.

On-X Life Technologies, Inc., a Delaware corporation

By: _____

Name: _____

Title: _____

Date: _____, 20__

ADDENDUM #1

BASIC RENTAL ADJUSTMENT SCHEDULE

BASED ON APPROXIMATELY [redacted] RSF

SCHEDULE "A"

MONTHS	RATE PER SF/YR	MONTHLY BASE RENT
1 - 5	[redacted]	[redacted]
6 - 15	[redacted]	[redacted]
16 - 65	[redacted]	[redacted]
66 - 125	[redacted]	[redacted]

Intentionally Deleted

ADDENDUM #3

RENEWAL OPTION

At the end of original Lease Term, Lessee, but not any sublessee, will have up to two (2) options to renew the Lease as to all of the Premises (or, if the Premises consists of more than one building in the Business Park, a portion of the Premises, provided that such renewal cannot be exercised for less than all of Building B or all of the portion of the Premises located in any other building in the Business Park) for a period of Five (5) Years each (each hereinafter referred to as a "Renewal Term"); provided that as a condition to each such Renewal Term, Lessee must deliver to Lessor written notice of Lessee's exercise of such right of renewal at least 270 days, but no more than one year, prior to the end of the then-current Lease Term or Renewal Term. Each Renewal Term shall be on the same terms and conditions as are set forth in this Lease, except the Basic Rent for each Renewal Term will be at the then determined Fair Market Rental Rate determined as set forth below. Lessee shall not have such right of renewal if Lessee is in default beyond any applicable cure period allowed by the Lease, either at the time of such notice of renewal or at the end of the Lease Term. Except as provided below when, Lessee timely exercises its option, Lessee will definitely be committed to lease the Premises for the Renewal Term, with Basic Rent being the Fair Market Rental Rate determined as set forth below.

Fair Market Rental Rate. As used in this Addendum, the term ''Fair Market Rental Rate" shall mean the annual rental rate per square foot of rentable area then being charged as Basic Rent in arm's length, bona fide negotiations for comparable buildings of similar quality, size, location, age and use in the Austin, Texas market, for space comparable to the space for which the Fair Market Rental Rate is being determined (taking into consideration use, location, floor level within the applicable building, extent of leasehold improvements existing, remodeling credits or allowances granted, quality, age and location of the applicable building, rental concessions {such as abatements or lease assumptions}, the provision of free or paid unassigned parking, the time the particular rate under consideration became effective, size of tenant, creditworthiness of

tenant, the then current operating expenses, relative services provided, and any other relevant factors). LESSOR shall advise LESSEE in writing of the Fair Market Rental Rate proposed by LESSOR in good faith within thirty (30) days after LESSEE has delivered its written notice to LESSOR exercising the renewal option (or such other option as may be described in other exhibits or addendums to this Lease, as applicable). LESSEE shall elect, within thirty (30) days thereafter, in a writing delivered to LESSOR to either (i) accept LESSOR's determination of the Fair Market Rental Rate (in which case the option so exercised shall be deemed unconditionally exercised for the applicable term at such rate), (ii) reject LESSOR's determination of the Fair Market Rental Rate and retract its exercise of the renewal option, or (iii) reject LESSOR's determination of the Fair Market Rental Rate and elect to negotiate with LESSOR for up to an additional ten (10) day period in order to reach agreement on the Fair Market Rental Rate. If LESSEE fails to deliver a written election to LESSOR within such thirty (30) day period, LESSEE shall be deemed to have elected (iii). If LESSEE elects or is deemed to have elected (iii), then LESSOR and LESSEE shall place in a separate sealed envelope such party's final proposal as to the Fair Market Rental Rate, and shall meet with each other within five (5) business days after LESSEE elects, or is deemed to have elected, (iii) above, whereupon each party shall exchange the sealed envelopes and open such envelopes in each other's presence, and each party's proposed Fair Market Rental Rate shall be recorded. LESSOR and LESSEE shall negotiate in good faith for an additional period of up to ten (10) days in order to reach agreement on the Fair Market Rental Rate. At any time within such additional ten (10) day period, LESSEE may elect, by delivering written notice to LESSOR, to proceed with the arbitration process described below to determine the Fair Market Rental Rate with respect to the Premises (or such other space, as applicable). If, at the end of this additional ten (10) day period, LESSEE and LESSOR have not agreed on the Fair Market Rental Rate and LESSEE has not elected to proceed with the arbitration process described below, then LESSEE shall be deemed to have retracted its exercise of the Renewal Option.

Within ten (10) days after LESSOR's receipt of LESSEE's notice invoking an arbitration proceeding, LESSOR and LESSEE shall each nominate and appoint a Qualified Broker to determine the Fair Market Rental Rate for the Leased Premises (or such other space, as applicable). Neither LESSOR nor LESSEE shall consult with such Qualified Broker as to his or her opinion as to Fair Market Rental Rate prior to the appointment. The determination of the Qualified Brokers shall be limited solely to the issue of whether LESSOR's or LESSEE's submitted Fair Market Rental Rate for the Leased Premises (or such other space) is the closest to the actual Fair Market Rental Rate for the Leased Premises (or such other space) as determined by the Qualified Broker, taking into account the requirements hereof. The two (2) Qualified Brokers shall afford to LESSOR and LESSEE the right, which right shall expire five (5) business days following the appointment of the second of the two (2) Qualified Brokers, to submit (with a copy to the other party hereto) any market data and additional information that such party deems relevant to the determination of the Fair Market Rental Rate (the "FMRR Data"), and each party may submit to each Qualified Broker in writing one (1) reply to the other party's FMRR Data within five (5) business days after receipt of the FMRR Data. The Qualified Brokers shall, with all possible speed, make their respective determinations and deliver a written report thereof to LESSOR and LESSEE within thirty (30) days after their appointment. Such Qualified Brokers may hold such hearings and require such briefs as the Qualified Broker, in his or her sole discretion, determines is necessary. In the event that the two Qualified Brokers are unable to agree on either the LESSOR's or the LESSEE's proposal within such thirty (30) day period, then the two (2) Qualified Brokers shall within ten (10) days after both of such Qualified Brokers have submitted their written reports to LESSOR and LESSEE select by mutual agreement a third (3rd) Qualified Broker and give written notice of such appointment to LESSOR and LESSEE. If the two (2) Qualified Brokers fail to agree upon the third Qualified Broker within said ten (10) day period, a third (3rd) Qualified Broker shall be selected by mutual agreement of LESSOR and LESSEE within a further period of ten (10) days, failing which, either LESSOR or LESSEE may elect to have the third (3rd) Qualified Broker appointed by the President of the Austin Chapter of the American Arbitration Association or its successor organization. The third (3rd) Qualified Broker shall be instructed to fairly and impartially determine whether the LESSOR's or the LESSEE's proposal is the closest to the actual Fair Market Rental Rate for the Leased Premises, taking into account the requirements

hereof, and the determination so selected, which shall be due no later than fifteen (15) days following his or her appointment, shall be binding upon LESSOR and LESSEE and shall be the Fair Market Rental Rate for purposes of the Premises. LESSOR and LESSEE shall pay the fees and expenses of the Qualified Broker it appoints, and the fees and expenses of the third (3rd) Qualified Broker shall be divided equally between LESSOR and LESSEE. If any Qualified Broker appointed as aforesaid shall thereafter become unable or unwilling to act, such Qualified Broker's successor shall be appointed in the same manner as provided in this Section for the appointment of that Qualified Broker.

The parties understand, stipulate and agree that there will be no compromise, modification or averaging of the LESSOR's and LESSEE's proposals for the Fair Market Rental Rate, and the Qualified Brokers must select one or the other, and that the proposed Fair Market Rental Rate selected by the foregoing arbitration procedure shall be final, binding, conclusive and effective on LESSOR and LESSEE for purposes under this Lease, and same shall not be subject to judicial review, mediation or any other legal proceeding.

ADDENDUM #4

RULES AND REGULATIONS

1. The sidewalk, entries, and driveways of the Business Park shall not be obstructed by Lessee, or its agents, or used by them for any purpose other than ingress and egress to and from the Premises.

2. Other than in Lessee's covered break area, Lessee's dumpster receptacle, and any equipment and areas identified in Lessee's original build out or otherwise permitted, under the Lease, Lessee shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Business Park.

3. Except for seeing-eye dogs, no animals shall be allowed in the offices, halls, or corridors in the Business Park.

4. Lessee shall not disturb the occupants of the Business Park or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises, due consideration given to the uses being made of the Premises and the Building Park, provided that the Sly dust collector which is presently located behind Building D, but which shall be moved to Building B, shall not be deemed to violate this rule, provided such Sly dust collector is located in a location reasonably acceptable to Lessor.

5. If Lessee desires telegraphic, telephonic or other electric connections in the Premises, Lessor or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Lessee's expense.

6. Parking any type of recreational vehicles is specifically prohibited on or about the Business Park. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings.

7. Lessee shall maintain the Premises free from rodents, insects and other pests.

8. Lessor reserves the right to exclude or expel from the Business Park any person who, in the judgment of Lessor, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Business Park.

9. Lessee shall not cause any unnecessary labor by reason of Lessee's carelessness or indifference in the preservation of good order and cleanliness. Lessor shall not be responsible to Lessee for any loss of property on the Premises, however occurring, or for any damage done to the effects of Lessee by the janitors or any other employee or person.

10. Lessee shall give Lessor prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.

11. Except as otherwise provided herein or in the Lease, Lessee shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.

12. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.

13. No auction, public or private, will be permitted on the Premises or the Business Park.

14. No awnings shall be placed over the windows in the Premises except with the prior written consent of Lessor.

15. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.

16. Lessee assumes full responsibility for protecting the Premises from theft, robbery and pilferage.

17. Lessee shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Lessee’s ordinary use of the Premises and shall keep all such machinery free of unreasonable vibration, noise and air waves which may be transmitted beyond the Premises except as otherwise provided herein or in the Lease.

ADDENDUM #5
SIGN SPECIFICATIONS

Per Paragraph 10, Signage at your Business Park is subject to restrictions as noted below. This is controlled to maintain a consistent overall visual appeal of the building. Except as otherwise provided, all signage at the Premises shall conform with the specifications set forth below.

I. INTRODUCTION

The intent of this sign criterion is to establish and maintain guidelines consistent with the signage polices of the Lessor and the City or County as appropriate. Further, the purpose is to assure a standard conformance for the design, size, fabrication techniques, and materials for signage for the Business Park and for Lessee identification.

II. GENERAL REQUIREMENTS

A. Intentionally deleted.

B. Each Lessee sign shall be designed, fabricated and installed in accordance with this sign criterion and consistent with the Sign Code of the City or County as amended from time to time by the governing authority.

C. Lessor’s written approval of Design Drawings, and Working Shop Drawings is required prior to the commencement of Lessee construction.

D. Sign permits must be obtained from the City or County prior to installations of signage.

E. Signs installed without written approval of the Lessor or the appropriate city permit may be subject to removal and proper reinstallation at Lessee’s expense. Damage may be assessed to cover costs of repairs to sign band or removal of signage resulting from unapproved installations.

F. Lessee and his sign contractor shall repair any damage caused during installation of signage.

G. No labels shall be permitted on the exposed surface of signs, except those required by local ordinance. Those required must be installed in an inconspicuous location.

H. Flashing, strobing, moving or audible signs are not permitted.

I. No window signs with the exception of suite numbers are permitted without the express approval of Lessor.

J. No portable signs are to be displayed on site.

K. No secondary exterior signs are to be placed on building wall elevations.

L. No freestanding and/or pylon type exterior signs will be permitted without Lessor's prior approval.

III. LESSEE RESPONSIBILITIES

Each Lessee shall, at its own expense, provide and maintain its own identification sign in accordance with specifications noted herein.

IV. LESSEE SIGN SUBMISSIONS

A. Lessee's sign contractors shall submit all Working Shop Drawings to the Lessor or his appointed representative for approval. Allow a minimum of ten working days, or two weeks, for Lessor's review and approval.

B. All submissions to include two (2) blue line prints. An approved copy will be returned.

C. Shop Drawings must include:

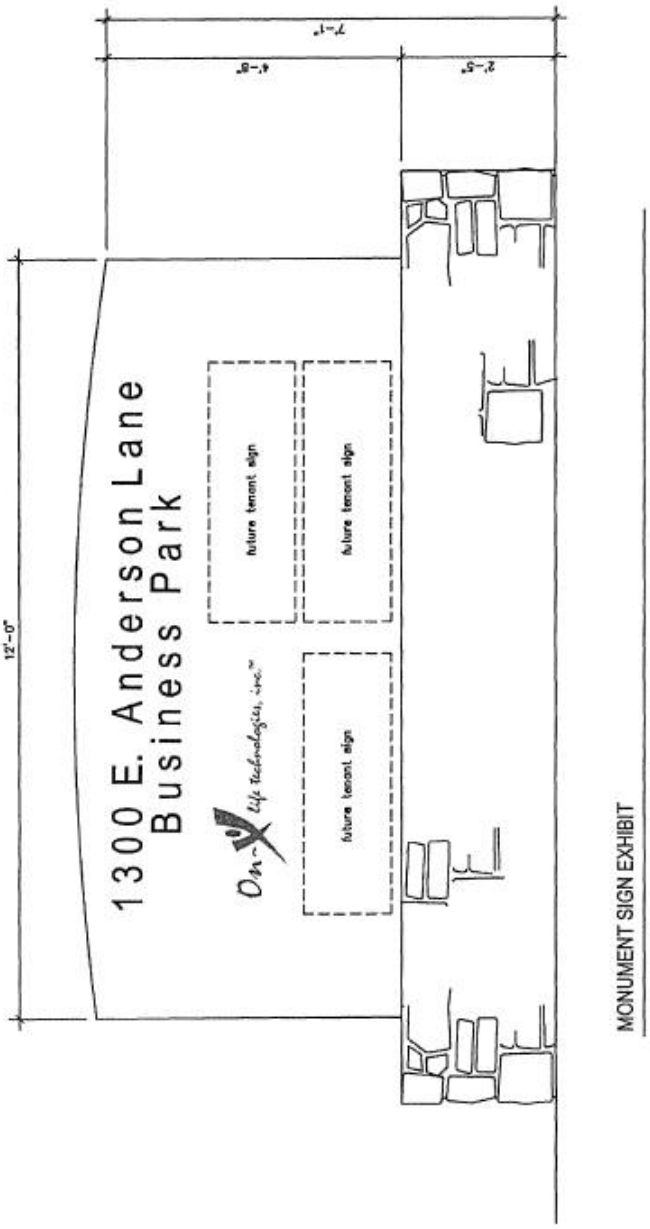
1. Full and complete dimensions

2. Letter style, face (color, material and thickness), returns (color, material and thickness).

V. APPROVALS

No sign shall be installed without first securing the necessary permits from the appropriate governing jurisdiction. Artwork and sign location are to be approved in writing by the Lessor or their appointed representative prior to installation.

Lessor reserves the right to reject any sign that does not comply with the intent and spirit of this sign criterion.


1300 E. Anderson Lane
Business Park
future tenant sign
future tenant sign
future tenant sign
12'-0"
MONUMENT SIGN EXHIBIT

ADDENDUM FIX #6
HVAC MAINTENANCE CONTRACT

Per Paragraph 15, “Maintenance by Lessee” is revised to include the following:

a) Lessee agrees to enter into and **maintain through the term of the lease,** a regularly scheduled preventative maintenance/service contract for servicing all hot water, heating, and air-conditioning systems and equipment within the premises. The Lessor requires a qualified HVAC contractor perform this work. A copy of the Maintenance Agreement/Service Contract between Lessee and HVAC contractor must be provided to Lessor upon occupancy of the leased premises.

The service contract must become effective within thirty (30) days of occupancy, and service visits should be performed on a semi-annual basis. We suggest that you send the following list to a qualified HVAC contractor to be assured that these items are included in the maintenance contract:

1. Adjust belt tension;
2. Lubricate all moving parts, as necessary;
3. Inspect and adjust all temperature and safety controls;
4. Check refrigeration system for leaks and operation;
5. Check refrigeration system for moisture;
6. Inspect compressor oil level and crank case heaters;
7. Check head pressure, suction pressure and oil pressure;
8. Inspect air filters and replace when necessary (unless Lessee elects to do so);
9. Check condensate drains and drain pans and clean, if necessary;
10. Inspect and adjust valves;
11. Check and adjust dampers;
12. Run machine through complete cycle;

Prior to the Commencement Date, Lessor, as part of the Tenant Improvements, agrees to have all HVAC systems serving the Premises in working order and condition (with any replacements being made, as necessary, including without limitation any units which have outlived their useful operating life), and to have all HVAC systems and equipment for the Premises inspected by a certified service contractor. A written report from the inspector certifying the condition of such systems as of the Commencement Date and a description of all such completed work shall be provided to Lessee on or before the Commencement Date. Notwithstanding anything to the contrary contained herein, Lessor shall be responsible for all replacements of the HVAC system or any portion thereof required during the initial twelve (12) months of the Lease Term, as set forth in the Lease.

ADDENDUM #7

MOVE-OUT CONDITIONS

Lessor expects to receive the space in a well-maintained condition, with normal wear and tear, casualty and condemnation excepted. The following list is designed to assist you in the move-out procedures but is not intended to be all-inclusive. Lessee's obligations to repair, replace or remove any conditions described below shall only apply to such conditions as are caused by Lessee or occur during the Term of the Lease, and Lessee shall not be obligated to deliver the Premises back to Lessor in a condition better than as it existed on the Commencement Date, ordinary wear and tear, casualty and condemnation excepted. In the event of a conflict between the terms of the Lease and the terms of this Addendum, the terms of the Lease shall prevail.

1. All lighting is to be placed into good working order. This includes replacement of bulbs, ballasts, and lenses as needed.
2. All truck doors and dock levelers should be serviced and placed in good operating order. This would include the necessary replacement of any dented truck door panels and adjustment of door tension to insure proper operation. All door panels, which are replaced, need to be painted to match the building standard.
3. All structural steel columns in the warehouse and office should be inspected for damage. Repairs of this nature should be pre-approved by the Lessor prior to implementation.
4. Heating/air-conditioning systems should be placed in good working order, including the necessary replacement of any parts to return the unit to a well-maintained condition. This includes warehouse heaters and exhaust fans. ***Upon move-out, Lessee shall provide an exit inspection performed by a certified mechanical contractor to determine the condition.***
5. All holes in the sheet rock walls should be repaired prior to move-out.
6. The carpets and vinyl tiles should be in a clean condition and should not have any holes or chips in them. Lessor will accept normal wear on these items provided they appear to be in a maintained condition.

7. Facilities should be returned in a broom clean condition, which would include cleaning of the coffee bar, restroom areas, windows, and other portions of the space.

8. If applicable, the warehouse should be in a broom clean condition with all inventories and racking removed. There should be no protrusion of anchors from the warehouse floor and all holes should be appropriately patched. If machinery/equipment is removed, the electrical lines should be properly terminated at the nearest junction box.

9. All exterior windows with cracks or breakage should be replaced.

10. The Lessee shall provide keys for all locks on the premises, including front doors, rear doors, and interior doors.

11. Items that have been added by the Lessee and affixed to the building will remain the property of Lessor unless agreed otherwise. This would include but is not limited to mini-blinds, air conditioners, electrical, water heaters, cabinets, flooring, etc., but shall exclude any of Lessee's equipment, machinery, trade fixtures or other removable items. Notwithstanding the foregoing, the DI Water System, the Reverse Osmosis system and water softener system installed, modified or used by Lessee shall remain the property of Lessor.

12. All electrical systems modified during the Lease Term should be left in a safe condition that conforms to code in effect at the time of modification.

13. All plumbing fixtures should be in good working order, including the water heater. Faucets and toilets should not leak.

14. If applicable, all dock bumpers must be left in place and well secured.

ADDENDUM #8

LOW VOLTAGE CABLING
INSTALLATION AND REMOVAL

INSTALLATION:

All voice, data, video, audio, and other low-voltage control transport system cabling and/or cable bundles installed in the Building shall be (a) plenum rated and/or have a composition makeup suited for its environmental use in accordance with NFPA 70/National Electrical Code; and (b) installed and routed in accordance with a routing plan showing “as built” or “as installed” configurations of cable pathways, outlet identification numbers, locations of all wall, ceiling and floor penetrations, riser cable routing and conduit routing if applicable, and such other information as Lessor may request. The routing plan shall be available to LESSOR and its agents at the Building upon request.

