UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2019

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: 001-36309

INOGEN, INC.

(Exact name of registrant as specified in its charter)

Delaware	**33-0989359**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
326 Bollay Drive Goleta, CA	**93117**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (805) 562-0500

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value	**INGN**	**The NASDAQ Stock Market LLC (NASDAQ Global Select Market)**

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

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

As of October 31, 2019, the registrant had 21,998,485 shares of common stock, par value $0.001, outstanding.

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INOGEN, INC.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

Inogen, Inc.
Consolidated Balance Sheets
(amounts in thousands)

	September 30, 2019	December 31, 2018
	(unaudited)	
Assets		
Current assets		
Cash and cash equivalents	$ 156,131	$ 196,634
Marketable securities	44,514	43,715
Accounts receivable, net	41,180	37,041
Inventories, net	34,072	27,071
Deferred cost of revenue	356	359
Income tax receivable	2,867	2,655
Prepaid expenses and other current assets	10,716	7,108
Total current assets	289,836	314,583
Property and equipment		
Rental equipment, net	39,821	43,038
Manufacturing equipment and tooling	9,455	7,338
Computer equipment and software	7,051	6,153
Furniture and equipment	1,678	1,445
Leasehold improvements	4,295	3,407
Land and building	125	125
Construction in process	1,461	3,128
Total property and equipment	63,886	64,634
Less accumulated depreciation	(43,998)	(42,293)
Property and equipment, net	19,888	22,341
Goodwill	33,277	2,257
Intangible assets, net	79,536	3,755
Operating lease right-of-use asset	6,355	—
Deferred tax asset - noncurrent	11,176	30,130
Other assets	4,664	2,832
Total assets	$ 444,732	$ 375,898

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Balance Sheets (continued)
(amounts in thousands, except share and per share amounts)

	September 30, 2019	December 31, 2018
	(unaudited)	
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable and accrued expenses	$ 30,418	$ 26,786
Accrued payroll	6,700	11,407
Warranty reserve - current	4,311	3,549
Operating lease liability - current	2,193	—
Deferred revenue - current	5,835	4,451
Income tax payable	586	392
Total current liabilities	50,043	46,585
Long-term liabilities		
Warranty reserve - noncurrent	7,165	5,981
Operating lease liability - noncurrent	5,123	—
Earnout liability - noncurrent	25,749	—
Deferred revenue - noncurrent	13,285	11,844
Deferred tax liability - noncurrent	221	232
Other noncurrent liabilities	—	832
Total liabilities	101,586	65,474
Commitments and contingencies (Note 10)		
Stockholders' equity		
Common stock, $0.001 par value per share; 200,000,000 authorized; 21,998,374 and 21,778,632 shares issued and outstanding as of September 30, 2019 and December 31, 2018, respectively	22	22
Additional paid-in capital	260,071	249,194
Retained earnings	82,809	60,484
Accumulated other comprehensive income	244	724
Total stockholders' equity	343,146	310,424
Total liabilities and stockholders' equity	$ 444,732	$ 375,898

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Comprehensive Income
(unaudited)
(amounts in thousands, except share and per share amounts)