ADDENDUM #9

Exclusions from Operating Expenses

Notwithstanding anything to the contrary contained in the Lease, the following items shall be excluded from the calculation of Operating Expenses:

1. costs of providing utility service to any tenants of the Business Park unless such utilities are also provided to LESSEE and paid through Operating Expenses;

2. depreciation and amortization of any capital investment item, including rental payments with respect to capital items, except for amortization of capital investment items installed to reduce operating expenses as contemplated in the Lease (provided that Lessor reasonably believes that operating expenses shall be reduced based on the documented reasonable opinion of an engineer or other appropriate third-party);

3. financing and refinancing costs, interest on debt or amortization payments on any mortgage or mortgages, and rental under any ground or underlying leases or lease together with all costs incidental to the items mentioned in this clause;

4. any costs relating to the presence of any Hazardous Materials currently present in or on the Business Park (including asbestos-containing materials), including, without limitation, the costs of any encapsulation or removal thereof required by any laws or regulations, whether currently existing or hereafter enacted;

5. costs of correcting defects in the original design or any subsequent construction of the Business Park or the material used in the construction of the Business Park (including latent defects in the original or any subsequent construction of the Business Park or defects in the design of the Business Park) or in the equipment or appurtenances thereto, except that for the purposes of this clause, conditions (not occasioned by design or construction defects) resulting from ordinary wear and tear and use shall not be deemed defects;

6. legal and other fees, leasing commissions, advertising expenses and other similar costs incurred in connection with the leasing of the Business Park;

7. costs incurred in renovating or otherwise improving or decorating or redecorating space for new tenants or other existing tenants or occupants in the Business Park or vacant space in the Business Park or costs related thereto (including architectural and engineering fees);

8. costs incurred by LESSOR that are specifically reimbursed to LESSOR by LESSEE, other tenants, insurance or any other sources (other than as part of Operating Expenses);

9. a bad debt loss, rent loss or reserves for bad debts or rent loss;

10. any item of cost which is includable in Operating Expenses, but which represents an amount paid to an affiliate of LESSOR or an affiliate of any partner or shareholder of LESSOR, or to the property management company or an affiliate of the property management company, to the extent the same is in excess of the reasonable market cost of said item or service in an arms length transaction;

11. all interest or penalties incurred as a result of LESSOR's failure to pay any costs of taxes as the same shall become due, to the extent not caused by LESSEE's failure to timely pay tax payments due by LESSEE;

12. costs or expenses incurred by LESSOR which represent amounts spent by LESSOR or its agents in bad faith and the amount of any payments received by LESSOR or the property manager, or the employees or officers or either, from suppliers of goods or services such as kick-backs, finders fees, expediting fees or other similar dishonest fees;

13. any and all costs associated with the operation of the business of the entity which constitutes LESSOR; excluded items shall specifically include, but shall not be limited to formation of the entity, internal accounting and legal matters, including but not limited to preparation of tax returns and financial statements and gathering of data thereof (except to the extent related to LESSOR's performance under this Lease and other leases, for example, without limitation, matters relating to Operating Expenses), costs of defending any lawsuits with any mortgagee (except as the actions of a tenant may be in issue), costs of selling, syndication, financing, mortgaging or hypothecating any of LESSOR's interest in the Business Park, costs of any disputes between LESSOR and its employees (if any) not engaged in the operation of the Business Park;

14. LESSOR's home office costs and general overhead;

15. any cost or expense for services or amenities that are specifically for the benefit of a particular tenant and that are of a nature not generally provided to all tenants in the Business Park;

16. any expense incurred as a direct result of the gross negligence of LESSOR, its agents, servants, or employees or arising out of LESSOR's grossly negligent failure to manage the Business Park consistently with the standard required by this Lease to the extent that such expense would not have been incurred in the absence of such gross negligence;

17. any cost or expense incurred as a direct result of painting, decorating, carpet shampooing, drapery cleaning, and wall washing within the rentable areas of the Business Park;

18. charitable donations attributable to the Business Park;

19. costs which would duplicate costs theretofore included in Operating Expenses;

20. any repair or restoration that is necessitated by any fire or other casualty; and

21. any other cost or expenditure which under generally accepted accounting principles, consistently applied, is considered a capital expenditure except for the amortization of a capital expense incurred to reduce operating expenses and permitted under paragraph 2 above.

Notwithstanding anything to the contrary contained in the Lease, in no event shall the amount of Operating Expenses (other than Uncontrollable Expenses (defined below)) used for purposes of calculating LESSEE's Additional Rental required to be paid by LESSEE hereunder increase by more than ten percent (10%) in any twenty-four (24) consecutive calendar month period on a non-cumulative basis. The foregoing limitation with respect to increases in Operating Expenses shall not be applicable with respect to the portion of Operating Expenses which are Uncontrollable Expenses. For purposes of this paragraph, ***"Uncontrollable Expenses"*** shall mean real and personal property taxes, general and special assessments levied by any governmental authority, insurance premiums, utility costs and costs incurred in complying with any law enacted after the Commencement Date.

ADDENDUM #10

LIMITED RIGHT OF FIRST REFUSAL

Subject to Lessee not being in default beyond applicable cure periods, during the Lease Term (including any Renewal Term), Lessor grants to Lessee a continuous right of first refusal (the "Right of First Refusal") exercisable as hereinafter set forth, to lease any space in any of the other Buildings located in the Business Park (the "Refusal Space"). All rights of Lessee to lease the Refusal Space pursuant to the Right of First Refusal shall be applicable to the entire Refusal Space or to any portion thereof which may become available. The Right of First Refusal shall be as follows:

1. Upon Lessor's receipt of a signed Letter of Intent from a third party Lessee for the lease of all or any portion of the Refusal Space that Lessor is willing to accept (but in any event prior to entering into any lease or other occupancy agreement affecting the Refusal Space), Lessor shall notify the Lessee in writing (the "Offer Notice"). The Offer Notice shall include a true, correct and complete copy of any such signed Letter of Intent or the terms upon which Lessor is willing to enter into a lease for such Refusal Space, and designate all or such portion of the Refusal Space covered by the Letter of Intent (the "Offered Refusal Space"). Lessee may exercise the Right of First Refusal and include the Offered Refusal Space, or any other unleased portion of the Refusal Space under this Lease, upon the terms and conditions as set forth in the Offer Notice by delivering to Lessor written notice of Lessee's election (the "Acceptance Notice") on or before fifteen (15) days after the date of Lessee's receipt of the Offer Notice; provided, however, if the lease term set forth in the Offer Notice is not coterminous with the Lease Term, said terms shall be pro-rated and the expiration date will be made coterminous with the Lease Term.

2. In the event Lessor does not receive Lessee's Acceptance Notice as to the Offered Refusal Space as described in the Offer Notice within said fifteen (15) day period, Lessee shall be deemed to have waived its Right of First Refusal with respect to such Offer Notice without further notice to Lessee and Lessor shall be free to lease the Offered Refusal Space to a third party on the same terms and conditions as set forth in the Offer Notice, provided that Lessor consummate such lease within one hundred eighty (180) days after the date the Offer Notice was delivered to Lessee. Lessee's failure to give Lessor a Lessee's Acceptance Notice as to any Offered Refusal Space described in an Offer Notice shall be deemed a waiver and release of Lessee's Right of First Refusal as to the Offered Refusal Space designated in the Offer Notice. If Lessor desires to lease the Offered Refusal Space on terms and/or conditions materially different from those contained in the Offer Notice or after the expiration of such 180 day period, Lessor must again offer the Offered Refusal Space to Lessee on such different terms and/or conditions, if applicable, and Lessee may exercise the Right of First Refusal and include the Offered Refusal Space on such different terms and/or conditions, if applicable, by delivering to Lessor an Acceptance Notice on or before fifteen (15) days after the date of Lessee's receipt of the different terms and conditions.

3. All Refusal Space leased by Lessee pursuant to the Right of First Refusal shall be for a term which is coterminous with the initial Lease Term and any renewal or extension thereof. Except for any terms or conditions specified in the Offer Notice, including without limitation the commencement date and the rental rates, the lease conditions for such additional space shall be the same as for the original Premises.

4. The term Premises, as used in this Lease, shall include all expansions thereof that may occur from time to time pursuant to this Right of First Refusal.

5. Upon the exercise of the Refusal Option pursuant to the terms hereof, Lessor and Lessee shall execute an instrument delineating and describing the any Refusal Space leased by Lessee and thereby added to the Premises."

6. SUBJECT TO OUTSTANDING COMMITMENTS. The Right of First Refusal granted herein shall be subject to the renewal options, expansion options, and/or preferential rights to lease, if any, held by the then current lessee, if any, of such additional space or portion thereof.

7. TERMINATION UPON DEFAULT. Lessee shall not be entitled to exercise the Right of First Refusal following the occurrence, and during the continuance, of any event of default under the Lease beyond applicable cure periods.

ADDENDUM #11

RIGHT OF FIRST REFUSAL TO PURCHASE

Subject to Lessee not being in default and otherwise being in full compliance with the terms of this Lease, Lessor hereby grants to Lessee a continuing right of first refusal (the "Right of First Refusal to Purchase") to purchase the Premises or the Business Park under the following terms and conditions:

(a) During the Term of this Lease, upon Lessor's receipt of a signed Letter of Intent from third party purchaser of all or part of the Business Park (but in any event prior to entering into any binding purchase agreement for all or part of the Business Park), Lessor will deliver a written notice to Lessee (the "Offer Notice"). The Offer Notice shall include a true, correct and complete copy of any such signed Letter of Intent (or shall specify in reasonable detail the terms of the offer which Lessor has deemed acceptable) and designate all or such portion of the Business Park covered by the Letter of Intent (the "Offered Refusal Property").

(b) Lessee will have ten (10) days from the date of the Offer Notice to exercise the Right of First Refusal to Purchase to purchase the Business Park, or Building B, on the same terms as set forth in the Offer Notice. In order to exercise the Right of First Refusal to Purchase, Lessee must deliver to Lessor, on or before ten (10) days from Lessee's receipt of the Offer Notice, a written notice exercising Lessee's Right of First Refusal to Purchase to purchase the Business Park or Building B (the "Exercise Notice"). If Lessee fails to timely deliver an Exercise Notice to Lessor, then Lessee will be deemed to have waived and released its Right of First Refusal to purchase the Business Park or Building B, and thereafter, Lessor will have the right to sell the Business Park or Building B to a third party on the terms set forth in the Offer Notice, without material deviation, within one hundred eighty (180) days after Lessee waives (or is deemed to have waived) its rights hereunder. If Lessee timely delivers an Exercise Notice to Lessor, then the parties will promptly commence the negotiation and execution of a definitive agreement for the purchase and sale of the Business Park or Building B, as applicable (the "Definitive Agreement"). The Definitive Agreement will include (i) that the purchase price of the Business Park or Building B will be the price set forth in the Offer Notice and will be paid in cash at the closing, (ii) that upon execution of the Definitive Agreement, Lessee will be obligated to deliver to the escrow agent an earnest money deposit in an amount equal to 5% of the purchase price (which shall be non-reimbursable subject only to Lessee's title and survey review and the satisfaction of Lessee's lender's due diligence requirements, or in the event of a default by Lessor thereunder), (iii) that the Business Park or Building B, as applicable, will be sold "AS IS, WHERE IS" and WITH ALL FAULTS", and Lessor will not make any warranties and representations regarding the Premises, other than Lessor's special warranty of title to be delivered at closing, and (iv) such other terms and conditions as are reasonably and mutually acceptable to Lessor and Lessee, and normal and customary for the purchase and sale of properties similar to the Business Park. If Lessor and Lessee, using commercially reasonable efforts and acting in good faith, are unable to negotiate and execute a Definitive Agreement within twenty (20) days from the date Lessee delivers the Exercise Notice to Lessor, then Lessee will be deemed not to have exercised the Right of First Refusal to Purchase, Lessee will be deemed to have waived and released its Right of First Refusal to Purchase, and Lessor will have the right to sell the Business Park on the terms set forth in the Offer Notice, without material deviation, within one hundred eighty (180) days after Lessee waives (or is deemed to have waived) its rights hereunder.

(c) If Lessee fails to timely exercise the Right of First Refusal to Purchase, or is deemed to have waived and released the Right of First Refusal to Purchase as set forth above, and if Lessor desires to sell the Business Park on terms materially less favorable to Lessor than those specified in the Offer Notice, or after the expiration of such 180-day period, Lessor shall again deliver an Offer Notice to Lessee., and in such event, Lessee will have the right to exercise this Right of First Refusal to Purchase in the same manner as set forth above.

(d) Lessee acknowledges that the entire Business Park is a single platted lot. If Lessee desires to only purchase Building B, Lessor agrees to subdivide, at Lessee's sole cost and expense, the Business Park into four lots, with each building in the Business Park located on a separate lot, and containing such mutual access easements and other easements as Lessor and Lessee may reasonably require. The completion and filing of the subdivision plat shall be a condition to closing.

ADDENDUM #12

LEESSE'S EXCLUSIVE/NON COMPETE

Lessor agrees it will not lease space in the Business Park to any person or entity whose primary business is heart valve manufacturing.

LESSEE____
LESSOR____

Exhibit 10.14(a)

FIRST AMENDMENT TO LEASE AGREEMENT

THIS FIRST AMENDMENT is made and entered into by and between **1300 E. ANDERSON LANE, LTD.**; a Texas limited partnership, "Lessor", and **ON-X LIFE TECHNOLOGIES, INC**., a Delaware Corporation ("On-X"), "Lessee".

WITNESSETH

WHEREAS, Lessor and Lessee previously entered into the original Lease Agreement dated March 2, 2009, for the rental of approximately [redacted] square feet, known as Building B, located at 1300 East Anderson Lane, Austin, Travis County, TX 78752.

WHEREAS, Lessor and Lessee desire to modify certain terms and conditions set forth in the Lease.

NOW THEREFORE, for and in consideration of mutual covenants and agreements contained herein, the Lease Agreement is modified and amended as set forth below:

1. Lessor agrees to lease approximately [redacted] square feet of office space [redacted] of Building C [redacted] ("additional space") as shown on the attached Exhibit "A".

2. The lease term shall coincide with the original lease of Building B; however, the term for the additional space is subject to a 45 day notice of termination by either Lessor or Lessee. The lease of the additional space shall commence *November 12,* 2012.

   Should Lessor exercise its right of 45 day notice to terminate Lease, Lessor will endeavor to provide similar space elsewhere on the 1300 E. Anderson campus to Lessee, provided space is available and acceptable to Lessee.

3. The Monthly rental rate shall be as follows:
   Base Rent [redacted] sq. ft. $[redacted] (+[redacted])

4. Lessee agrees to accept the space "As Is".

5. Lessee, at Lessee's sole cost, will provide lock and security systems for any regulated, controlled, or proprietary goods, products, etc., located or stored in the additional space.

6. Lessee will be responsible for a prorata share of the electricity cost incurred in Building C, proportionate to the amount of space leased [redacted].

7. Lessee is responsible for activation and maintenance of the HVAC system, if Lessee so decides to activate. Should the HVAC system be activated by Lessee in the future, Lessor and Lessee will determine a reasonable method to properly allocate the additional electricity cost for powering the HVAC system.

IT IS HEREBY AGREED BY THE PARTIES HERETO that with the exception of those terms and conditions specifically modified and amended herein, all terms, covenants and conditions of the original Lease Agreement shall remain in full force and effect according to all its terms and conditions.

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment to Lease Agreement as of the 15th day of November, 2012.

LESSOR:

1300 E. ANDERSON LANE, LTD.,
Texas limited partnership

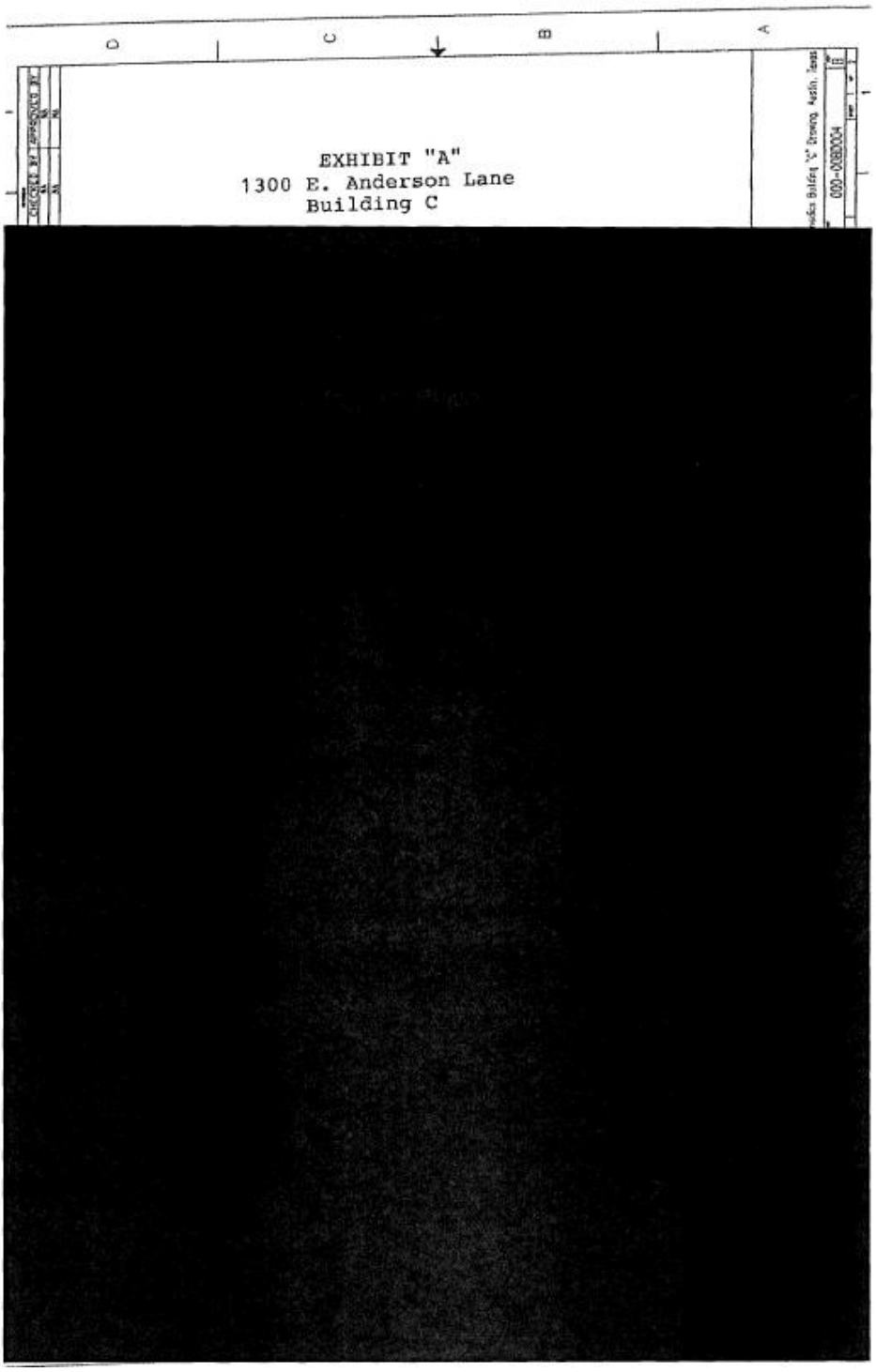
BY: JDB Real Properties, Inc., a Texas Corporation, its General Partner

By: /s/ Scott Prideaux
Scott Prideaux
Secretary/Treasurer

LESSEE:

ON-X TECHNOLOGIES, INC.,
a Delaware Corporation

By: /s/ William McClellan
William McClellan
CFO, EVP of Finance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C
B
A
EXHIBIT "A"
1300 E. Anderson Lane
Building C

SECOND AMENDMENT TO LEASE AGREEMENT

THIS SECOND AMENDMENT TO LEASE AGREEMENT ("Second Amendment") is made and entered into on this 29th day of January, 2015, by and between **1300 E. ANDERSON LANE, LTD**., as "LESSOR", and **ON-X LIFE TECHNOLOGIES, INC**., as "LESSEE".

RECITALS

A. LESSOR and LESSEE are parties to that certain Lease Agreement ("Original Lease") dated March 2, 2009, for the lease of certain leased premises described as Building B ("Building B") in the 1300 East Anderson Lane Business Park ("Project"), located at 1300 East Anderson Lane, Austin, Travis County, Texas (the "Land"). Building B contains approximately [redacted] square feet of space.

B. The Original Lease was amended by First Amendment to Lease Agreement dated November 15, 2012 ("First Amendment"), wherein LESSOR leased to LESSEE approximately [redacted] square feet, known as [redacted] on [redacted] of Building C, located at the Project (the "Building C Expansion Premises"). The Original Lease, as amended by the First Amendment, and as further amended by this Second Amendment is hereinafter referred to as the "Lease".

C. LESSOR and LESSEE desire to further amend the Lease to provide that LESSOR shall lease to LESSEE, and LESSEE agrees to lease from LESSOR, Building A located at the Project.

AGREEMENT

NOW THEREFORE, for and in consideration of the foregoing Recitals and the mutual covenants, agreements and benefits to be derived by the parties as set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, LESSOR and LESSEE agree to amend the Lease as follows:

1. Unless otherwise defined herein, all capitalized terms contained in this Second Amendment shall have the same meanings ascribed to such terms in the Lease.

2. LESSOR agrees to lease to LESSEE, and LESSEE agrees to lease from LESSOR, [redacted] Building A ("Building A") located at the Project (labeled as [redacted] of the Original Lease) and the parking spaces associated with Building A shown on Exhibit A to the Original Lease (the "Building A Parking Spaces"). The patties agree that for purposes of this Second Amendment and the Lease, Building A contains [redacted] square feet of space ("Building A Premises). From and after the Building A Premises Commencement Date, the "Premises," as such term is used in the Lease, shall mean and refer to Building B, the Building C Expansion Premises and the Building A Premises. LESSEE shall have all rights with respect to the Building A Parking Spaces that are provided to LESSEE under the Lease with respect to the Building B Parking Spaces (as defined therein).

3. The Lease Term for Building A shall be for five (5) years, commencing on May 1, 2015 ("Building A Premises Commencement Date"). Provided however (a) if Substantial Completion occurs prior to May 1, 2015, LESSOR shall permit LESSEE to occupy the Building A Premises promptly after Substantial Completion, and upon such early occupancy for the conduct of LESSEE's business, the Building A Premises Commencement Date shall be such date of LESSEE's early occupancy (and the Lease Term for Building A shall be extended for an equal

number of days so that it still expires on April 30, 2020, as set forth below), and (b) if for reasons other than LESSEE'S Delay, Substantial Completion has not occurred and a Certificate of Occupancy has not been issued and delivered to LESSEE at least five (5) days prior to May 1, 2015, the Building A Premises Commencement Date shall be extended to the date that is five (5) days after the Substantial Completion of the Tenant Improvements (as defined in the Building A Premises Work Letter (defined below) and issuance by the City of Austin of a Certificate of Occupancy for Building A and LESSEE is notified of same in writing. On the date that LESSOR believes that such conditions have been satisfied, LESSOR shall deliver to LESSEE (i) the General Contractor's certification in writing that Substantial Completion has occurred, and (ii) a Certificate of Occupancy for Building A issued by the City of Austin. The Lease Term for Building A shall expire on April 30, 2020, which date is coterminous with the expiration of the Lease Term for Building B and the Building C Expansion Premises as set forth in the Lease.

4. The parties agree LESSEE may terminate the Lease solely as relates to the Building C Expansion Premises by delivering LESSOR written notice of termination ("Building C Termination Notice") thirty (30) days prior to the date LESSEE desires to terminate the Lease Term for the Building C Expansion Premises, which notice requirement amends the applicable provision in the First Amendment by changing the notice requirement from forty-five (45) days to thirty (30) days' notice. If LESSEE delivers a Building C Termination Notice, then the Lease shall terminate solely as relates to the Building C Expansion Premises and LESSEE shall have no further obligation or liability to pay Rent for the Building C Expansion Premises on the later of (i) thirty (30) days after LESSEE delivers to LESSOR the Building C Termination Notice, or (ii) the date LESSEE fully vacates the Building C Expansion Premises and surrenders the Building C Expansion Premises to LESSOR in accordance with the terms of the Lease, including specifically, but without limitation, the second paragraph of Section 22 of the Original Lease.

5. The monthly Rent for the Building A Premises shall begin on the Building A Premises Commencement Date and shall be in the following amounts:

Basic Rent:

[redacted]sq. ft. x[redacted] per sq. ft. per annum ([redacted]per sq. ft. monthly)	=	$[redacted]
Additional Rent:		
Allocable portion sq. ft.) of expenses in Section 5 of the original Lease (currently[redacted]per sq. ft. monthly)	=	$[redacted]
TOTAL	=	$[redacted]

If the Building A Premises Commencement Date is a day other than the 1st of the month, then the first monthly payment of Rent for the Building A Premises shall be prorated accordingly.

6. No Security Deposit is due in connection with the lease of the Building A Premises.

7. LESSOR agrees to make improvements to the Building A Premises as described in the Building A Premises Work Letter attached hereto as Exhibit "1" ("Building A Premises Work Letter").

8. LESSOR shall, at its sole cost and expense, cause a contractor, designated by LESSOR, to perform the following renovations or repairs to the exterior improvements to the Project: (i) sealcoat and restripe the parking lots surrounding Buildings A & B; (ii) repair the retaining wall in the parking lot between Buildings A & B; (iii) repaint the color trim work on Building B, and (iv) repair and install a six (6) foot high wrought iron fence and card-entry security entry gate compatible with LESSEE's card reader system at the front entrance of the Project and replacing the pole-style security gate at the Building B entrance with a wrought iron gate. LESSOR agrees to cause its contractor to inspect all other chain-link fencing around the perimeter of the Project and repair as necessary.

9. HVAC Repair. Immediately after the date hereof, LESSOR, at its sole cost and expense, will have a commercial inspection of the existing air conditioning and heating equipment serving Building A ("Building A HVAC Systems") completed and will deliver the Building A HVAC Systems in good working condition. The LESSOR will provide a full warranty for repairs in excess of $250 per occurrence or replace the equipment at the LESSOR's sole discretion throughout the entire Lease Term in a timely manner. Upon the complete replacement of an air conditioning and heating unit(s) by the LESSOR under this provision, LESSEE, at LESSEE's expense shall be fully responsible for the maintenance, repair, and/or replacement of the aforementioned air conditioning and heating unit(s) in a commercially reasonable manner for the remainder of the Lease Term and any extensions thereof. All other HVAC maintenance provisions shall be followed as outlined in Section 15 and Addendum #6 of the original Lease Agreement.

10. As provided in Section 10 of the Original Lease, LESSEE, at LESSEE's sole cost and expense, shall have the exclusive right to place its name and corporate logo on up to two (2) sides of Building A, subject to LESSOR's right to approve such building signage, which approval shall not be unreasonably withheld, conditioned, or delayed. In addition, as provided in Section 10 of the Original Lease, LESSEE shall have the right to increase its portion of the advertising space on the existing Business Park Monument Sign located adjacent to Highway 183 in proportion to the portion of the Project leased by LESSEE, which for purposes of this paragraph shall be not less than fifty percent (50%) of the contiguous advertising space on such sign. Notwithstanding the foregoing, LESSOR acknowledges that it has approved LESSEE's signage set forth on Addendum #5 to the Original Lease.

11. LESSOR also grants to LESSEE, during the Lease Term, the right to access the [redacted] located in Building C on the Project (labeled as [redacted] in Exhibit A of the Original Lease) for the purpose of [redacted], and to [redacted] from time to time.

12. LESSOR represents and warrants to LESSEE that to LESSOR's current actual knowledge, without inquiry or investigation, the Building A Premises and the land associated therewith, including without limitation the Building A Parking Spaces, and the condition thereof, does not violate any applicable Environmental Laws. LESSOR further covenants and agrees that the Building A Premises and the land associated therewith, including without limitation the handicap parking spaces attributable to Building A, and building entrances of Building A, will not upon the Substantial Completion of the Tenant Improvements violate zoning or any other applicable laws (including the Americans with Disabilities Act, the Texas Accessibility Standards and any other accessibilities laws, Environmental Laws, and any other applicable laws pertaining to health and the environment) or restrictive covenants or encumbrances relating to the Business Park in any material respect, and that upon the Building A Premises Commencement Date, the Building A Premises and the use thereof contemplated by this Lease will comply with applicable laws and any such restrictive covenants or encumbrances in all material respects. For purposes of the

preceding sentence, a violation will be considered "material" if it impairs the use of, access to or parking for the Building A Premises by LESSEE to any material extent, or would impair such use, access, or parking to a material extent if disclosed to governmental authorities or other parties or if the violation may cause LESSEE or any of LESSEE's officers or employees to be subject to prosecution for civil or criminal liability.

13. All terms, covenants and conditions of the Lease shall remain in full force and effect according to the terms therein unless otherwise modified or changed by this Second Amendment.

14. This Second Amendment, together with the Lease, embodies the entire agreement of the parties hereto, and incorporates all previous correspondence or communications, whether oral or written. The Lease, as amended hereby, can only be further modified or varied by written instrument subscribed to by all the parties hereto.

(remainder of page intentionally left blank; signature pages to follow)

Executed this 29th day of January, 2015.

LESSOR:

1300 E. ANDERSON LANE, LTD.
Texas Limited Partnership

BY: JDB Real Properties, Inc. a Texas Corporation, its General Partner

By: /s/ Scott Prideaux
Scott Prideaux
Secretary/Treasurer

LESSEE:

ON-X TECHNOLOGIES, INC.
a Delaware Corporation

By: /s/ William McClellan
William McClellan
CFO, EVP of Finance

Exhibit “1”

Building A Premises Work Letter

1. Building A Tenant Improvements. LESSOR shall, at its sole cost and expense (except as limited below), construct improvements to the Building A Premises substantially in accordance with the Scope of Work (defined below). The term ‘‘Tenant Improvements” refers only to the improvements to the Building A Premises shown on the Scope of Work and any other work necessary to deliver the Building A Premises in good working order and in compliance with all applicable laws (including the Americans with Disabilities Act, the Texas Accessibility Standards and any other accessibilities laws). LESSOR shall pay for the costs and expenses related to the design, permitting and construction of the Tenant Improvements. Any costs and expenses for Extra Work (hereinafter defined) shall be paid by LESSEE prior to LESSEE’s occupancy of the Building A Premises.

2. Scope of Work. LESSOR has completed a summary of the specifications/scope of the work for the Tenant Improvements (“Scope of Work”) which is attached as Exhibit “A”. LESSOR and LESSEE acknowledge and agree they have approved the Scope of Work. Notwithstanding the foregoing, the Scope of Work shall also include any work necessary to deliver the Building A Premises in good working order and in compliance with all applicable laws (including the Americans with Disabilities Act, the Texas Accessibility Standards and any other accessibilities laws).

3. Building Petmits. LESSOR shall be solely responsible for obtaining all building pennits required by applicable governmental authorities for the construction of the Tenant Improvements (“Building Permits”), and agrees to use commercially reasonable efforts to obtain same as expeditiously as possible. LESSOR shall supervise and manage construction and completion of the Tenant Improvements by a general contractor designated by LESSOR (the “General Contractor”) in accordance with the Scope of Work.

4. Punch List. “Punch List Items” as used herein shall mean any details of construction, decoration, mechanical and electrical adjustments or other matters, which, in the aggregate, are minor in character, the non-completion of which does not materially interfere with LESSEE’s use or enjoyment of the Building A Premises for the uses contemplated by LESSEE. Following LESSOR’s notice to LESSEE that the Tenant Improvements are Substantially Complete, LESSOR and LESSEE shall conduct a walk-though of the Building A Premises to confirm Substantial Completion and agree on Punch List Items and create a “Punch List”. LESSOR shall use reasonable efforts to complete all Punch List Items within thirty (30) days after the date the approved Punch List is delivered by LESSEE to LESSOR, but in any event shall complete such Punch List Items not later than sixty (60) days after Substantial Completion.

5. Extra Work. Except as set forth in the Lease, including this Exhibit “1”, LESSOR has no other agreement with LESSEE and has no other obligation to do any other work with respect to the Building A Premises. Any other work in the Building A Premises that may be permitted by LESSOR pursuant to the terms and conditions of this Lease shall be done at LESSEE’s sole cost and expense and subject to LESSOR’s reasonable approval. If, after the commencement of construction of the Tenant Improvements, LESSEE desires to make changes in the Scope of Work or desires extra work to be performed not contemplated by the Scope of Work (the “Extra Work”), LESSEE, at LESSEE’s sole cost and expense, shall submit to LESSOR all necessary drawings, plans and specifications (the “Extra Work Plans”) to construct the Extra Work. Notwithstanding the foregoing, “Extra Work” shall not include any additional work necessary to complete the Tenant Improvements arising as a result of unforeseen conditions, all of which shall be LESSOR’s responsibility. LESSOR shall have the right to reasonably approve the Extra Work Plans. Within five (5) business days of receipt of the Extra Work Plans,

LESSOR shall deliver written notice of its approval of such Extra Work Plans or any specific objections thereto. Failure to timely respond shall be deemed an approval of such Extra Work Plans. Once approved (or deemed approved), LESSOR shall, within fifteen (15) days thereafter, submit to LESSEE written estimates of the cost of Extra Work and any delays to Substantial Completion of the Tenant Improvements resulting from Extra Work (any actual delays resulting from Extra Work shall constitute a LESSEE Delay as defined below). LESSOR's estimate of the cost of the Extra Work shall include a charge of ten percent (10%) of the total expenses and costs otherwise chargeable for the Extra Work as LESSOR's construction management fee. If LESSEE fails to approve LESSOR's estimate within three (3) business days from the receipt thereof, then LESSOR's estimate shall be deemed disapproved in all respects by LESSEE and LESSOR shall not be required to proceed with such Extra Work. If LESSEE timely accepts LESSOR's estimate, LESSEE agrees to pay 50% of the cost of the Extra Work to LESSOR upon acceptance of LESSOR's estimate, and the balance, not to exceed the total estimated amount approved by LESSEE, upon completion of the Extra Work and receipt of the actual cost of such Extra Work. All Extra Work shall be done at LESSEE's sole cost and expense provided that LESSEE approves such Extra Work and the costs thereof in advance in writing. The Building A Premises Commencement Date shall not be delayed, nor any rent abated as a result of the construction or performance of any Extra Work or any delay in such construction or performance (except if caused by a LESSOR Delay).

6. Lessee's Right of Entry Prior to Occupancy. LESSOR hereby consents to LESSEE having access to all or any part of the Building A Premises approximately two (2) weeks prior to the estimated date of Substantial Completion (the "Early Access Period") for the limited purpose of preparing the Building A Premises for occupancy. Such preparations shall include without limitation the installation of computers (and peripherals), voice and data communication systems, wall and furniture systems, and other office equipment and furnishings, provided LESSEE has delivered to LESSOR evidence of all insurance required to be carried by LESSEE under this Lease. LESSOR and LESSEE agree to mutually and reasonably cooperate with each other during the Early Access Period. LESSEE acknowledges and agrees that during the Early Access Period, LESSOR may still be in process of completing the Tenant Improvements, including, without limitation, laying carpet. During the Early Access Period, LESSEE will use reasonable efforts to accommodate LESSOR's completion of the Tenant Improvements. Likewise, LESSOR acknowledges and agrees that during the Early Access Period, LESSEE will be installing wiring, equipment and furniture and LESSOR will use reasonable efforts to accommodate LESSEE's pre-occupancy installations during the Early Access Period. LESSOR acknowledges that LESSEE is not required to pay rent during the Early Access Period. During the Early Access Period, LESSEE and LESSEE's agents may enter the Building A Premises, in mutual cooperation with LESSOR, in order that LESSEE may do such work as may be required by LESSEE to make the Building A Premises ready for LESSEE's use and occupancy thereof. LESSEE's early entry into the Building A Premises is conditioned upon LESSEE and LESSEE's agents, contractors, workmen, mechanics, suppliers and invitees, working in harmony and not interfering with LESSOR, LESSOR's agents and the General Contractor in completing the Tenant Improvements or other tenants and occupants of the Project. If at any time such entry shall cause or threaten to cause such disharmony or interference with the timely completion of the Tenant Improvements, LESSOR shall have the right to withdraw LESSOR's consent to LESSEE's early entiy of the Building A Premises upon twenty-four (24) hours written notice to LESSEE. LESSEE agrees that any such early entry into and occupation of the Building A Premises shall be deemed to be under all of the terms, covenants, conditions and provisions of this Lease except as to the covenant to pay Rent, and further agrees LESSOR shall not be liable in any way for any injury, loss or damage that may occur to any of the LESSEE's Improvements or LESSEE's installations made in the Building A Premises or to properties placed therein prior to the Building A Premises Commencement Date, the same being at LESSEE's sole risk. LESSEE hereby indemnifies, defends and holds harmless LESSOR and LESSOR's Indemnified Parties against any and all claims, demands, losses, liabilities, costs and expenses (including reasonable attorneys' fees) arising out of or

related to LESSEE's or LESSEE's agents entry of the Building A Premises prior to Substantial Completion of the Tenant Improvements to install its equipment and furnishings preparatory to its occupancy of the Building A Premises, or on account of injury to any person whatsoever or damage to any property arising out of, in connection with or in any way relating to LESSEE's entry of the Building A Premises prior to Substantial Completion of the Tenant Improvements, except to the extent cause by LESSOR's or General Contractor's negligence or willful misconduct.

7. Substantial Completion; Delays.

a. "Substantial Completion" of the Tenant Improvements shall mean the sufficient completion of Tenant Improvements in accordance with the approved Scope of Work to allow LESSEE to use the Building A Premises for the permitted uses and the issuance of (i) a certification from the General Contractor that the Tenant Improvements have been substantially completed in accordance with the Scope of Work, subject to Punch List Items that can be completed within thirty (30) days, and (ii) any certificate of occupancy required by applicable governmental authorities for the occupancy of the Building A Premises. If there is any dispute as to whether Substantial Completion of Tenant Improvements has occurred, upon the request of either party, the parties shall obtain a good faith decision by an unrelated third party architect mutually acceptable to the parties, which shall be final and binding on the parties.

b. "LESSEE Delay" means any one or more of the following occurrences which actually results in a delay in construction of the Tenant Improvements, and for which LESSOR delivered written notice to LESSEE within three (3) business days of the occurrence of such event of the delay caused by such occurrence:

(i) LESSEE causes changes in the Tenant Improvements after commencement of construction of the Tenant Improvements resulting in Extra Work; or

(ii) LESSEE shall have directly, or indirectly through any person, firm or corporation employed by LESSEE, interfered with or delayed the work of the General Contractor; or

(iii) Any request by LESSEE that LESSOR delay the completion of any of LESSEE's Improvements, and LESSOR does so delay completion; or

(iv) Any breach or default by LESSEE in the performance of LESSEE's obligations under this Lease which affect the completion of the Tenant Improvements; or

(v) Any delay resulting from LESSEE's entry of the Building A Premises prior to Substantial Completion as described in Paragraph 6 of this Exhibit "1" above.

c. "LESSOR Delay" means any breach or default by LESSOR in the performance of LESSOR's obligations under this Lease which actually results in a delay in construction of the Tenant Improvements.

8. Acceptance of Tenant Improvements. Except for the completion of any Punch List Items, the taking of possession of the Building A Premises by LESSEE means that (i) LESSEE has conducted its own independent investigation of the Building A Premises and that the Building A Premises are suitable for the purpose for which the same are leased, and (ii) the Building A Premises and each and every part and appurtenance thereof are in good and satisfactory condition. Provided, however, that the foregoing shall not relieve LESSOR of any obligation to complete any portion of the Tenant Improvements that have not been completed.

9. Security System. Prior to the Building A Premises Commencement Date, LESSOR agrees to install a security system for Building A ("Security System"). The Security System will be installed, at LESSOR's sole cost and expense, prior to the Building A Premises Commencement Date. LESSOR shall determine the make, model, quality and type of the Security System to be installed (as well as the installer); [redacted] The Security System is not reflected in the Scope of Work but shall be considered part of the Tenant Improvements.

Exhibit A

Scope of Work

This Scope of Work has been previously approved by [redacted] with On-X Life Technologies, Inc.

[see attached]

Exhibit A

Scope of Work

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

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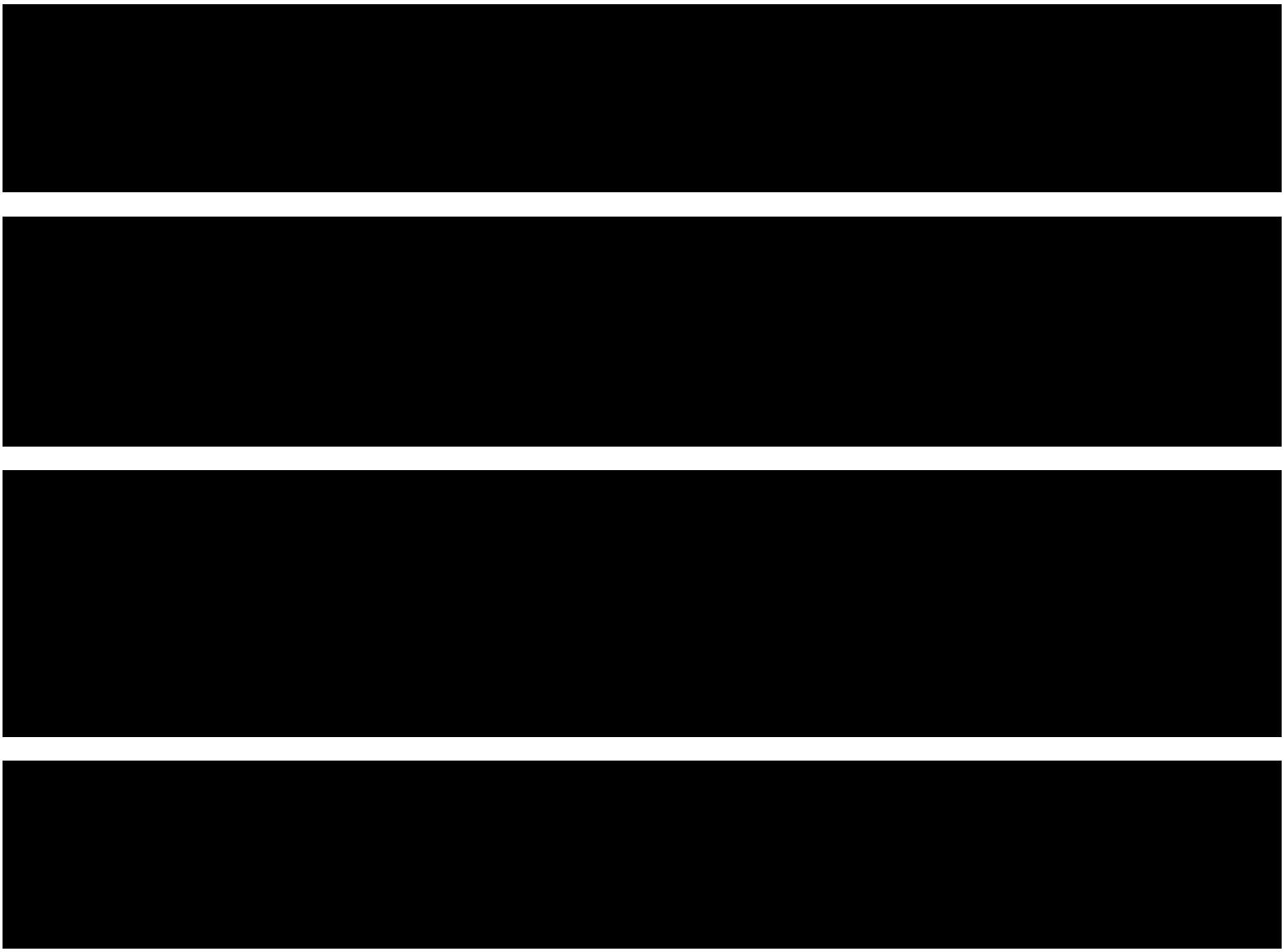

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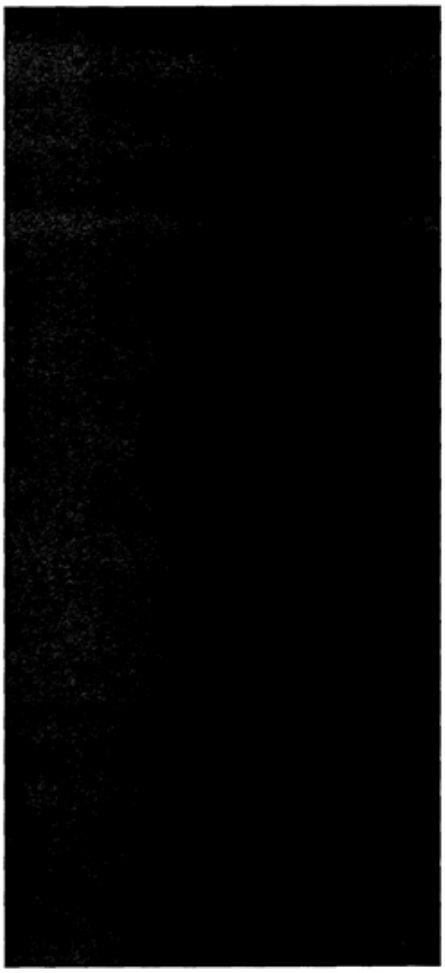

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Exhibit 10.14(c)

THIRD AMENDMENT TO LEASE AGREEMENT

THIS THIRD AMENDMENT TO LEASE AGREEMENT ("Third Amendment") is made and entered into on this 29th day of January, 2015, by and between **1300 E. ANDERSON LANE, LTD.**, as "LESSOR", and **ON-X LIFE TECHNOLOGIES, INC.**, as "LESSEE".

RECITALS

A. LESSOR and LESSEE are parties to that certain Lease Agreement ("Original Lease") dated March 2, 2009, for the lease of certain leased premises described as Building B ("Building B") in the 1300 East Anderson Lane Business Park ("Project"), located at 1300 East Anderson Lane, Austin, Travis County, Texas (the "Land"). Building B contains approximately [redacted] square feet of space.