	Three months ended September 30, 2019	Three months ended September 30, 2018	Nine months ended September 30, 2019	Nine months ended September 30, 2018
Revenue				
Sales revenue	$ 86,392	$ 89,712	$ 267,073	$ 255,283
Rental revenue	5,369	5,579	15,953	16,297
Total revenue	91,761	95,291	283,026	271,580
Cost of revenue				
Cost of sales revenue	44,769	42,810	134,066	124,726
Cost of rental revenue, including depreciation of $1,482 and $1,689, for the three months ended and $4,781 and $5,820 for the nine months ended, respectively	3,677	3,668	11,021	11,844
Total cost of revenue	48,446	46,478	145,087	136,570
Gross profit				
Gross profit-sales revenue	41,623	46,902	133,007	130,557
Gross profit-rental revenue	1,692	1,911	4,932	4,453
Total gross profit	43,315	48,813	137,939	135,010
Operating expense				
Research and development	2,636	2,096	5,773	5,287
Sales and marketing	24,047	26,339	80,006	67,376
General and administrative	8,525	9,982	27,050	29,230
Total operating expense	35,208	38,417	112,829	101,893
Income from operations	8,107	10,396	25,110	33,117
Other income (expense)				
Interest income	1,149	895	3,877	2,111
Other income (expense)	(503)	8	(478)	(596)
Total other income, net	646	903	3,399	1,515
Income before provision (benefit) for income taxes	8,753	11,299	28,509	34,632
Provision (benefit) for income taxes	1,890	(5,133)	6,184	(7,168)
Net income	6,863	16,432	22,325	41,800
Other comprehensive income (loss), net of tax				
Change in foreign currency translation adjustment	(309)	(47)	(340)	137
Change in net unrealized gains (losses) on foreign currency hedging	(420)	102	(954)	577
Less: reclassification adjustment for net (gains) losses included in net income	338	(354)	796	(286)
Total net change in unrealized gains (losses) on foreign currency hedging	(82)	(252)	(158)	291
Change in net unrealized gains (losses) on marketable securities	(18)	3	18	3
Total other comprehensive income (loss), net of tax	(409)	(296)	(480)	431
Comprehensive income	$ 6,454	$ 16,136	$ 21,845	$ 42,231
Basic net income per share attributable to common stockholders (Note 7)	$ 0.31	$ 0.77	$ 1.02	$ 1.97
Diluted net income per share attributable to common stockholders (Note 7)	$ 0.31	$ 0.73	$ 1.00	$ 1.86
Weighted-average number of shares used in calculating net income per share attributable to common stockholders:				
Basic common shares	21,840,473	21,324,256	21,802,468	21,175,286
Diluted common shares	22,191,688	22,659,052	22,387,146	22,512,125

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Stockholders' Equity
(amounts in thousands, except share amounts)

	Three months ended September 30, 2019 and September 30, 2018					
	Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income	Total stockholders' equity
	Shares	Amount				
Balance, June 30, 2018 (unaudited)	21,321,543	$ 21	$ 231,879	$ 34,007	$ 999	$ 266,906
Stock-based compensation	—	—	3,216	—	—	3,216
Employee stock purchases	13,519	—	1,360	—	—	1,360
Restricted stock awards issued	3,557	—	—	—	—	—
Vesting of restricted stock units	8,707	—	—	—	—	—
Shares withheld related to net restricted stock settlement	(3,022)	—	(801)	—	—	(801)
Stock options exercised	158,708	—	4,447	—	—	4,447
Net income	—	—	—	16,432	—	16,432
Other comprehensive loss	—	—	—	—	(296)	(296)
Balance, September 30, 2018 (unaudited)	21,503,012	$ 21	$ 240,101	$ 50,439	$ 703	$ 291,264
Balance, June 30, 2019 (unaudited)	21,933,669	$ 22	$ 257,177	$ 75,946	$ 653	$ 333,798
Stock-based compensation	—	—	1,565	—	—	1,565
Employee stock purchases	31,049	—	1,223	—	—	1,223
Restricted stock awards issued, net of forfeitures	24,456	—	—	—	—	—
Vesting of restricted stock units	3,441	—	(6)	—	—	(6)
Shares withheld related to net restricted stock settlement	(979)	—	(46)	—	—	(46)
Stock options exercised	6,738	—	158	—	—	158
Net income	—	—	—	6,863	—	6,863
Other comprehensive loss	—	—	—	—	(409)	(409)
Balance, September 30, 2019 (unaudited)	21,998,374	$ 22	$ 260,071	$ 82,809	$ 244	$ 343,146