B. The Original Lease was amended by First Amendment to Lease Agreement dated November 15, 2012 ("First Amendment"), wherein LESSOR leased to LESSEE approximately [redacted] square feet, known as [redacted] of Building C, located at the Project (the "Building C Expansion Premises") and by that certain Second Amendment to Lease Agreement dated as of the date hereof ("Second Amendment") wherein LESSOR leased to LESSEE approximately [redacted] square feet known as "Building A" in the Project. The Original Lease, as amended by the First Amendment and the Second Amendment, and as further amended by this Third Amendment is hereinafter referred to as the "Lease".

C. LESSOR and LESSEE desire to further amend the Lease to acknowledge LESSEE's right to perform certain improvements to Building B, as more particularly set forth herein.

AGREEMENT

NOW THEREFORE, for and in consideration of the foregoing Recitals and the mutual covenants, agreements and benefits to be derived by the parties as set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, LESSOR and LESSEE agree to amend the Lease as follows:

1. LESSEE shall have the right, as LESSEE's sole cost and expense, to make those repairs and improvements to Building B described on Exhibit A attached hereto.

2. All terms, covenants and conditions of the Lease shall remain in full force and effect according to the terms therein unless otherwise modified or changed by this Third Amendment.

3. This Third Amendment, together with the Lease, embodies the entire agreement of the parties hereto, and incorporates all previous correspondence or communications, whether oral or written. The Lease, as amended hereby, can only be further modified or varied by written instrument subscribed to by all the parties hereto.

(remainder of page intentionally left blank; signature pages to follow)

Executed this 29th day of January, 2015.

LESSOR:

1300 E. ANDERSON LANE, LTD.
Texas Limited Partnership

BY: JOB Real Properties, Inc. a Texas Corporation, its General Partner

By: /s/ Scott Prideaux
Scott Prideaux
Secretary/Treasurer

LESSEE:

ON-X TECHNOLOGIES, INC.
a Delaware Corporation

By: /s/ William McClellan
William McClellan
CFO, EVP of Finance

Exhibit A

Description of Tenant Work on Building B

(to be attached)





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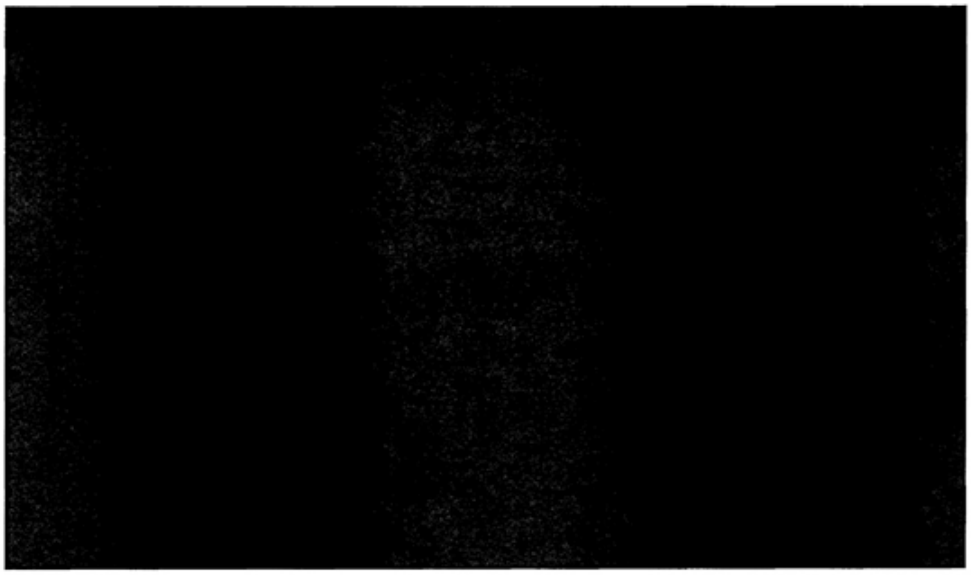

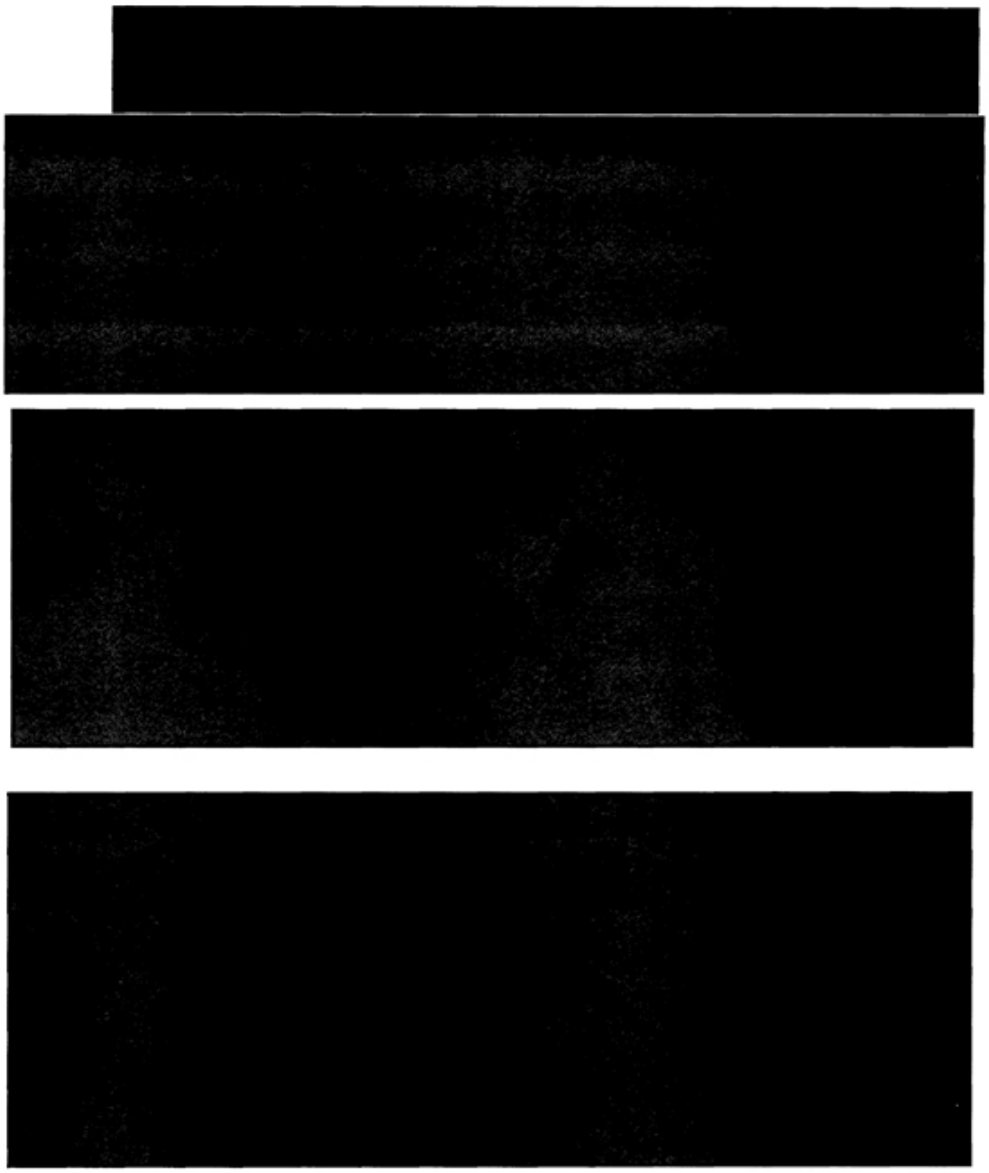

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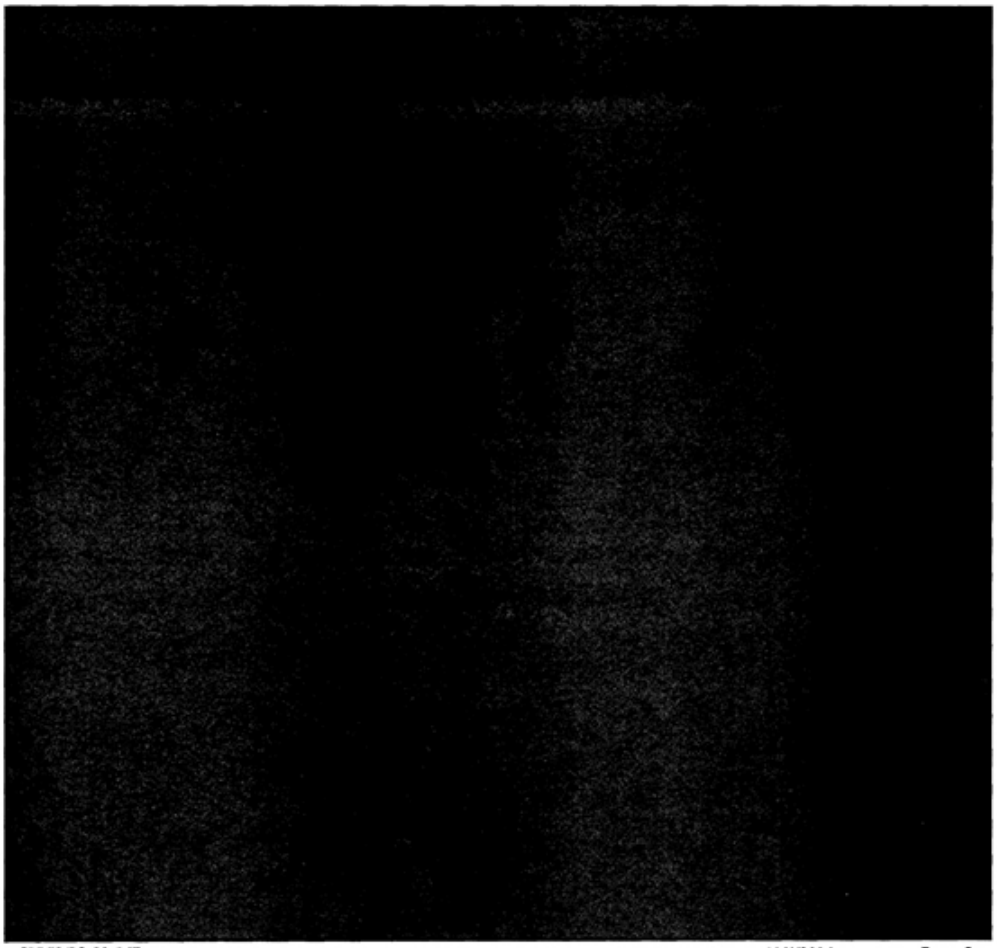

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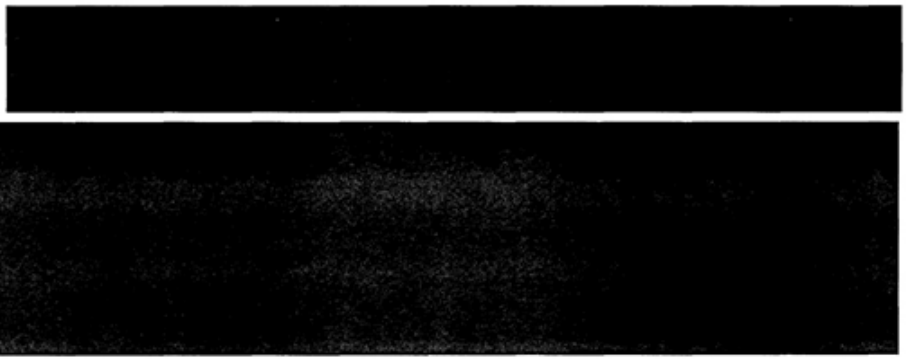

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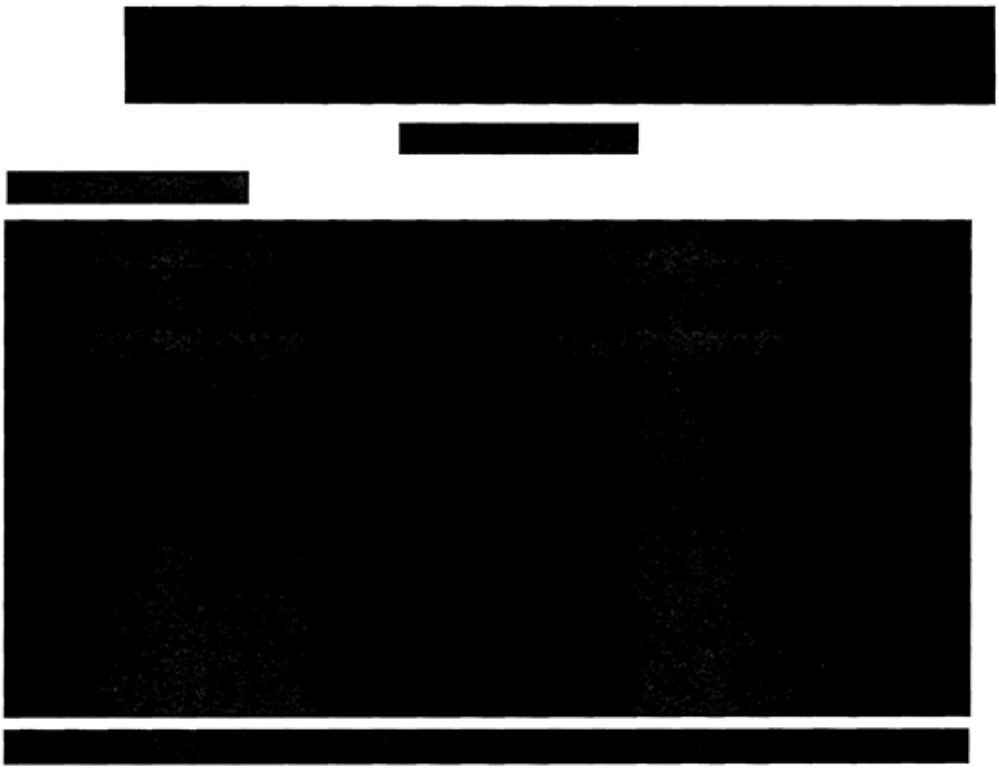

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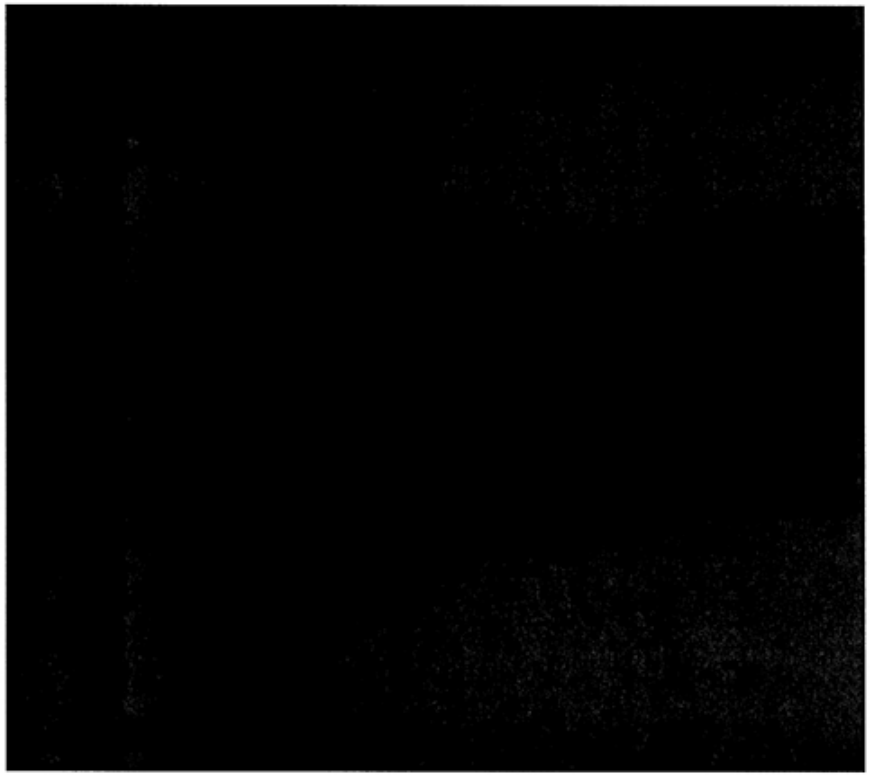

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Existing

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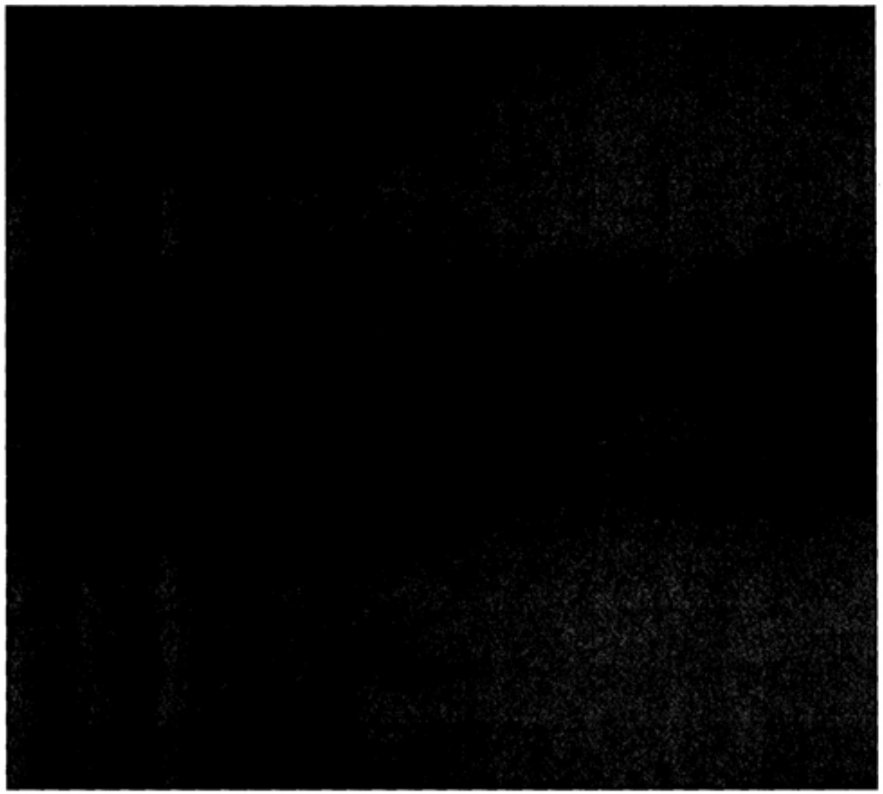

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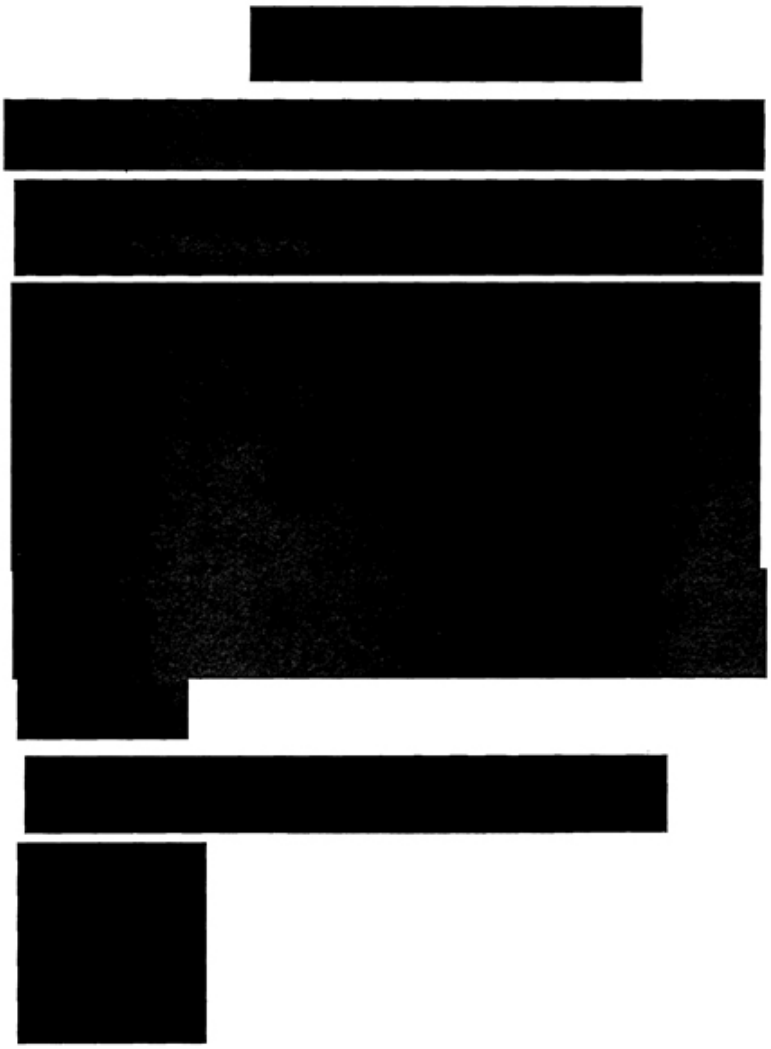

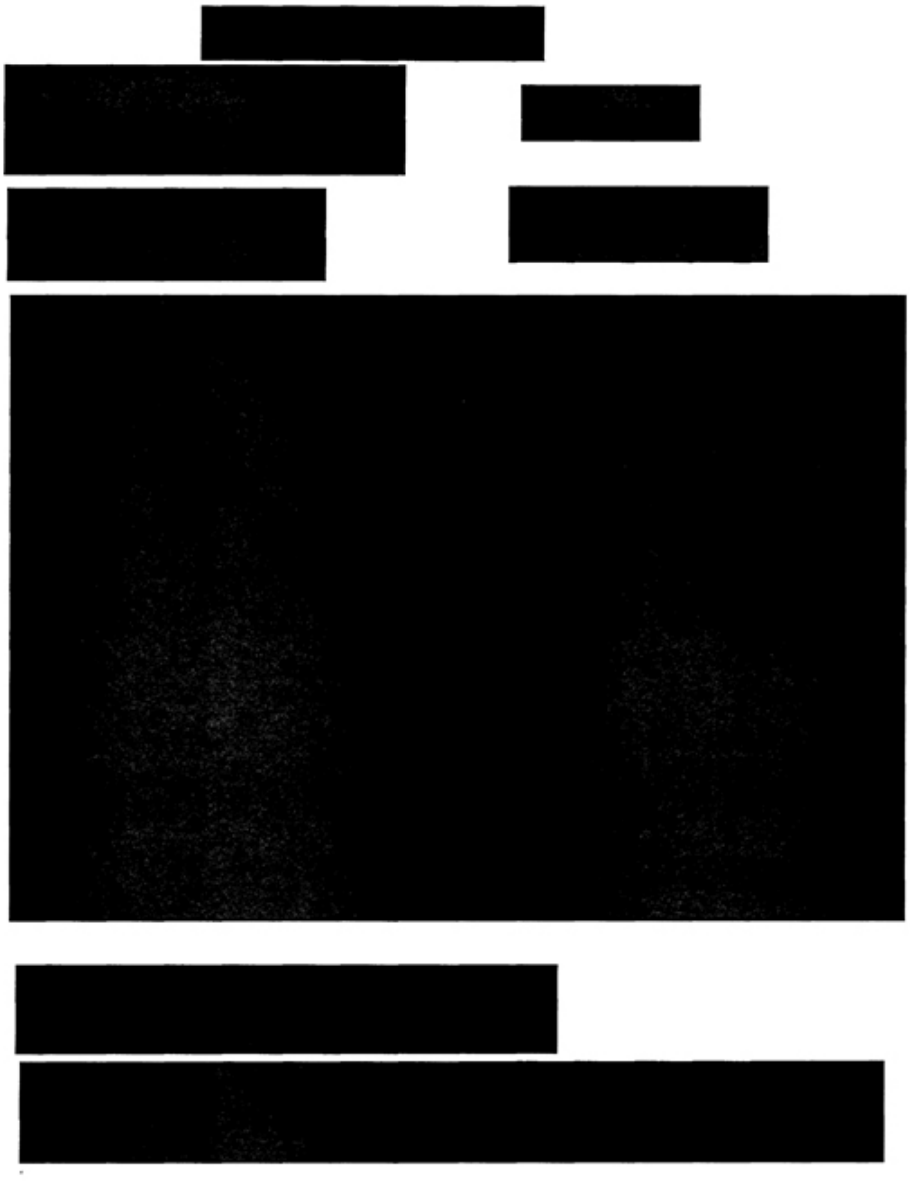

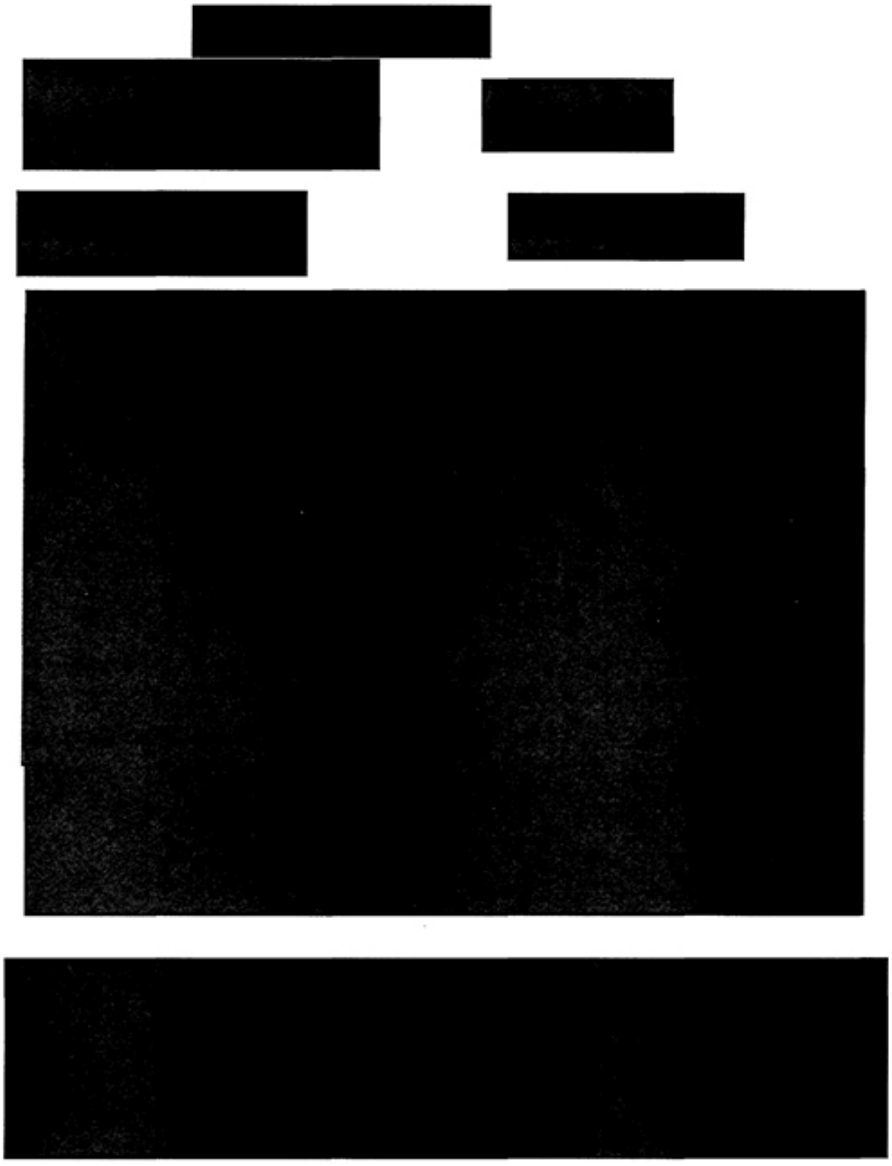

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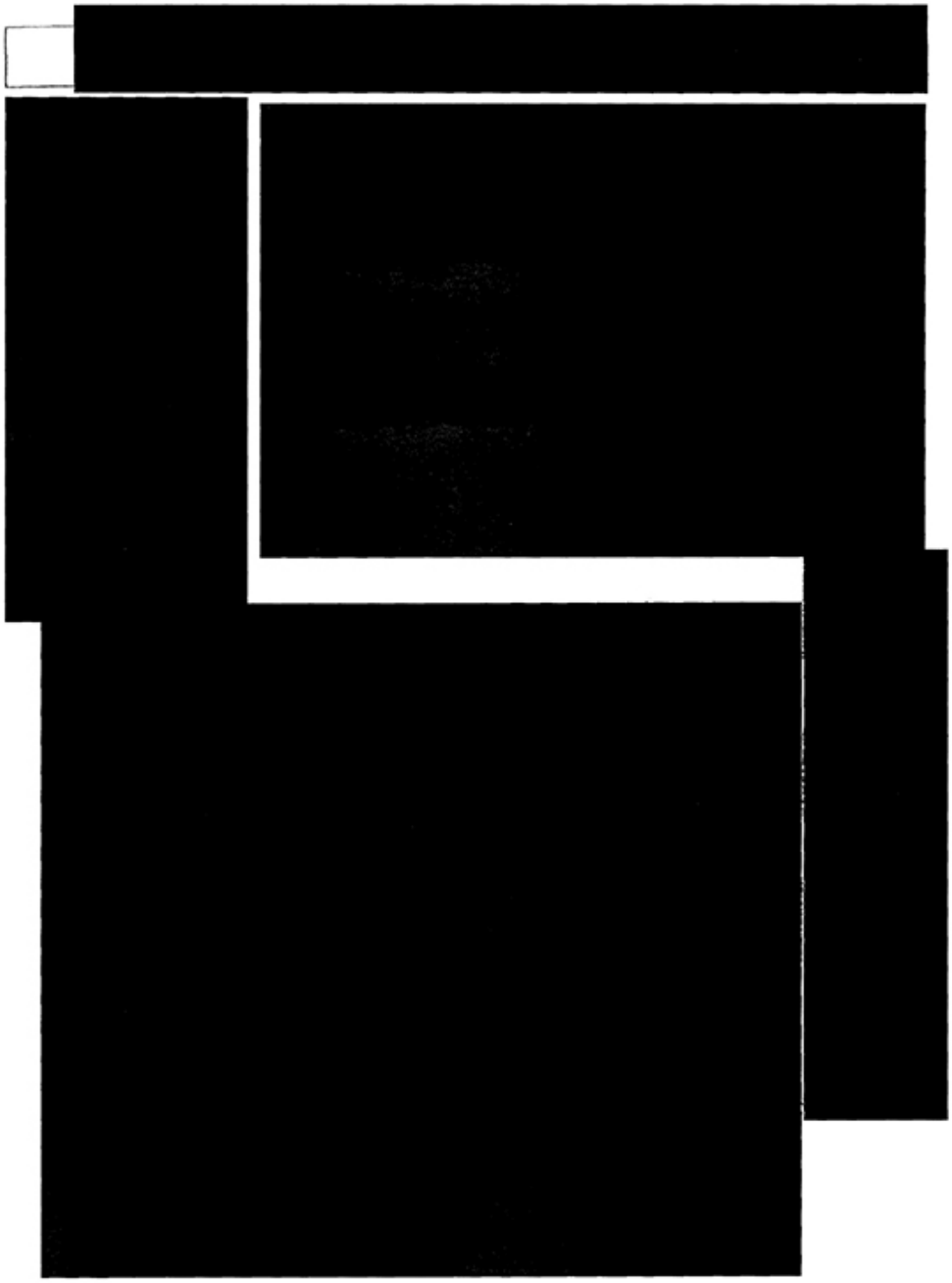