	Nine months ended September 30, 2019 and September 30, 2018					
	Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income	Total stockholders' equity
	Shares	Amount				
Balance, December 31, 2017	20,976,350	$ 21	$ 218,109	$ 8,639	$ 272	$ 227,041
Stock-based compensation	—	—	9,783	—	—	9,783
Employee stock purchases	25,532	—	2,348	—	—	2,348
Restricted stock awards issued	56,609	—	—	—	—	—
Vesting of restricted stock units	15,372	—	—	—	—	—
Shares withheld related to net restricted stock settlement	(5,575)	—	(1,103)	—	—	(1,103)
Stock options exercised	434,724	—	10,964	—	—	10,964
Net income	—	—	—	41,800	—	41,800
Other comprehensive income	—	—	—	—	431	431
Balance, September 30, 2018 (unaudited)	21,503,012	$ 21	$ 240,101	$ 50,439	$ 703	$ 291,264
Balance, December 31, 2018	21,778,632	$ 22	$ 249,194	$ 60,484	$ 724	$ 310,424
Stock-based compensation	—	—	6,930	—	—	6,930
Employee stock purchases	47,816	—	2,748	—	—	2,748
Restricted stock awards issued, net of forfeitures	79,058	—	—	—	—	—
Vesting of restricted stock units	24,817	—	(73)	—	—	(73)
Shares withheld related to net restricted stock settlement	(14,002)	—	(764)	—	—	(764)
Stock options exercised	82,053	—	2,036	—	—	2,036
Net income	—	—	—	22,325	—	22,325
Other comprehensive loss	—	—	—	—	(480)	(480)
Balance, September 30, 2019 (unaudited)	21,998,374	$ 22	$ 260,071	$ 82,809	$ 244	$ 343,146

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Cash Flows
(unaudited)
(amounts in thousands)

	Nine months ended September 30, 2019	Nine months ended September 30, 2018
Cash flows from operating activities		
Net income	$ 22,325	$ 41,800
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	9,216	8,521
Loss on rental units and other fixed assets	473	848
Gain on sale of former rental assets	(64)	(409)
Provision for sales revenue returns and doubtful accounts	13,204	14,089
Provision for rental revenue adjustments	1,701	2,157
Provision for inventory losses	593	319
Stock-based compensation expense	6,930	9,783
Deferred income taxes	5,908	(7,646)
Changes in operating assets and liabilities:		
Accounts receivable	(19,109)	(19,233)
Inventories	(7,936)	(12,828)
Deferred cost of revenue	3	(40)
Income tax receivable	(212)	(1,047)
Prepaid expenses and other current assets	(3,610)	(5,483)
Operating lease right-of-use asset	(6,356)	—
Other noncurrent assets	(2,088)	(1,082)
Accounts payable and accrued expenses	3,462	6,191
Accrued payroll	(4,702)	5,033
Warranty reserve	1,946	3,071
Deferred revenue	2,825	3,395
Income tax payable	210	34
Operating lease liability	7,317	—
Other noncurrent liabilities	(832)	167
Net cash provided by operating activities	31,204	47,640
Cash flows from investing activities		
Purchases of marketable securities	(58,681)	(50,285)
Maturities of marketable securities	57,900	33,705
Investment in intangible assets	(31)	(350)
Investment in property and equipment	(2,275)	(7,240)
Production and purchase of rental equipment	(2,187)	(3,475)
Proceeds from sale of former assets	166	680
Payment for acquisition, net of cash acquired	(70,401)	—
Net cash used in investing activities	(75,509)	(26,965)

(continued on next page)

See accompanying condensed notes to the consolidated financial statements.

Inogen, Inc.
Consolidated Statements of Cash Flows (continued)
(unaudited)
(amounts in thousands)

	Nine months ended September 30,	
	2019	**2018**
Cash flows from financing activities		
Proceeds from stock options exercised	2,036	10,964
Proceeds from employee stock purchases	2,748	2,348
Payment of employment taxes related to release of restricted stock	(837)	(1,103)
Net cash provided by financing activities	3,947	12,209
Effect of exchange rates on cash	(145)	445
Net increase (decrease) in cash and cash equivalents	(40,503)	33,329
Cash and cash equivalents, beginning of period	196,634	142,953
Cash and cash equivalents, end of period	$ 156,131	$ 176,282
Supplemental disclosures of cash flow information		
Cash paid during the period for income taxes, net of refunds received	$ 221	$ 1,631
Supplemental disclosure of non-cash transactions		
Accrued value of earnout related to acquisition	$ 25,749	$ —
Property and equipment in accounts payable and accrued liabilities	18	161

See accompanying condensed notes to the consolidated financial statements.