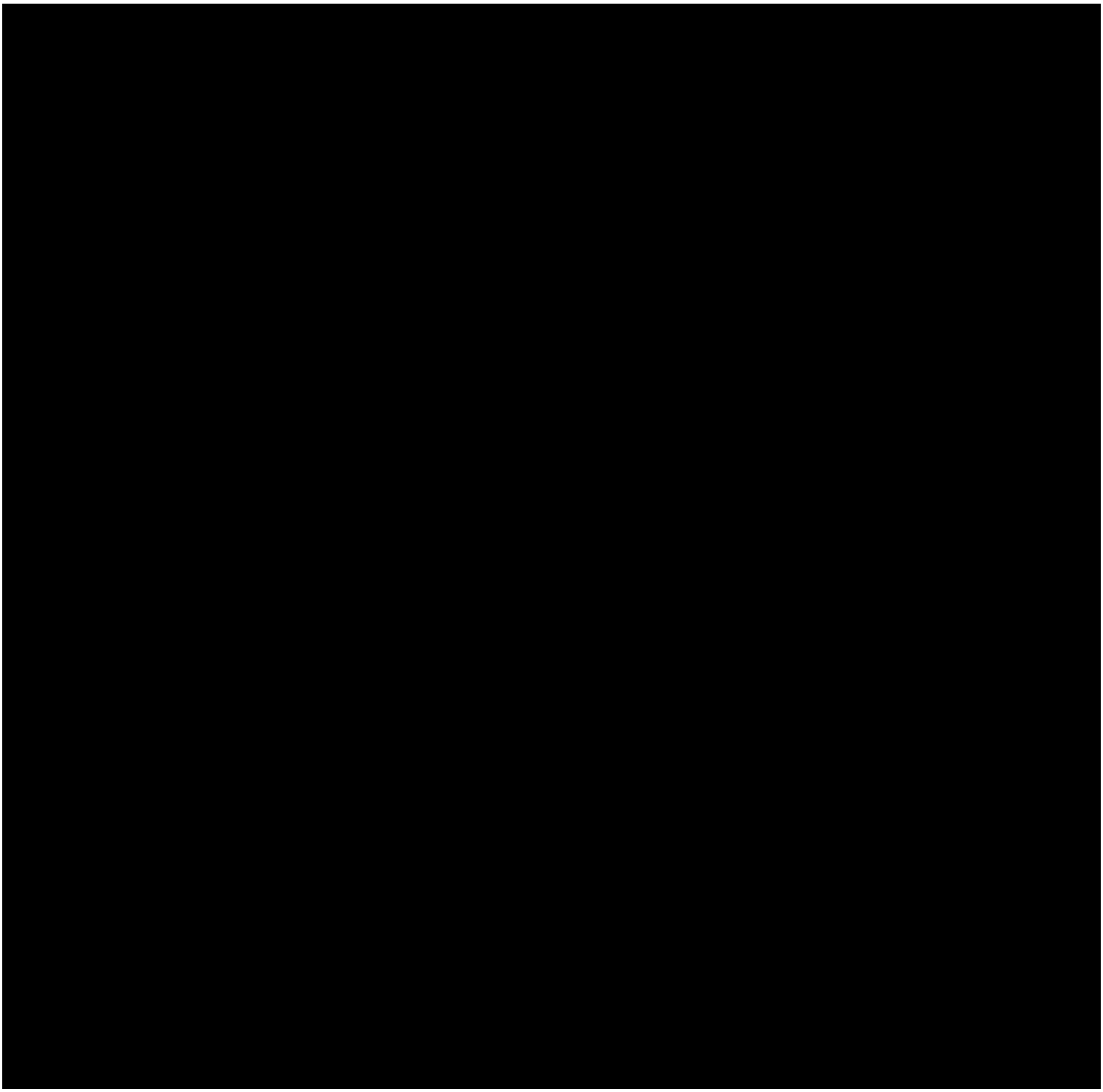

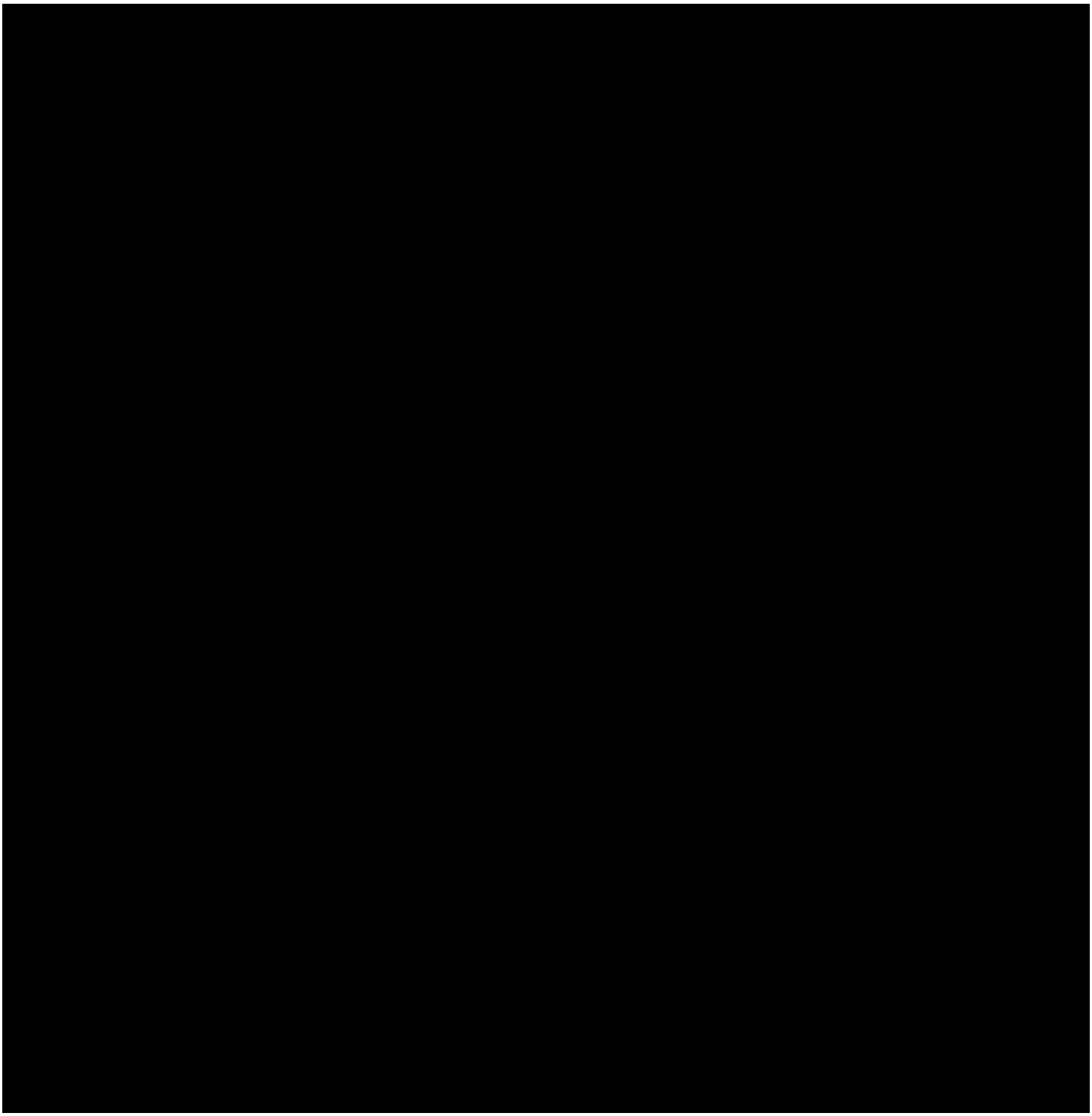

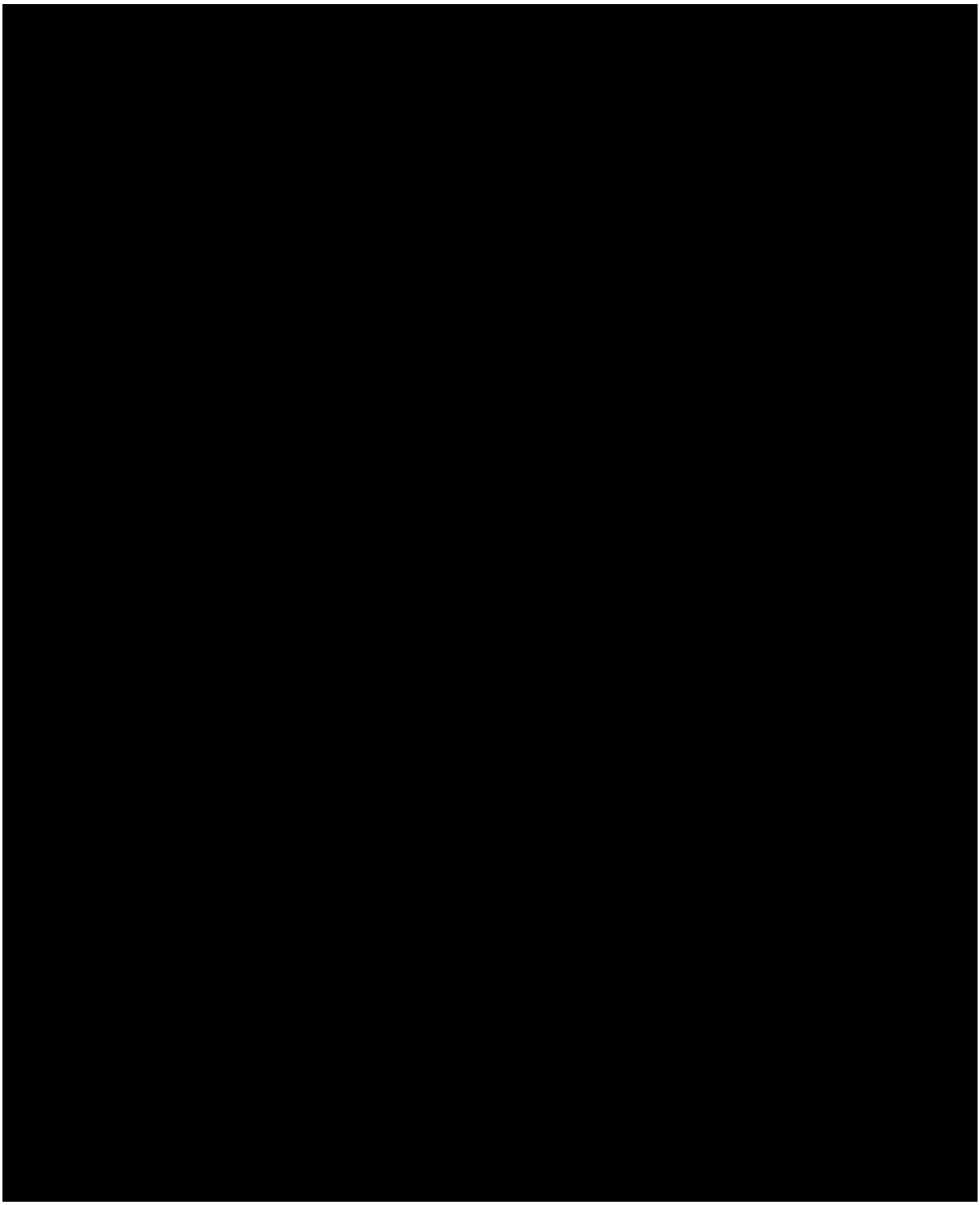

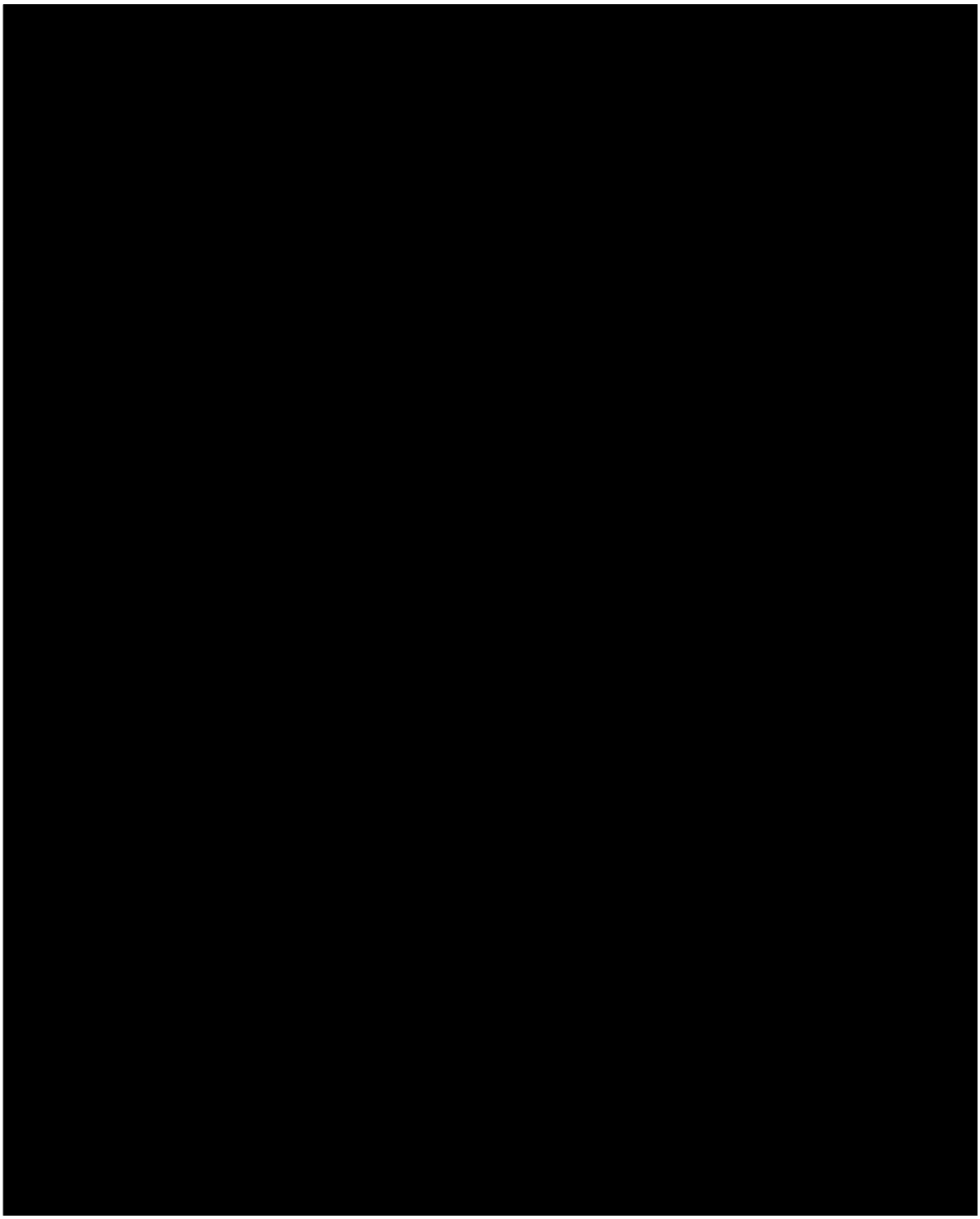

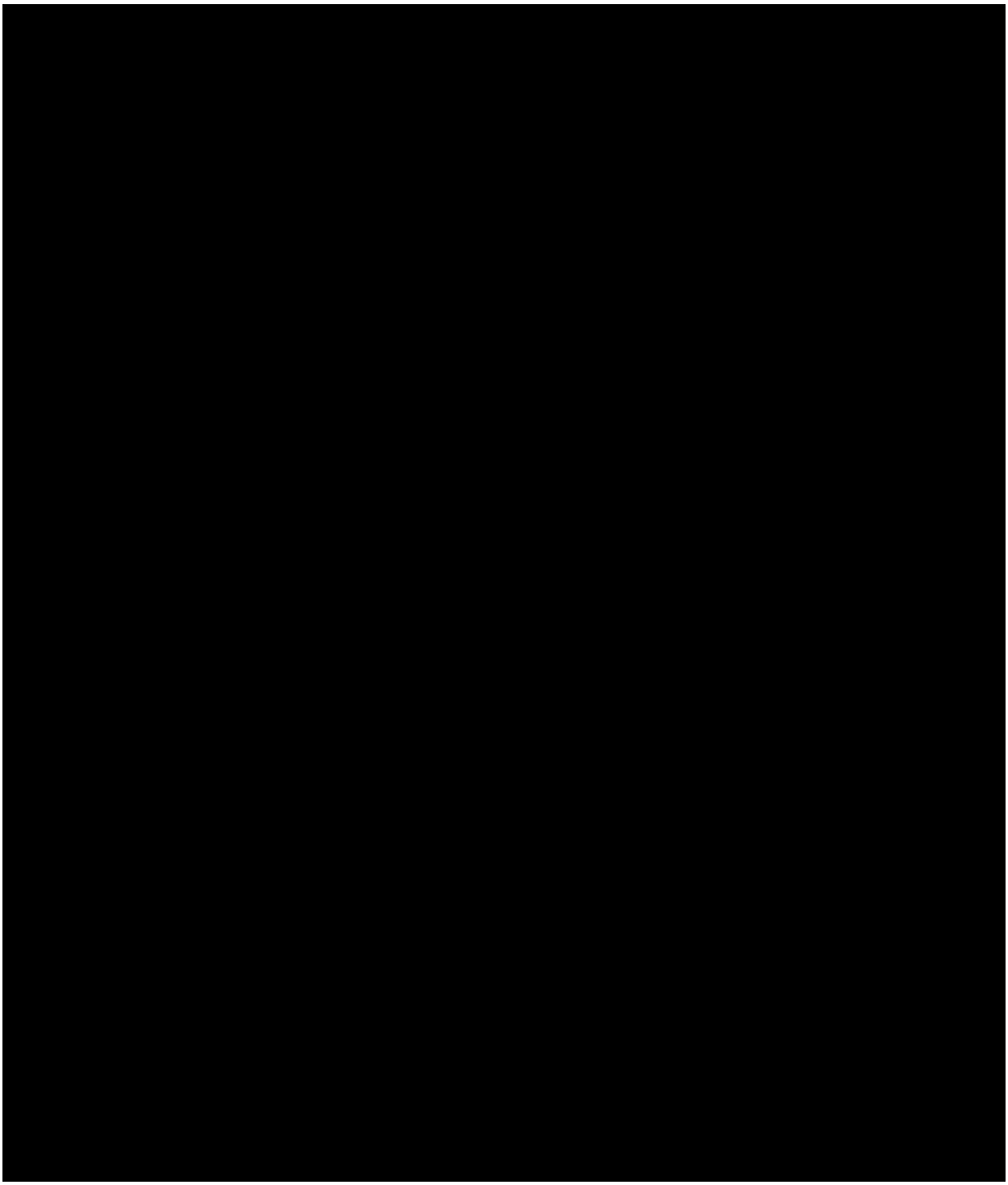

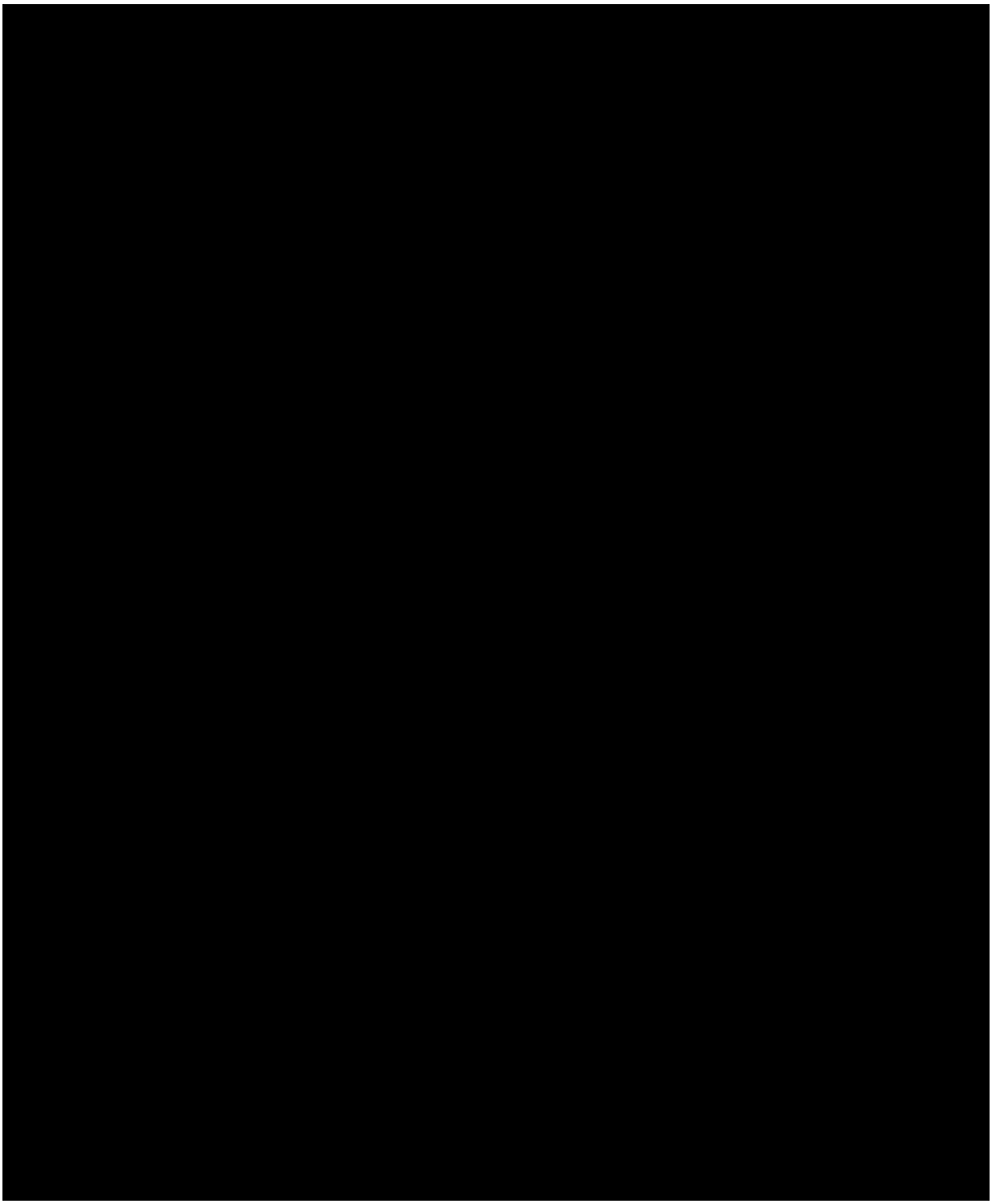

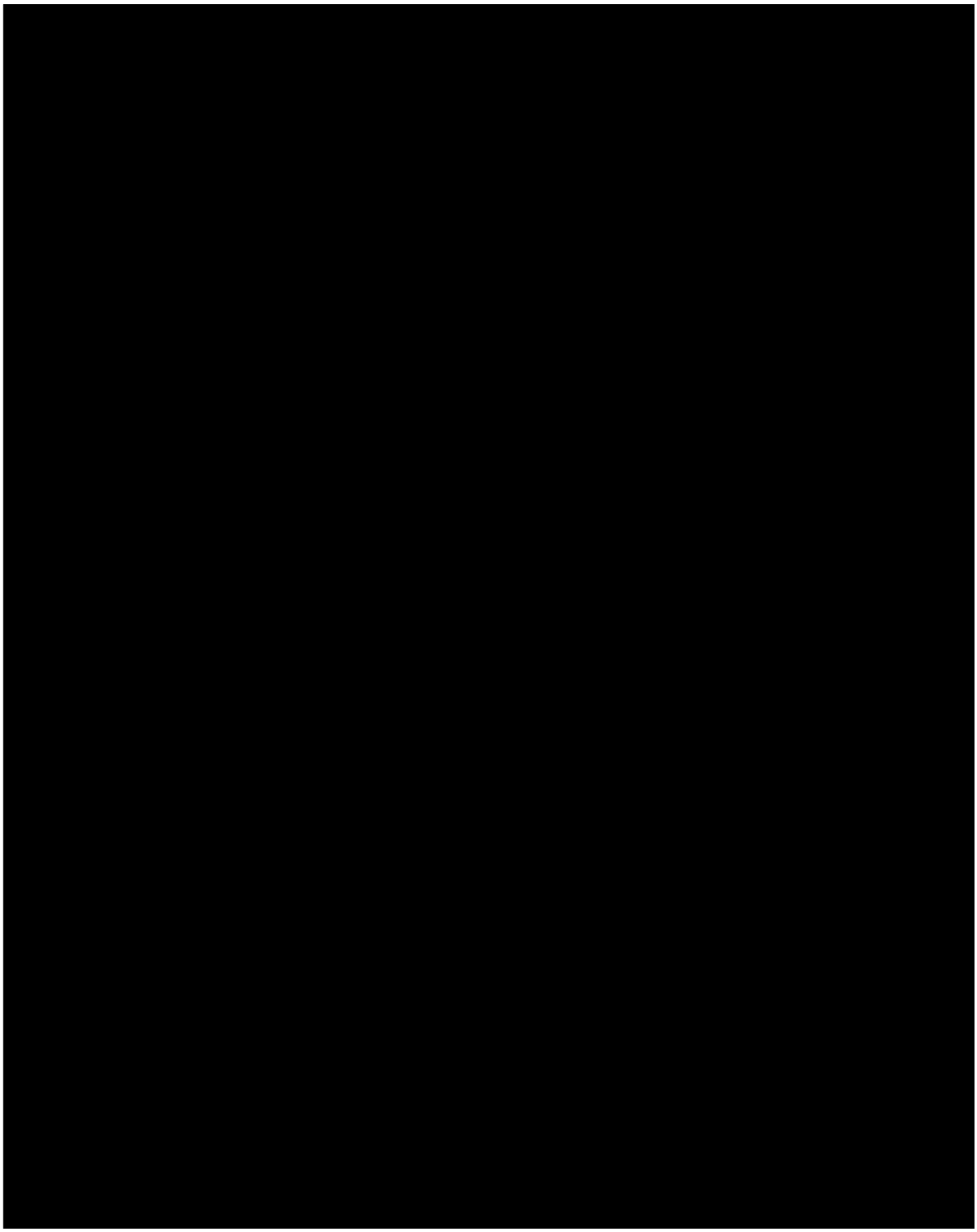

Gewerberaummietvertrag
72379 Hechingen, Lotzenäcker 23

Zwischen

(1) Herrn **Lars Sunnanväder,** Silberburgstraße 12, 72379 Hechingen,

– nachstehend **"Vermieter"** genannt –

und

(2) **JOTEC GmbH,** Lotzenäcker 23/25, 72379 Hechingen

– nachstehend **"Mieter"** genannt –

– nachstehend Vermieter und Mieter gemeinsam die **"Parteien"** genannt –

wird folgender Gewerberaummietvertrag geschlossen:

§ 1
Mietgegenstand

(1) Der Vermieter ist Eigentümer des in 72379 Hechingen, Lotzenäcker 23, gelegenen Grundstücks (im Folgenden: **"Lotzenäcker 23")**.

(2) Der Mietgegenstand **("Mietobjekt"** oder **"Mietgegenstand")** erstreckt sich auf die gesamte Liegenschaft Lotzenäcker 23.

(3) Die Parteien sind bereits durch einen Mietvertrag vom 30. Juni 2002 mit Ergänzungsvereinbarungen vom 10.

Commercial Lease Agreement
72379 Hechingen, Lotzenäcker 23

Between

(1) Mr **Lars Sunnanväder,** Silberburgstraße 12, 72379 Hechingen,

– hereinafter referred to as **"Lessor"** –

and

(2) **JOTEC GmbH,** Lotzenäcker 23/25, 72379 Hechingen

– hereinafter referred to as **"Lessee"** –

– Lessor and Lessee hereinafter jointly referred to as the **"Parties"** –

the following lease agreement concerning commercial premises is concluded:

Article 1
Lease Object

(1) Lessor is the owner of the property located in 72379 Hechingen, Lotzenäcker 23 (hereinafter referred to as **"Lotzenäcker 23").**

(2) The lease object **("Lease Object"** or **"Leased Object")** extends to the entire property Lotzenäcker 23.

(3) The Parties are already connected by a lease agreement dated 30 June 2002 with supplementary agreements dated

Juni 2008, 03. November 2011, 30. März 2015 und 19. Juni 2017 (der **“bisherige Mietvertrag”)** betreffend die Liegenschaft Lotzenäcker 23 verbunden.

Mit diesem Vertrag wird das Mietverhältnis zusammengefasst und insgesamt neu geregelt und der bisherige Mietvertrag dementsprechend mit Wirkung zum 31.08.2017, 24.00 Uhr, aufgehoben. Ab 01.09.2017, 0.00 Uhr, gilt für die Rechtsbeziehung der Parteien bezüglich der Liegenschaften Lotzenäcker 23 ausschließlich der vorliegende Mietvertrag.

§ 2
Nutzung, Untervermietung, Konkurrenzschutz und Betriebspflicht

(1) Nutzung der Räume.

a) Die Vermietung erfolgt zu folgenden Zwecken:

- Entwicklung,
- Produktion, und
- Vertrieb

von medizintechnischen Erzeugnissen.

b) Der Vermieter steht dafür ein, dass die erforderlichen baurechtlichen Genehmigungen

10 June 2008, 3 November 2011, 30 March 2015 and 19 June 2017 (the **“initial agreement”)** concerning the Lotzenäcker 23 property.

With this contract, the lease relationship is newly regulated and the initial agreement is rescinded accordingly with effect from 31 August 2017, 24:00 hrs. From 01.09.2017, 0:00 hrs, only this present lease agreement shall apply to the legal relationship between the parties with regard to Lotzenäcker 23.

Article 2
Use, Sublease, Protection From Competition And Obligation to Operate

(1) Use of the premises.

a) The intended usage of the premises is as follows:

- Development,
- Production, and
- Distribution

of medical-technical products.

b) The Lessor is responsible for maintaining the required permits under building law for the usage

für die in a) genannte Nutzung vorliegen. Der Vermieter übernimmt keine Haftung dafür, dass notwendige behördliche Genehmigungen für den vorgesehenen Geschäftsbetrieb des Mieters vorliegen oder erteilt werden, sofern die Genehmigungen nicht aus Gründen versagt oder aufgehoben werden, die auf der Beschaffenheit oder Lage des Mietobjekts beruhen.

defined in a). Lessor will not assume any liability in terms of whether official permits required for Lessee's intended business operations are or will be issued, unless the permits are refused or revoked for reasons relating to the condition or location of the Lease Object.

c) Der Mieter darf die Mieträume nur zu den in § 2 des Mietvertrags genannten gewerblichen Zwecken nutzen. Eine beabsichtigte Nutzungsänderung bedarf der schriftlichen Zustimmung des Vermieters.

c) Lessee may use the leased premises only for the commercial purposes specified in Article 2 of the Lease Agreement. Each and any intended change in use requires the prior written permission of Lessor.

(2) Untervermietung der Räume

Der Mieter ist mit vorheriger schriftlicher Zustimmung des Vermieters zur vollständigen oder teilweisen Untervermietung des Mietgegenstands im Rahmen des Mietzwecks berechtigt. Der Vermieter kann seine Zustimmung zur Untervermietung nur aus wichtigem Grund verweigern. Die Zustimmung ist nicht erforderlich bei Untervermietung an mit dem Mieter verbundene Unternehmen gem. § 15 AktG.

(2) Sublease of the Premises

Lessee is entitled to completely or partly sublet the Lease Object with prior written consent of Lessor, within the framework of the lease purpose. Lessor can only deny consent for compelling reasons. Consent is not required in case of sublease to companies affiliated with Lessee pursuant to § 15 of the German Stock Corporation Act *(AktG).*

(3) Außer in den Fällen des § 566 BGB ist eine rechtsgeschäftliche Übertragung der vermieterseitigen Rechte und Pflichten auf einen Dritten ausgeschlossen.

(3) (3) Except in the cases of § 566 BGB (German Civil Code) a transfer of the landlord's rights and obligations to a third party is excluded.

§3
Zustand der Räume

(1) Der Mietgegenstand wird durch den Mieter bereits genutzt.

(2) Der Mieter ist berechtigt, Um-, An- und Einbauten sowie mit dem Mietgegenstand fest verbundene Einrichtungen, die der vertragsgemäße Gebrauch fordert, mit Zustimmung des Vermieters vorzunehmen. Die Zustimmung darf nur aus wichtigem Grund versagt werden.

(3) Der Mieter ist verpflichtet, die gemieteten Räume in ordnungsgemäßen Zustand zu erhalten und bei Beendigung des Mietverhältnisses in ordnungsgemäßen Zustand am letzten Tag der Laufzeit zurückzugeben.

(4) Im Falle einer Beendigung des Mietverhältnisses ist der Mieter verpflichtet, den bei Beginn des Anwendungszeitraums der hier vorliegenden Vertragsfassung vorhandenen Zustand bis spätestens zum letzten Tag der Laufzeit wieder herzustellen. Entfernt der Mieter Einrichtungen, so hat er dafür zu sorgen, dass die Mietsache sich wieder in dem ursprünglichen, ordnungsgemäßen Zustand befindet.

Article 3
Shape of Premises

(1) The Lease Object is already in use by the Lessee.

(2) With the consent of Lessor, Lessee may carry out conversions, extensions, and installations and firmly affix facilities to the Lease Object that are required for contractual use. Such consent may be refused only for good reason.

(3) The Lessee is obliged to keep the rented rooms in proper condition and to return them to the tenant in proper condition on the last day of the contract period upon termination of the tenancy.

(4) In the event of termination of the rental agreement, the Lessee shall be obliged to restore the existing condition at the beginning of the period of application of the present version of the contract by no later than the last day of the contract period. If the Lessee removes furnishings, it must ensure that the leased property is returned to its original, orderly condition.

§4
Laufzeit, Optionsrecht, Vorkaufsrecht

(1) Das Mietverhältnis hat eine feste Mietzeit, welche am 31.12.2030 en-

Article 4
Term, Option Right, Pre-emptive right

(1) The lease has a fixed term which ends on 31 December 2030.

det.

(2) Dem Mieter wird das Recht eingeräumt, die feste Mietzeit einmal durch einseitige Erklärung um weitere 10 (zehn) Jahre zu verlängern („Optionsrecht"). Der Mieter hat das Optionsrecht spätestens 9 (neun) Monate vor Ablauf der festen Mietzeit gegenüber dem Vermieter schriftlich auszuüben.

(2) The Lessee may give one-sided notice to extend the Initial Term by a period of another 10 (ten) years ("Option Right"). The Lessee may exercise the Option Right by written notice to the Lessor to be given no later than 9 (nine) months before the end of the Initial Term.

(3) Nach Ablauf der Grundmietzeit einschließ1ich eventueller Verlängerungen infolge Ausübung eines Optionsrechts verlängert sich das Mietverhältnis jeweils um ein Jahr, wenn nicht eine der Parteien spätestens 6 Monate vor Ablauf der Mietzeit der automatischen Verlängerung kündigt.

(3) At the end of the basic lease term, including any possible extensions caused by the Lessee's usage of his Option Right, and in the event that neither of the parties issues a termination no later than 6 months before the end of the lease term.

(4) Im Falle der Veräußerung der Mietsache bzw. des gesamten Grundstücks durch den Vermieter erhält der Mieter vom Vermieter ein Vorkaufrecht an der Mietsache/an dem Grundstück. Der Vermieter wird dieses Vorkaufrecht nach Vertragsunterzeichnung unverzüglich durch einen Notar ins Grundbuch mit folgendem lnhalt eintragen lassen und dem Mieter eine beglaubigte Kopie über diese Eintragung ins Grundbuch überlassen:

(4) In the event of the sale of the leased property or the entire property by the Lessor, the Lessor shall grant the Lessee a pre-emption right to the leased property/land. The landlord will have the pre-emption right entered in the land register by a notary public immediately after signing the contract with the following content and will provide the tenant with a certified copy of this entry in the land register:

Herr Lars Sunnanväder, Silberburgstraße 12, 72379 Hechingen

- nachstehend der „Besteller" -

räumt hiermit

der JOTEC GmbH, Hechingen,

Mr. Lars Sunnanväder, Silberburgstraße 12,72379 Hechingen

hereinafter referred to as the "Owner" -

hereby grants to

JOTEC GmbH, Hechingen, Germany,

- nachstehend der „Berechtigte”-

an dem Grundstück Lotzenäcker 23, Hechingen, eingetragen im Grundbuch des Amtsgerichts Sigmaringen, Blatt Stein 594, Nr. 4, Flurstück 1228/5, ein dingliches Vorkaufsrecht nach folgender Maßgabe ein:

Das Vorkaufsrecht soll nur für-den ersten Verkaufsfall entstehen, aber unabhängig davon, ob das Grundstück durch den Besteller oder durch einen Rechtsnachfolger veräußert wird. Ein allfälliger Übertrag des Grundstücks vom Besteller auf dessen Ehegattin oder dessen Nachkommen in gerader Linie gilt nicht als erster Verkaufsfall im Sinne dieser Bestimmung. Das Vorkaufsrecht kann nur innerhalb einer Frist von zwei Monaten seit Empfang der Mitteilung über den abgeschlossenen Kaufvertrag ausgeübt werden. Das Vorkaufsrecht ist nicht übertragbar und nicht vererblich.

Der Besteller bewilligt und der Berechtigte beantragt die Eintragung dieses Vorkaufsrechts an nächstoffener Rangstelle in das Grundbuch. Bis zur Eintragung ist das Vorkaufsrecht auch als schuldrechtliches Vorkaufsrecht vereinbart.

- hereinafter referred to as the “Beneficiary” -

regarding the property Lotzenäcker 23, Hechingen, registered in the land register of the Local Court Sigmaringen, sheet Stein 594, No. 4, parcel 1228/5, a right of first refusal in rem subject to the following conditions:.

The pre-emption right shall only be granted for the first sale case, but irrespective of whether the property is sold by the Owner or by a legal successor. A possible transfer of the property from the Owner to his spouse or to any descendants is not considered as a first sale case for the purposes of this provision. The pre-emption right may only be exercised within a period of two months after receipt of the notification of the contract of sale. The pre-emption right is not transferable and cannot be inherited.

The purchaser approves and the Beneficiary applies for the registration of this pre-emption right at the nearest place of priority in the land register. Until registration, the pre-emption right is also agreed upon as a right of first refusal under the law of obligation.

§ 5
Miete und Nebenkosten

(1) Als monatliche Grundmiete wird ver-einbart:

EUR 59‘000.00 netto zuzüglich der Umsatzsteuer in gesetzlicher Höhe von derzeit 19% (EUR 11‘210.00), insgesamt EUR 70’210.00 pro Monat.

(2) Neben der Grundmiete hat der Mieter Nebenkosten wie folgt zu tragen:

Hinsichtlich der Liegenschaft Lot-zenäcker 23 hat der Mieter die durch ihn verursachten Heizungs-, Wasser-und Stromkosten sowie die Gebühren und Kosten für Gebäudereinigung, Straßenreinigung, Entwässerung, Müll-abfuhr, Schornsteinfeger, Pflege (inkl.Reinigung) der Aussen- und Gartenan-lagen, Gebäudeversicherung und Brandmeldeanlage zu tragen.

(3) Zusätzlich fällt Umsatzsteuer in gesetz-licher Höhe von derzeit 19 % an.

Article 5
Rent and Ancillary Costs

(1) The monthly base rent is agreed on as follows:

EUR 59‘000.00 net plus VAT at the current rate of 19% (EUR 11‘210.00), total EUR 70’210.00 per month.

(2) In addition to the basic rent, the Lessee shall bear incidental expenses as follows:

With regard to the Lotzenäcker 23 property, the Lessee shall bear the heating, water and electricity costs caused by him/her as well as the fees and costs for cleaning of buildings, street cleaning, drainage, garbage disposal, chimney sweep, maintenance (incl. cleaning) of outdoor facilities and gardens, building insurance and fire alarm system.

(3) VAT at the current rate of 19 % will additionally apply.

§ 6
Wertsicherungsklausel

Ändert sich der Verbraucherpreisindex für Deutschland auf der Grundlage des Basis-jahres 2010 = 100 nach den Feststellungen des Statistischen Bundesamtes oder einer Nachfolgeorganisation gegenüber dem Stand zum Beginn der Geltung dieser vorlie-genden Fassung des Mietvertrages bzw.

Article 6
Indexation Clause

If the consumer price index for Germany changes on the basis of the base year 2010 = 100 in accordance with the findings of the Federal Office for Consumer Prices or a successor organisation compared with the status at the beginning of the validity of this current version of the rental agreement or at

zum Zeitpunkt der letzten Mietanpassung aufgrund dieser Wertsicherungsklausel um mindestens 5%, so kann jede Partei eine Anpassung der Miete in dem gleichen pro-zentualen Verhältnis zum auf den Eingang des Anpassungsverlangens folgenden Mo-natsbeginn verlangen.

the time of the last rent adjustment on the basis of this index clause by at least 5%, each party may make an adjustment of the rent in the same percentage ratio to the amount received.

§7
Mietzahlung

Die Miete ist monatlich im Voraus, spätes-tens am 5. Werktag des Monats porto- und spesenfrei auf das Konto des Vermieters IBAN DE48 6005 0101 7475 3024 46 zu zah-len. Die Nebenkosten werden dem Mieter separat in Rechnung gestellt.

Article 7
Rent Payment

The rent is payable monthly in advance, free of postal charges and expenses, no later than on the fifth working day of the month, to the Lessors account IBAN DE48 6005 0101 7475 3024 46. The operating and ancillary costs are invoiced separately.

§8
Verkehrssicherungspflicht

Der Mieter trägt die Verkehrssicherungs-pflicht für das Mietobjekt sofern der Vermie-ter keine anderweitigen Regelungen getrof-fen hat und stellt den Vermieter von Ansprü-chen Dritter aus der Verletzung dieser Ver-kehrssicherungspflicht auf erste Anforderung frei. Der Mieter übernimmt es, insbesondere die Gehwege und Zuwege vor und zu dem Mietobjekt von Schnee zu räumen und ge-gen Glatteis zu streuen. Das gleiche gilt für den Parkplatz und dessen Zufahrten und Zuwege.

Article 8
Legal Duty to Ensure Safety

Lessee bears the legal duty to ensure safety within the Lease Object unless Lessor has made any other such provisions, and Lessee will hold Lessor harmless upon first demand from claims of third parties arising from any breach of such duty. Lessee assumes the responsibility of removing snow particularly from the walkways and access routes to and from the Lease Object and gritting in the event of black ice. The same applies to the car park and the walkways and access routes to and from it.

§9
Salvatorische Klausel

(1) Sollte eine oder mehrere Bestimmun-gen dieses Vertrages ganz oder teil-weise rechtsunwirksam sein oder wer-

Article 9
Severability Clause

(1) If one or more provisions of this Agreement should be or become void in whole or in part, this will not affect

den, so soll der Bestand der übrigen Bestimmungen hierdurch nicht berührt werden. Die Parteien verpflichten sich vielmehr, an einer Vereinbarung mit-zuwirken, die in wirtschaftlicher Hin-sicht dem ursprünglichen Parteiwillen soweit wie möglich entspricht. Entsprechendes soll gelten, falls sich eine re-gelungsbedürftige Lücke aus diesem Vertrag ergeben sollte.

(2) Außer den in diesem Vertrag festgeleg-ten Vertragsbestimmungen sind keine Nebenabreden getroffen worden.

§ 10
Änderungen und Ergänzungen, Schrift-form, Sprache und geltendes Recht

(1) Änderungen und Ergänzungen dieses Vertrages einschließlich der Vertrags-anlagen und der Vertragsaufhebung bedürfen der Schriftform. Diese Klausel kann auch nicht mündlich abgeändert werden.

(2) Den Mietvertragsparteien sind die be-sonderen gesetzlichen Schrifterforder-nisse der §§ 550 i.V.m. 578 Abs. 1 BGB bekannt. Sie sind sich darüber ei-nig, dass der Mietvertrag in schriftlicher Form gemäß §§ 550, 578 BGB ge-schlossen sein soll. Sie verpflichten sich hiermit gegenseitig, auf jederzeiti-ges Verlangen einer Partei alle Hand-lungen vorzunehmen und Erklärungen abzugeben, die erforderlich sind, um dem gesetzlichen Schriftformerforder-nis Genüge zu tun und den Mietvertrag nicht unter Berufung auf die Einhaltung der gesetzlichen Schriftform vorzeitig zu kündigen. Dies gilt nicht nur für den

the validity of the other provisions . The parties undertake to work together to reach an agreement that reflects as closely as possible in economic terms the parties' original intention. This applies *mutatis mutandis* if it should become apparent that a point that should have been provided for in this Agreement has been omitted.

(2) Beyond the contractual provisions set out in this Agreement, no side agreements have been concluded.

Article 10
Amendments and Additions, Written Form, Language and Governing Law

(1) Amendments and additions to this Agreement, including its annexes and the mutually agreed termination of the Agreement, require written form. This clause may not be amended orally.

(2) The Parties to the Lease Agreement are aware of the special statutory written form requirements contained in § 550 in conjunction with § 578 (1) of the Civil Code. They agree that the Lease Agreement is to be concluded in written form pursuant to § 550 and § 578 of the Civil Code . The parties hereby undertake towards one another to carry out all actions and to provide all declarations that are necessary to satisfy the statutory written form requirement at the request of either of the parties at any time and not to terminate the Lease Agreement ahead of time on the grounds of non-

Abschluss des Ursprungsvertrages, sondern auch für Nachtrags-, Änderungs- und Ergän-zungsverträge. lm Falle einer jeden Veräußerung des Mietgegenstandes ist es dem Erwerber nicht verwehrt, sich auf einen etwaigen Schriftformmangel zu berufen. Der Mieter verpflichtet sich jedoch, auf Verlangen des Erwerbers mit diesem einen Nachtrag, der der Schriftform entspricht, zu schließen, mit dem der lnhalt des vorstehenden Ab-satzes auch zum Vertragsgegenstand im Verhältnis Mieter / Erwerber ge-macht wird.

compliance with the statutory written form requirement. This applies not only to the conclusion of the original agreement, but also to all addenda, amendments and additional agreements. In the event of any sale of the Lease Object, the purchaser is not prohibited from pleading a possible defect in written form. If requested by the purchaser to do so, however, Lessee undertakes to conclude an addendum with the purchaser that satisfies the written form requirement, by way of which the content of the above paragraph is also made the subject matter of the contract in the relationship between Lessee and the purchaser.

(3) lm Falle eines Widerspruchs zwischen der deutschen und der englischen Fas-sung dieser Vereinbarung ist die deut-sche Fassung maßgebend.

(3) In case of any inconsistency between the German and the English version of this Agreement, the German version shall prevail.

(4) Die vorliegende Vereinbarung unter-liegt dem deutschen Recht.

(4) This Agreement shall be governed by and construed in accordance with German law.

Hechingen, den / the 02.11.2017

Lars Sunnanväder
(Vermieter / Lessor)

Hechingen, den / the 27.10.2017

Thomas Bogenschütz
(Mieter / Lessee)

Exhibit 10.15(a)

1. Nachtrag
zum Gewerberaummietvertrag vom
27.10./02.11.2017
betreffend die Liegenschaft
72379 Hechingen, Lotzenäcker 23

zwischen

Herrn **Lars Sunnanväder**, Silberburgstra-ße 12, 72379 Hechingen,

– nachstehend **“Vermieter”** genannt –

und

JOTEC GmbH, Lotzenäcker 23/25, 72379 Hechingen

– nachstehend **“Mieter”** genannt –

– nachstehend Vermieter und Mieter ge-meinsam die **“Parteien”** genannt –

Präambel

Die Parteien waren durch einen Mietver-trag vom 30. Juni 2002 mit Ergänzungs-vereinbarungen vom 10. Juni 2008, 03. November 2011, 30. März 2015 und 19. Juni 2017 (der **“bisherige Mietvertrag”)** betreffend die Liegenschaft Lotzenäcker 23 verbunden. Mit Vertrag vom 27.10./02.11.2017 haben die Parteien das Mietverhältnis zusammengefasst und ins-gesamt neu geregelt und den bisherigen Mietvertrag dementsprechend mit Wirkung zum 31.08.2017, 24.00 Uhr, aufgehoben. Ab 01.09.2017, 0.00 Uhr, gilt für die Rechtsbeziehung der Parteien bezüglich der Liegenschaft Lotzenäcker 23 aus-schließlich der Mietvertrag vom

First Amendment
to the Commercial Lease Agreement
dated 27 October/2 November 2017
regarding the property
72379 Hechingen, Lotzenäcker 23

between

Mr **Lars Sunnanväder**, Silberburgstraße 12, 72379 Hechingen,

– hereinafter referred to as **“Lessor”** –

and

JOTEC GmbH, Lotzenäcker 23/25, 72379 Hechingen

– hereinafter referred to as **“Lessee”** –

– Lessor and Lessee hereinafter jointly referred to as the **“Parties”** –

Preamble

The Parties were connected by a lease agreement dated 30 June 2002 with supplementary agreements dated 10 June 2008, 3 November 2011, 30 March 2015 and 19 June 2017 (the **“initial agreement”)** concerning the Lotzenäcker 23 property. With contract dated 27 October/2 November 2017, the lease relationship was newly regulated and the initial agreement was rescinded accordingly with effect from 31 August 2017, 24:00 hrs. As of 01.09.2017, 0:00 a. m., the legal relationship between the parties with regard to the Lotzenäcker 23 property is governed exclusively by the rental agreement dated 27 October / 2 November

27.10./02.11.2017.

Mit dem vorliegenden 1. Nachtrag zum Mietvertrag vom 27.10./02.11.2017 soll nunmehr die Höhe der Nettokaltmiete mit Wirkung ab dem 01.01.2018 neu geregelt werden wie folgt:

§ 1
Nettokaltmiete ab Januar 2018

Die monatliche Grundmiete beträgt ab 01.01.2018, 0.00 Uhr:

EUR 42.631,00 netto zuzüglich der Um-satzsteuer in gesetzlicher Höhe von derzeit 19% (EUR 8.099,89), insgesamt EUR 50.730,89 pro Monat.

§ 2
Aufrechterhaltung der sonstigen Vertragsbestimmungen

lm Übrigen bleibt es bei den Regelungen des Mietvertrages vom 27.10./02.11.2017.

Hechingen, den / the 28.12.2017

Lars Sunnanväder
(Vermieter / Lessor)

2017.

With this First Amendment to the lease agreement dated 27.10./02.11.2017, the amount of the net rent shall now be revised with effect from 1 January 2018 as follows:

Article 1
Net rent from January 2018

The monthly base rent is starting from 1 January 2018, 0.00 o’ clock:

EUR 42,631.00 net plus VAT at the current rate of 19% (EUR 8,099.89), totalling EUR 50.730,89 per month.

Article 2
Continuation of the other contractual provisions

In all other respects, the provisions of the rental agreement dated 27.10./02.11.2017 shall continue to apply.

Hechingen, den / the 13.01.2018

Thomas Bogenschütz
(Mieter / Lessee)

Exhibit 10.16

Gewerberaummietvertrag
72379 Hechingen, Lotzenäcker 25

Zwischen

(1) Herrn **Lars Sunnanväder**, Silberburgstraße 12, 72379 Hechingen,

– nachstehend "**Vermieter**" genannt –

und

(2) **JOTEC GmbH**, Lotzenäcker 23/25, 72379 Hechingen

– nachstehend "**Mieter**" genannt –

– nachstehend Vermieter und Mieter ge-meinsam die "**Parteien**" genannt –

wird folgender Gewerberaummietvertrag geschlossen:

§ 1
Mietgegenstand

(1) Der Vermieter ist Eigentümer des in 72379 Hechingen, Lotzenäcker 25, gelegenen Grundstücks (im Folgen-den: "**Lotzenäcker 25**") mit zwei Gebäuden:

a) Gebäude 1, das größere, bein-haltet verschiedene Bürotrakte, einen Reinraum und zwei Fab-rikhallen und

b) Gebäude 2, das kleinere (Emp-fangsgebäude) beinhaltet zwei Büroetagen, Empfangshalle

Commercial Lease Agreement
72379 Hechingen, Lotzenäcker 25

Between

(1) Mr **Lars Sunnanväder**, Silberburgstraße 12, 72379 Hechingen,

– hereinafter referred to as "**Lessor**" –

and

(2) **JOTEC GmbH**, Lotzenäcker 23/25, 72379 Hechingen

– hereinafter referred to as "**Lessee**" –

– Lessor and Lessee hereinafter jointly referred to as the "**Parties**" –

the following lease agreement concerning commercial premises is concluded:

Article 1
Lease Object

(1) Lessor is the owner of the property located in 72379 Hechingen, Lotzenäcker 25 (hereinafter referred to as "**Lotzenäcker 25**"), with two buildings:

a) Building 1, the larger one, includes various office tracts, a clean room and two factory halls, and

b) Building 2, the smaller one (reception building), includes two office floors, reception hall and

und Archivkeller.

(2) Der Mietgegenstand **(“Mietobjekt”** oder **“Mietgegenstand”)** erstreckt sich auf auf die in dem/den als An-hang 1 beigefügten Plan/Plänen far-big gekennzeichneten Flächen in-nerhalb der Liegenschaft Lot-zenäcker 25, nämlich

a) im Gebäude 1 ein Bürotrakt in der zweiten Etage mit Konfe-renzräumen inkl. 50 Parkplät-zen und im Erdgeschoss eine Fabrikhalle inkl. 40 Parkplätzen und

b) im Gebäude 2 in der ersten und zweiten Etage ein Büro-trakt inkl. 75 Parkplätze, ein Treppenhaus, einen Archivkel-ler und im Erdgeschoss eine Empfangshalle.

Die Lage und Größe der zum Miet-gegenstand gehörenden Flächen er-geben sich zudem aus der in An-hang 1 beigefügten Flächenaufstel-lung. Der Mieter und/oder weitere Gebäudemieter haben das Recht, in der Liegenschaft Lotzenäcker 25 den Aufzug und Gebäudezugänge mit zu nutzen, sollte dieses (z.B. zum Möbeltransport) notwendig sein.

(3) Die Parteien sind bereits durch einen Mietvertrag vom 16.12.2014 (der **“bisherige Mietvertrag”**) betreffend Räumlichkeiten innerhalb der Lie-genschaft Lotzenacker 25 verbun-den.

archive cellar.

(2) The lease object **(“Lease Object”** or **“Leased Object”)** extends to the areas within the Lotzenäcker 25 property marked in color in the plan/plans attached as **Annex 1,** namely

a) in Building 1 an office tract on the second floor with conference rooms including 50 parking spaces and in the ground floor a factory hall including 40 parking spaces and

b) in Building 2 on the first and second floors an office tract including 75 parking spaces, a staircase, an archive in the basement and on the ground floor a lobby.

The location and size of the areas belonging to the leased object are also determined by the area layout enclosed as **Annex 1a**. The Lessee and/or other building Lessees have the right to use the elevator and building access points in the Lotzenäcker 25 property if this is necessary (e. g. for furniture transport).

(3) The Parties are already connected by a lease agreement dated 16 December 2014 (the **“initial agreement”**) concerning premises with the Lotzenäcker 25 property.

Mit diesem Vertrag wird das Miet-verhältnis insgesamt neu geregelt und der bisherige Mietvertrag dem-entsprechend mit Wirkung zum 31.08.2017, 24.00 Uhr, aufgehoben. Ab 01.09.2017, 0.00 Uhr, gilt für die Rechtsbeziehung der Parteien be-züglich der Liegenschaft Lot-zenäcker 25 ausschließlich der vor-liegende Mietvertrag.

With this contract, the lease relationship is newly regulated and the initial agreements rescinded accordingly with effect from 31 August 2017, 24:00 hrs. From 01.09.2017, 0:00 hrs, only this present lease agreement shall apply to the legal relationship between the parties with regard to Lotzenäcker 23 and Lotzenäcker 25.

§ 2
Nutzung, Untervermietung, Konkurrenzschutz und Betriebspflicht

Article 2
Use, Sublease, Protection From Competition And Obligation to Operate

(1) Nutzung der Räume.

a) Die Vermietung erfolgt zu fol-genden Zwecken:

- Entwicklung,
- Produktion, und
- Vertrieb

von medizintechnischen Erzeugnissen.

b) Der Vermieter steht dafür ein, dass die erforderlichen bau-rechtlichen Genehmigungen für die in a) genannte Nutzung vorliegen. Der Vermieter über-nimmt keine Haftung dafür, dass notwendige behördliche Genehmigungen für den vor-gesehenen Geschäftsbetrieb des Mieters vorliegen oder er-teilt werden, sofern die Ge-

(1) Use of the premises.

a) The intended usage of the premises is as follows:

- Development,
- Production, and
- Distribution

of medical-technical products.

b) The Lessor is responsible for maintaining the required permits under building law for the usage defined in a). Lessor will not assume any liability in terms of whether official permits required for Lessee’s intended business operations are or will be issued, unless the permits are refused or revoked for reasons relating to the condition or location of the

nehmigungen nicht aus Grün-den versagt oder aufgehoben werden, die auf der Beschaf-fenheit oder Lage des Mietob- jekts beruhen.

c) Der Mieter darf die Mieträume nur zu den in § 2 des Mietver-trags genannten gewerblichen Zwecken nutzen. Eine beab-sichtigte Nutzungsänderung bedarf der schriftlichen Zu-stimmung des Vermieters.

(2) Untervermietung der Räume

Der Mieter ist mit vorheriger schriftli-cher Zustimmung des Vermieters zur vollständigen oder teilweisen Unter-vermietung des Mietgegenstands im Rahmen des Mietzwecks berechtigt. Der Vermieter kann seine Zustim-mung zur Untervermietung nur aus wichtigem Grund verweigern. Die Zustimmung ist nicht erforderlich bei Untervermietung an mit dem Mieter verbundene Unternehmen gem. § 15 AktG.