1. Business overview

Inogen, Inc. (Company or Inogen) was incorporated in Delaware on November 27, 2001. The Company is a medical technology company that primarily develops, manufactures and markets innovative portable oxygen concentrators used to deliver supplemental long-term oxygen therapy to patients suffering from chronic respiratory conditions. Traditionally, these patients have relied on stationary oxygen concentrator systems for use in the home and oxygen tanks or cylinders for mobile use, which the Company calls the delivery model. The tanks and cylinders must be delivered regularly and have a finite amount of oxygen, which requires patients to plan activities outside of their homes around delivery schedules and a finite oxygen supply. Additionally, patients must attach long, cumbersome tubing to their stationary concentrators simply to enable mobility within their homes. The Company's proprietary Inogen One® systems concentrate the air around the patient to offer a single source of supplemental oxygen anytime, anywhere with a single battery and can be plugged into an outlet when at home, in a car, or in a public place with outlets available. The Company's Inogen One systems reduce the patient's reliance on stationary concentrators and scheduled deliveries of tanks with a finite supply of oxygen, thereby improving patient quality of life and fostering mobility.

Since adopting the Company's direct-to-consumer rental strategy in 2009, the Company has directly sold or rented more than730,000 of its Inogen oxygen concentrators as of September 30, 2019.

The Company incorporated Inogen Europe Holding B.V., a Dutch limited liability company, on April 13, 2017. On May 4, 2017, Inogen Europe Holding B.V. acquired all issued and outstanding capital stock of MedSupport Systems B.V. (MedSupport) and began operating under the name Inogen Europe B.V. The Company merged Inogen Europe Holding B.V. and Inogen Europe B.V. on December 28, 2018. Inogen Europe B.V. is the remaining legal entity. Inogen completed the acquisition of New Aera, Inc. (New Aera) on August 9, 2019.

2. Basis of presentation and summary of significant accounting policies

The consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

The accompanying consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 26, 2019. Except as further described below, there have been no significant changes in the Company's accounting policies from those disclosed in its Annual Report on Form 10-K filed with the SEC on February 26, 2019.

Basis of consolidation

The consolidated financial statements include the accounts of Inogen, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated.

Use of estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Management bases these estimates and assumptions upon historical experience, existing and known circumstances, authoritative accounting pronouncements and other factors that management believes to be reasonable. Significant areas requiring the use of management estimates relate to revenue recognition and determining the stand-alone selling price (SSP) of performance obligations, inventory and rental asset valuations and write-downs, accounts receivable allowances for bad debts, returns and adjustments, warranty expense, stock compensation expense, depreciation and amortization, income tax provision and uncertain tax positions, fair value of financial instruments, fair value of acquired intangible assets and goodwill and fair value of earnout liabilities. Actual results could differ from these estimates.

Leases

The Company determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use (ROU) assets, operating lease liability - current, and operating lease liability - noncurrent on the consolidated balance sheets.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. The Company uses an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments as the rate implicit in each lease is generally not readily determinable. The operating lease ROU asset also includes any lease payments made to the lessor at or before the commencement date and excludes lease incentives. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The Company has lease agreements with lease and non-lease components. The Company elected the practical expedient to treat the lease and non-lease components as a single lease component. Additionally, the Company elected the practical expedient to not record leases with an initial term of twelve months or less on the consolidated balance sheets.

Revenue

The Company generates revenue primarily from sales and rentals of its products. The Company's products consist of its proprietary line of oxygen concentrators, non-invasive ventilators, and related accessories. Other revenue, which is included in sales revenue on the Statements of Comprehensive Income, primarily comes from service contracts, replacement parts and freight revenue for product shipments.

Sales revenue

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. Revenue from product sales is generally recognized upon shipment of the product but is deferred for certain transactions when control has not yet transferred to the customer.

The Company's product is generally sold with a right of return and the Company may provide other incentives, which are accounted for as variable consideration when estimating the amount of revenue to recognize. Returns and incentives are estimated at the time sales revenue is recognized. The provisions for estimated returns are made based on known claims and estimates of additional returns based on historical data and future expectations. Sales revenue incentives within the Company's contracts are estimated based on the most likely amounts expected on the related sales transaction and recorded as a reduction to revenue at the time of sale in accordance with the terms of the contract. Accordingly, revenue is recognized net of allowances for estimated returns and incentives.

The Company also offers a lifetime warranty for direct-to-consumer sales of its oxygen concentrators. For a fixed price, the Company agrees to provide a fully functional oxygen concentrator for the remaining life of the patient. Lifetime warranties are only offered to patients upon the initial sale of oxygen concentrators directly from the Company and are non-transferable. Lifetime warranties are considered to be a distinct performance obligation that are accounted for separately from its sale of oxygen concentrators with a standard warranty of three years.

The revenue is allocated to the distinct lifetime warranty performance obligation based on a relative SSP method. The Company has vendor-specific objective evidence of the selling price for its equipment. To determine the selling price of the lifetime warranty, the Company uses its best estimate of the SSP for the distinct performance obligation as the lifetime warranty is neither separately priced nor is the selling price available through third-party evidence. To calculate the selling price associated with the lifetime warranties, management considers the profit margins of service revenue, the average estimated cost of lifetime warranties and the price of extended warranties. Revenue from the distinct lifetime warranty is deferred after the delivery of the equipment and recognized based on an estimated mortality rate over five years, which is the estimated performance period of the contract based on the average patient life expectancy.

(amounts in thousands, except share and per share amounts)

Revenue from the sale of the Company's repair services is recognized when the performance obligationsare satisfied and collection of the receivables is probable. Other revenue from sale of replacement parts is generally recognized when product is shipped to customers.

Freight revenue consists of fees associated with the deployment of products internationally and domestically when expedited freight options are requested or when minimum order quantities are not met. Freight revenue is generally recognized upon shipment of the product but is deferred if control has not yet transferred to the customer. Shipping and handling costs for sold products and rental assets shipped to the Company's customers are included on the consolidated statements of comprehensive income as part of cost of sales revenue and cost of rental revenue, respectively.

The payment terms and conditions of customer contracts vary by customer type and the products and services offered. For certain products or services and customer types, the Company requires payment before the products or services are delivered to the customer. The timing of sales revenue recognition, billing and cash collection results in billed accounts receivable and deferred revenue in the consolidated balance sheet.

Contract liabilities primarily consist of deferred revenue related to lifetime warranties on direct-to-consumer sales revenue when cash payments are received in advance of services performed under the contract. The contract with the customer states the final terms of the sale, including the description, quantity, and price of each product or service purchase. The increase in deferred revenue related to lifetime warrantiesfor the nine months ended September 30, 2019was primarily driven by $6,984 of payments received in advance of satisfying performance obligations, partially offset by $4,175 of revenues recognized that were included in the deferred revenue balances as of December 31, 2018 Deferred revenue related to lifetime warranties was $17,683 and $14,874 as of September 30, 2019 and December 31, 2018, respectively, and is classified within deferred revenue – current and noncurrent deferred revenue in the consolidated balance sheet.

The Company elected to apply the practical expedient in accordance withAccounting Standards Codification (ASC) 606—*Revenue Recognition* and did not evaluate contracts of one year or less for the existence of a significant financing component. The Company does not expect any revenue to be recognized over a multi-year period with the exception of revenue related to lifetime warranties.

The Company's sales revenue is primarily derived from the sale of its Inogen One systems, Inogen At Home systems, and related accessories to individual consumers, home medical equipment providers, distributors, the Company's private label partner and resellers worldwide. Sales revenue is classified into two areas: business-to-business sales and direct-to-consumer sales. The following table sets forth the Company's sales revenue disaggregated by sales channel and geographic region:

	Three months ended September 30,		Nine months ended September 30,	
Revenue by region and category	**2019**	**2018**	**2019**	**2018**
Business-to-business domestic sales	$ 30,143	$ 30,263	$ 85,857	$ 91,222
Business-to-business international sales	18,492	21,142	60,859	58,807
Direct-to-consumer domestic sales	37,757	38,307	120,357	105,254
Total sales revenue	$ 86,392	$ 89,712	$ 267,073	$ 255,283