(3) Außer in den Fällen des § 566 BGB ist eine rechtsgeschäftliche Übertra-gung der vermieterseitigen Rechte und Pflichten auf einen Dritten aus-geschlossen.

§ 3
Zustand der Räume

(1) Der Mietgegenstand wird durch den Mieter bereits genutzt.

Lease Object.

c) Lessee may use the leased premises only for the commercial purposes specified in Article 2 of the Lease Agreement. Each and any intended change in use requires the prior written permission of Lessor.

(2) Sublease of the Premises

Lessee is entitled to completely or partly sublet the Lease Object with prior written consent of Lessor, within the framework of the lease purpose. Lessor can only deny consent for compelling reasons. Consent is not required in case of sublease to companies affiliated with Lessee pursuant to § 15 of the German Stock Corporation Act *(AktG)*.

(3) (3) Except in the cases of § 566 BGB (German Civil Code) a transfer of the Lessor’s rights and obligations to a third party is excluded.

Article 3
Shape of Premises

(1) The Lease Object is already in use by the Lessee.

(2) Der Mieter ist berechtigt, Um-, An- und Einbauten sowie mit dem Mietgegenstand fest verbundene Einrichtungen, die der vertragsgemäße Gebrauch fordert, mit Zustimmung des Vermieters vorzunehmen. Die Zustimmung darf nur aus wichtigem Grund versagt werden.

(3) Der Mieter ist verpflichtet, die gemieteten Räume in ordnungsgemäßen Zustand zu erhalten und bei Beendigung des Mietverhältnisses in ordnungsgemäßen Zustand am letzten Tag der Laufzeit zurückzugeben.

(4) Im Falle einer Beendigung des Mietverhältnisses ist der Mieter verpflichtet, den bei Beginn des Anwendungszeitraums der hier vorliegenden Vertragsfassung vorhandenen Zustand bis spätestens zum letzten Tag der Laufzeit wieder herzustellen. Entfernt der Mieterin Einrichtungen, so hat er dafür zu sorgen, dass die Mietsache sich wieder in dem ursprünglichen, ordnungsgemäßen Zustand befindet.

§ 4
Laufzeit, Optionsrecht, Vorkaufsrecht

(1) Das Mietverhältnis hat eine feste Mietzeit, welche am 31.12.2030 endet.

(2) Dem Mieter wird das Recht eingeräumt, die feste Mietzeit einmal durch einseitige Erklärung um weitere 10 (zehn) Jahre zu verlängern („Optionsrecht“). Der Mieter hat das

(2) With the consent of Lessor, Lessee may carry out conversions, extensions, and installations and firmly affix facilities to the Lease Object that are required for contractual use. Such consent may be refused only for good reason.

(3) The Lessee is obliged to keep the rented rooms in proper condition and to return them to the Lessor in proper condition on the last day of the contract period upon termination of the tenancy.

(4) In the event of termination of the rental agreement, the Lessee shall be obliged to restore the existing condition at the beginning of the period of application of the present version of the contract by no later than the last day of the contract period. If the Lessee removes furnishings, it must ensure that the leased property is returned to its original, orderly condition.

Article 4
Term, Option right, Pre-emptive right

(1) The lease has a fixed term which ends on 31 December 2030.

(2) The Lessee may give one-sided notice to extend the Initial Term by a period of another 10 (ten) years (“Option Right”). The Lessee may exercise the Option Right by written notice to the Lessor to

Optionsrecht spätestens 9 (neun) Monate vor Ablauf der festen Mietzeit gegenüber dem Vermieter schriftlich auszuüben.

(3) Nach Ablauf der Grundmietzeit einschließlich eventueller Verlängerung infolge Ausübung eines Optionsrechts verlängert sich das Mietverhältnis jeweils um ein Jahr, wenn nicht eine der Parteien spätestens 6 Monate vor Ablauf der Mietzeit kündigt.

(4) Im Falle der Veräußerung der Mietsache bzw. des gesamten Grundstücks durch den Vermieter erhält der Mieter vom Vermieter ein Vorkaufrecht an der Mietsache/an dem Grundstück. Der Vermieter wird dieses Vorkaufrecht nach Vertragsunterzeichnung unverzüglich durch einen Notar ins Grundbuch mit folgendem lnhalt eintragen lassen und dem Mieter eine beglaubigte Kopie über diese Eintragung ins Grundbuch überlassen:

Herr Lars Sunnanväder, Silberburgstraße 12, 72379 Hechingen

- nachstehend der ,,Besteller“ -

räumt hiermit

der JOTEC GmbH, Hechingen,

- nachstehend der ,,Berechtigte“-

an dem Grundstück Lotzenäcker 25, Hechingen, eingetragen im Grundbuch des Amtsgerichts Sigmaringen, Blatt Stein 594, Nr. 4, Flurstück

be given no later than 9 (nine) months before the end of the Initial Term.

(3) At the end of the basic lease term, including a possible extension caused by the Lessee’s usage of his Option Right, and in the event that neither of the parties issues a termination no later than 6 months before the end of the lease term.

(4) In the event of the sale of the leased property or the entire property by the Lessor, the Lessor shall grant the Lessee a pre-emption right to the leased property/land. The landlord will have the pre-emption right entered in the land register by a notary public immediately after signing the contract with the following content and will provide the tenant with a certified copy of this entry in the land register:

Mr. Lars Sunnanväder, Silberburgstraße 12,72379 Hechingen

hereinafter referred to as the “Owner” -

hereby grants to

JOTEC GmbH, Hechingen, Germany,

- hereinafter referred to as the “Beneficiary” -

regarding the property Lotzenäcker 25, Hechingen registered in the land register of the Local Court Sigmaringen, sheet Stein 594, No. 4,

1228/2, ein dingliches Vorkaufsrecht nach folgender Maßgabe ein:

Das Vorkaufsrecht soll nur für den ersten Verkaufsfall entstehen, aber unabhängig davon, ob das Grundstück durch den Besteller oder durch einen Rechtsnachfolger veräußert wird. Ein allfälliger Übertrag des Grundstücks vom Besteller auf dessen Ehegattin oder dessen Nachkommen in gerader Linie gilt nicht als erster Verkaufsfall im Sinne dieser Bestimmung. Das Vorkaufsrecht kann nur innerhalb einer Frist von zwei Monaten seit Empfang der Mitteilung über den abgeschlossenen Kaufvertrag ausgeübt werden. Das Vorkaufsrecht ist nicht übertragbar und nicht vererblich.

Der Besteller bewilligt und der Berechtigte beantragt die Eintragung dieses Vorkaufsrechts an nächstoffener Rangstelle in das Grundbuch. Bis zur Eintragung ist das Vorkaufsrecht auch als schuldrechtliches Vorkaufsrecht vereinbart.

§ 5
Miete und Nebenkosten

(1) Als monatliche Grundmiete wird vereinbart:

EUR 25’880.00 netto zuzüglich der Umsatzsteuer in gesetzlicher Höhe von derzeit 19% (EUR 4‘917.20), insgesamt EUR 30‘797.20 pro Monat.

(2) Neben der Grundmiete hat der Mieter

parcel 1228/2 , a right of first refusal in rem subject to the following conditions:.

The pre-emption right shall only be granted for the first sale case, but irrespective of whether the property is sold by the Owner or by a legal successor. A possible transfer of the property from the Owner to his spouse or to any descendants is not considered .as a first sale case for the purposes of this provision. The pre-emption right may only be exercised within a period of two months after receipt of the notification of the contract of sale. The pre-emption right is not transferable and cannot be inherited.

The purchaser approves and the Beneficiary applies for the registration of this pre-emption right at the nearest place of priority in the land register. Until registration, the pre-emption right is also agreed upon as a right of first refusal under the law of obligation.

Article 5
Rent and Ancillary Costs

(1) The monthly base rent is agreed on as follows:

EUR 25‘880.00 net plus VAT at the current rate of 19% (EUR 4‘917.20), total EUR 30‘797.20 per month.

(2) In addition to the basic rent the Lessee

Nebenkosten wie folgt zu tragen:

a) eine monatliche Pauschale von EUR 3‘390.00 netto zuzüglich der Umsatzsteuer in gesetzlicher Höhe von derzeit 19% (EUR 644.10), insgesamt EUR 4‘034.10, für die durch ihn verursachten Heizungs-, Wasser- und Stromkosten,

b) die Kosten der Pflege des Dachgartens, welche der Mieter durchführt;

c) 50 % der Kosten der jährlichen Wartung der Brandmeldeanlage und des Hauptmelders (Siemens), welche der Vermieter beauftragt,

d) die Kosten sonstiger notwendiger Wartungen für die gemieteten Räume und Flächen; sollten für die Wartungen der Zugang zu Räumen im Anwesen, die nicht Gegenstand des Mietobjekts sind, erforderlich sein, wird der Vermieter dem Mieter diesen Zugang ermöglichen, umgekehrt wird der Mieter in ähnlich gelagerten Fällen dem Vermieter einen Zugang ermöglichen,

e) an der Gebäudeversicherung beteiligt sich der Mieter i.H.v. 66 %,

f) an den Kosten für die Pflege der Außen- und Gartenanlage, des Winterdienstes, der Müllabfuhr, des Schornsteinfegers, der Entwässerung beteiligt sich der Mieter i.H.v. 66 %.

shall bear incidental expenses as follows:

a) a monthly lump sum in the amount of EUR 3‘390.00 net plus VAT at the current rate of 19% (EUR 644.10), total EUR 4‘034.10 for the costs of heating, water and electricity caused by it,

b) the costs of the maintenance of the roof garden carried out by the Lessee;

c) 50% of the annual maintenance costs for the fire alarm system and the main detector (Siemens), which are charged by the Lessor.

d) the costs of other necessary maintenance for the rented premises and areas; if necessary for the maintenance of access to premises in the property which are not the subject of the rental object, the Lessor will enable the Lessee to access them; conversely, in similar cases, the Lessee will provide the Lessor with access to the same, and the Lessor will be able to access the same.

e) the Lessee participates in the building insurance in the amount of 66%,

f) the Lessee participates in the costs for the maintenance of the outdoor and garden facilities, the winter road clearance service, the garbage disposal, the chimney sweeper, the drainage in the amount of 66%.

(3) Zusätzlich fällt Umsatzsteuer in gesetzlicher Höhe von derzeit 19 % an.

§ 6
Wertsicherungsklausel

Ändert sich der Verbraucherpreisindex für Deutschland auf der Grundlage des Basisjahres 2010 = 100 nach den Feststellungen des Statistischen Bundesamtes oder einer Nachfolgeorganisation gegenüber dem Stand zum Beginn der Geltung dieser vorliegenden Fassung des Mietvertrages bzw. zum Zeitpunkt der letzten Mietanpassung aufgrund dieser Wertsicherungsklausel um mindestens 5 %, so kann jede Partei eine Anpassung der Miete in dem gleichen prozentualen Verhältnis zum auf den Eingang des Anpassungsverlangens folgenden Monatsbeginn verlangen.

§ 7
Mietzahlung

Die Miete ist monatlich im Voraus, spätestens am 5. Werktag des Monats porto- und spesenfrei auf das Konto des Vermieters IBAN DE48 6005 0101 7475 3024 46 zu zahlen. Die Nebenkosten werden dem Mieter separat in Rechnung gestellt.

§ 8
Verkehrssicherungspflicht

Der Mieter trägt die Verkehrssicherungspflicht für das Mietobjekt sofern der Vermieter keine anderweitigen Regelungen getroffen hat und stellt den Vermieter von Ansprüchen Dritter aus der Verletzung dieser Ver-

(3) VAT at the current rate of 19 % will additionally apply.

Article 6
Indexation Clause

If the consumer price index for Germany changes on the basis of the base year 2010 = 100 in accordance with the findings of the Federal Office for Consumer Prices or a successor organisation compared with the status at the beginning of the validity of this current version of the rental agreement or at the time of the last rent adjustment on the basis of this index clause by at least 5%, each party may make an adjustment of the rent in the same percentage ratio to the amount received.

Article 7
Rent Payment

The rent is payable monthly in advance, free of postal charges and expenses, no later than on the fifth working day of the month, to the Lessors account IBAN DE48 6005 0101 7475 3024 46. The operating and ancillary costs are invoiced separately.

Article 8
Legal Duty to Ensure Safety

Lessee bears the legal duty to ensure safety within the Lease Object unless Lessor has made any other such provisions, and Lessee will hold Lessor harmless upon first demand from claims of third parties arising from any

kehrssicherungspflicht auf erste Anforderung frei. Der Mieter übernimmt es, insbesondere die Gehwege und Zuwege vor und zu dem Mietobjekt von Schnee zu räumen und gegen Glatteis zu streuen. Das gleiche gilt für den Parkplatz und dessen Zufahrten und Zuwege.

breach of such duty. Lessee assumes the responsibility of removing snow particularly from the walkways and access routes to and from the Lease Object and gritting in the event of black ice. The same applies to the car park and the walkways and access routes to and from it.

§9
Salvatorische Klausel

(1) Sollte eine oder mehrere Bestimmungen dieses Vertrages ganz oder teilweise rechtsunwirksam sein oder werden, so soll der Bestand der übrigen Bestimmungen hierdurch nicht berührt werden. Die Parteien verpflichten sich vielmehr, an einer Vereinbarung mitzuwirken, die in wirtschaftlicher Hinsicht dem ursprünglichen Parteiwillen soweit wie möglich entspricht. Entsprechendes soll gelten, falls sich eine regelungsbedürftige Lücke aus diesem Vertrag ergeben sollte.

(2) Außer den in diesem Vertrag festgelegten Vertragsbestimmungen sind keine Nebenabreden getroffen worden.

Article 9
Severability Clause

(1) If one or more provisions of this Agreement should be or become void in whole or in part, this will not affect the validity of the other provisions. The parties undertake to work together to reach an agreement that reflects as closely as possible in economic terms the parties' original intention. This applies *mutatis mutandis* if it should become apparent that a point that should have been provided for in this Agreement has been omitted.

(2) Beyond the contractual provisions set out in this Agreement, no side agreements have been concluded.

§10
Änderungen und Ergänzungen, Schriftform, Sprache und geltendes Recht

(1) Änderungen und Ergänzungen dieses Vertrages einschließlich der Vertragsanlagen und der Vertragsaufhebung bedürfen der Schriftform. Diese Klausel kann auch nicht mündlich abgeändert werden.

Article 10
Amendments and Additions, Written Form, language and Governing law

(1) Amendments and additions to this Agreement, including its annexes and the mutually agreed termination of the Agreement, require written form. This clause may not be amended orally.

(2) Den Mietvertragsparteien sind die besonderen gesetzlichen Schrifterfordernisse der §§ 550 i.V.m. 578 Abs. 1 BGB bekannt. Sie sind sich darüber einig, dass der Mietvertrag in schriftlicher Form gemäß §§ 550, 578 BGB geschlossen sein soll. Sie verpflichten sich hiermit gegenseitig, auf jederzeitiges Verlangen einer Partei alle Handlungen vorzunehmen und Erklärungen abzugeben, die erforderlich sind, um dem gesetzlichen Schriftformerfordernis Genüge zu tun und den Mietvertrag nicht unter Berufung auf die Einhaltung der gesetzlichen Schriftform vorzeitig zu kündigen. Dies gilt nicht nur für den Abschluss des Ursprungsvertrages, sondern auch für Nachtrags-, Änderungs- und Ergänzungsverträge. lm Falle einer jeden Veräußerung des Mietgegenstandes ist es dem Erwerber nicht verwehrt, sich auf einen etwaigen Schriftformmangel zu berufen. Der Mieter verpflichtet sich jedoch, auf Verlangen des Erwerbers mit diesem einen Nachtrag, der der Schriftform entspricht, zu schließen, mit dem der Inhalt des vorstehenden Absatzes auch zum Vertragsgegenstand im Verhältnis Mieter / Erwerber gemacht wird.

(3) lm Falle eines Widerspruchs zwischen der deutschen und der englischen Fassung dieser Vereinbarung ist die deutsche Fassung maßgebend.

(4) Die vorliegende Vereinbarung unterliegt dem deutschen Recht.

(2) The Parties to the Lease Agreement are aware of the special statutory written form requirements contained in § 550 in conjunction with § 578 (1) of the Civil Code. They agree that the Lease Agreement is to be concluded in written form pursuant to § 550 and § 578 of the Civil Code. The parties hereby undertake towards one another to carry out all actions and to provide all declarations that are necessary to satisfy the statutory written form requirement at the request of either of the parties at any time and not to terminate the Lease Agreement ahead of time on the grounds of non-compliance with the statutory written form requirement. This applies not only to the conclusion of the original agreement, but also to all addenda, amendments and additional agreements. In the event of any sale of the Lease Object, the purchaser is not prohibited from pleading a possible defect in written form. If requested by the purchaser to do so, however, Lessee undertakes to conclude an addendum with the purchaser that satisfies the written form requirement, by way of which the content of the above paragraph is also made the subject matter of the contract in the relationship between Lessee and the purchaser.

(3) In case of any inconsistency between the German and the English version of this Agreement, the German version shall prevail.

(4) This Agreement shall be governed by and construed in accordance with German law.

Hechingen, den / the 02.1.2017

Lars Sunnanväder
(Vermieter / Lessor)

Hechingen, den / the 27.10.2017

Thomas Bogenschütz
(Mieter / Lessee)

[redacted]

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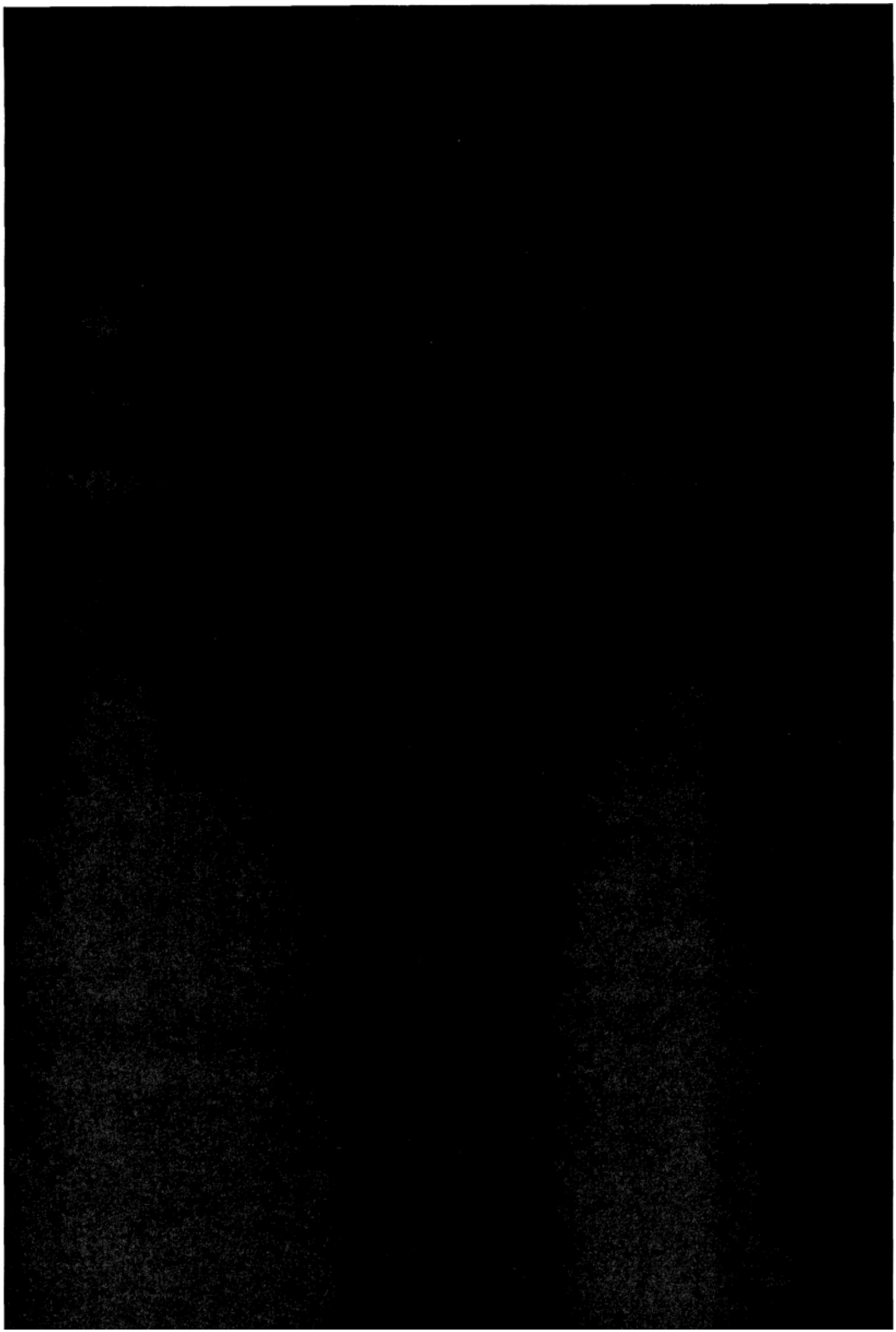

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CERTIFICATIONS

I, James Patrick Mackin, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CryoLife, Inc.;

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

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

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

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

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

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

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

5. The registrant's other certifying officer 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: May 4, 2018

/s/ J. PATRICK MACKIN
Chairman, President, and
Chief Executive Officer

I, David Ashley Lee, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CryoLife, Inc.;

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

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

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

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

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

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

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

5. The registrant's other certifying officer 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: May 4, 2018

/s/ D. ASHLEY LEE
Executive Vice President,
Chief Operating Officer, and
Chief Financial Officer

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of CryoLife, Inc. (the "Company") on Form 10-Q for the quarter ending March 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of James Patrick Mackin, the Chairman, President, and Chief Executive Officer of the Company, and David Ashley Lee, the Executive Vice President, Chief Operating Officer, and Chief Financial Officer of the Company, hereby certifies, pursuant to and for purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

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

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

/s/ J. PATRICK MACKIN

J. PATRICK MACKIN
Chairman, President, and
Chief Executive Officer
May 4, 2018

/s/ D. ASHLEY LEE

D. ASHLEY LEE
Executive Vice President,
Chief Operating Officer, and Chief Financial Officer
May 4, 2018