Rental revenue

The Company recognizes equipment rental revenue over the non-cancelable lease term, which is one month, less estimated adjustments, in accordance with ASC 842 –*Leases*. The Company has separate contracts with each patient that are not subject to a master lease agreement with any third-party payor. The Company evaluates the individual lease contracts at lease inception and the start of each monthly renewal period to determine if it is reasonably certain that the monthly renewal option and the bargain renewal option associated with the potential capped free rental period would be exercised. Historically, the exercise of the monthly renewal and bargain renewal option is not reasonably certain at lease inception and at most subsequent monthly lease renewal periods. If the Company determines that the reasonably certain threshold for an individual patient is met at lease inception or at a monthly lease renewal period, such determination would impact the bargain renewal period for an individual lease. The Company would first consider the lease classification issue (sales-type lease or operating lease) and then appropriately recognize or defer rental revenue over the lease term, which may include a portion of the capped rental period. The Company deferred $0 associated with the capped rental period as of September 30, 2019 and December 31, 2018.

The lease term begins on the date products are shipped to patients and are recorded at amounts estimated to be received under reimbursement arrangements with third-party payors, including Medicare, private payors, and Medicaid. Due to the nature of the industry and the reimbursement environment in which the Company operates, certain estimates are required to record net revenue and accounts receivable at their net realizable values. Inherent in these estimates is the risk that they will have to be revised or updated as additional information becomes available. Specifically, the complexity of many third-party billing arrangements and the uncertainty of reimbursement amounts for certain services from certain payors may result in adjustments to amounts originally recorded. Such adjustments are typically identified and recorded at the point of cash application, claim denial or account review. The Company adjusts revenue for historical trends on revenue adjustments due to timely filings, deaths, hospice, bad debt and other types of analyzable adjustments on a monthly basis to record rental revenue at the expected collectible amounts Accounts receivable are reduced by an allowance for doubtful accounts which provides for those accounts from which payment is not expected to be received although product was delivered, and revenue was earned. The determination that an account is uncollectible, and the ultimate write-off of that account occurs once collection is considered to be highly unlikely, and it is written-off and charged to the allowance at that time. Amounts billed but not earned due to the timing of the billing cycle are deferred and recognized in revenue on a straight-line basis over the monthly billing period. For example, if the first day of the billing period does not fall on the first of the month, then a portion of the monthly billing period will fall in the subsequent month and the related revenue and cost would be deferred based on the service days in the following month.

The lease agreements generally contain lease and non-lease components. Non-lease components primarily include payments for supplies. The Company elected the practical expedient to treat the lease and non-lease components as a single lease component.

Rental revenue is recognized as earned, less estimated adjustments. Revenue not billed at the end of the period is reviewed for the likelihood of collections and accrued. The rental revenue stream is not guaranteed and payment will cease if the patient no longer needs oxygen or returns the equipment. Revenue recognized is at full estimated allowable amounts; transfers to secondary insurances or patient responsibility have no net effect on revenue. Rental revenue is earned for that entire month if the patient is on service on the first day of the 30-day period commencing on the recurring date of service for a particular claim, regardless if there is a change in condition or death after that date.

Included in rental revenue are unbilled amounts for which the revenue recognition criteria had been met as of period-end but were not yet billed to the payor. The estimate of net unbilled rental revenue recognized is based on historical trends and estimates of future collectability. In addition, the Company estimates potential future adjustments and write-offs of these unbilled amounts and includes these estimates in the allowance for adjustments and write-offs of rental revenue which is netted against gross receivables.

Earnout liability

The earnout liability will be adjusted to fair value at each reporting date until settled. At the end of each reporting period after the acquisition date, the arrangement is remeasured at its fair value, with changes in fair value recorded in earnings. Changes in fair value will be recognized in general and administrative expense.

Recently issued accounting pronouncements not yet adopted

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13,*Accounting for Credit Losses (Topic 326).* The new standard requires the use of an “expected loss” model on certain types of financial instruments. The standard also amends the impairment model for available-for-sale debt securities and requires estimated credit losses to be recorded as allowances instead of reductions to amortized cost of the securities. The ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within those years, with early adoption permitted. The Company is currently evaluating the new guidance but does not expect it to have a material impact on the Company’s consolidated financial statement presentation or results.

In January 2017, the FASB issued ASU No. 2017-04,*Simplifying the Test for Goodwill Impairment.* The new guidance eliminates step two of the goodwill impairment test. Under the new guidance, an entity should recognize an impairment charge for the amount by which a reporting unit’s carrying value exceeds its fair value. The ASU is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. The Company is currently evaluating the effect of the new guidance but does not expect it to have a material impact on the Company’s consolidated financial statement presentation or results.

In August 2018, the FASB issued ASU No. 2018-13,*Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*. The new guidance modifies the disclosure requirements on fair value measurements. The ASU is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. While the Company continues to evaluate the effect of adopting this guidance, the Company expects the fair value disclosures related to marketable securities, as disclosed in Note 4 – Fair value measurements, will be subject to the new standard.

Recently adopted accounting pronouncements

In February 2016, the FASB issued ASU No. 2016-02,*Leases (Topic 842)*. The new guidance requires organizations that lease assets—referred to as "lessees"—to recognize on the consolidated balance sheet the assets and liabilities for the rights and obligations created by those leases with lease terms of more than twelve months. The Company adopted the standard using the modified retrospective transition method at the adoption date of January 1, 2019 that does not require restatement of its comparative periods presented, allows it to apply the standard as of the adoption date and record a cumulative adjustment in retained earnings. As permitted under the transition guidance, the Company carried forward the assessment of whether the Company's contracts contain or are leases, classification of the Company's leases and remaining lease terms. The Company elected the practical expedients to not record leases with an initial term of twelve months or less on the consolidated balance sheet and to not separate lease and non-lease components for all of its leases as the non-lease components are not significant to the overall lease costs. The Company recognized approximately $6,400 of operating lease right-of-use assets and operating lease liabilities on the consolidated balance sheets upon adoption on January 1, 2019. The Company also recognizes equipment rental revenue over the non-cancelable lease term, which is one month, less estimated adjustments, in accordance with Topic 842, effective January 1, 2019. The impact on rental revenue as a result of the adoption did not have a material impact on the Company's consolidated financial presentation or results. There was no cumulative adjustments recorded to retained earnings as a result of the adoption.

In August 2017, the FASB issued ASU No. 2017-12,*Derivatives and Hedging*, which changes both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results, in order to better align an entity's risk management activities and financial reporting for hedging relationships. The amendments expand and refine hedge accounting for both nonfinancial and financial risk components and align the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The Company adopted this standard on January 1, 2019 and adoption of this standard did not have a material impact on the Company's consolidated financial statement presentation or results.

In January 2018, the FASB issued ASU No. 2018-02,*Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. The new guidance permits entities the option to reclassify tax effects that are stranded in accumulated other comprehensive income as a result of the implementation of the Tax Cuts and Jobs Act to retained earnings. The Company adopted this standard on January 1, 2019 using the beginning of the period of adoption method and adoption of this standard did not have a material impact on the Company's consolidated financial statement presentation or results.

In June 2018, the FASB issued ASU No. 2018-07,*Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*. The new guidance modifies the accounting for nonemployee share-based payments. The Company adopted this standard on January 1, 2019 and adoption of this standard did not have a material impact on the Company's consolidated financial statement presentation or results.

In November 2018, the FASB issued ASU No. 2018-19,*Codification Improvements to Topic 326, Financial Instruments-Credit Losses*, which is an amendment to ASU No. 2016-13 that clarifies the scope of the guidance. The amendment clarifies that receivables arising from operating leases are not within the scope of ASU No. 2016-13 and impairment of receivables arising from operating leases should be accounted for in accordance with ASU No. 2016-02. As a result, the bad debt expense account associated with the rental revenue allowance for doubtful account is charged to rental revenue instead of general and administrative expense upon adoption. This change results in decreased rental revenue and decreased operating expense. The Company adopted the standard using the modified retrospective transition method at the adoption date of January 1, 2019 that does not require restatement of its comparative periods presented. The adoption of this reclassification did not have a material impact on the Company's consolidated financial statement presentation or results.

(amounts in thousands, except share and per share amounts)

Business segments

The Company operates and reports in only one operating and reportable segment – development, manufacturing, marketing, sales, and rental of respiratory products. Management reports financial information on a consolidated basis to the Company's chief operating decision maker.

3. Acquisitions

On August 6, 2019, the Company entered into an Agreement and Plan of Merger (Merger Agreement) by and among the Company, New Aera, Inc., a Delaware corporation, Move Merger Sub, Inc., a Delaware corporation and a wholly-owned subsidiary of the Company, and Gregory J. Kapust, as stockholder representative. On August 9, 2019, the Company completed the acquisition of New Aera pursuant to and on the terms set forth in the Merger Agreement. In connection with the Merger Agreement, the Company also separately acquired certain intellectual property assets from Silverbow Development, LLC, an affiliate of New Aera (Silverbow). New Aera is an innovative developer and manufacturer of portable non-invasive ventilators for people suffering from various chronic lung diseases. Under the terms of the Merger Agreement, all outstanding shares of capital stock of New Aera were cancelled and converted into the right to receive merger consideration with a value equal to up to $101,923 in cash in the aggregate (inclusive of payments to Silverbow) comprised of $70,523 of cash paid at closing and up to $31,400 in earnout payments if certain performance targets are achieved. Acquisition-related expenses of approximately $663 were incurred in the nine months ended September 30, 2019 and classified within general and administrative expense.

Assets and liabilities of the acquired company were recorded at their estimated fair values at the date of acquisition. The excess purchase price over the fair value of net tangible assets and identifiable intangible assets acquired has been allocated to goodwill. Goodwill represents the expected synergies with the existing business, the acquired assembled workforce, and future cash flows after the acquisition. The fair value assigned to the identifiable intangible asset was determined primarily by using the excess earnings method. The key assumptions included in the excess earnings method included revenue recognized, cost of revenue and the discount rate. The fair value of the earnout liability was measured using a Monte Carlo simulation and was discounted using a rate that appropriately captures the risk associated with the obligation. The key assumption included in the simulation included revenue recognized.

The Company's allocation of the purchase price of New Aera is preliminary and any measurement period adjustments that result from the finalization of the purchase price allocation will be recorded retrospectively to the acquisition date. Changes are possible and could change the allocation of the purchase price.

The following table summarizes the preliminary purchase price allocation for the acquisition of New Aera:

Cash	$	122
Inventories		140
Other current assets		8
Property and equipment		224
Goodwill		31,124
Intangible assets		77,700
Total assets acquired	$	109,318
Deferred tax liability - noncurrent	$	13,046
Earnout liability - noncurrent		25,749
Total liabilities assumed		38,795
Total purchase price	$	70,523

(amounts in thousands, except share and per share amounts)

The consolidated financial and operating results reflect the New Aera operations beginning August 9, 2019. The following unaudited pro forma information for the three and nine months ended September 30, 2019 and the three and nine months ended September 30, 2018 presents the revenues and operating income assuming the acquisition of New Aera had occurred as of January 1, 2018.

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Total revenue	$ 91,756	$ 95,293	$ 283,036	$ 271,602
Net income	$ 5,108	$ 15,843	$ 18,784	$ 39,873

4. Fair value measurements

ASC 820 — *Fair Value Measurements and Disclosures* creates a single definition of fair value, establishes a framework for measuring fair value in U.S. GAAP and expands disclosures about fair value measurements. ASC 820 emphasizes that fair value is a market-based measurement, not an entity-specific measurement, and states that a fair value measurement is to estimate the price at which an orderly transaction to sell an asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Assets and liabilities adjusted to fair value in the balance sheet are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Level inputs, as defined by ASC 820, are as follows:

Level input	Input definition
Level 1	Inputs are unadjusted, quoted prices for identical assets or liabilities in active markets at the measurement date.
Level 2	Inputs, other than quoted prices included in Level 1, that are observable for the asset or liability through corroboration with market data at the measurement date.
Level 3	Unobservable inputs that reflect management’s best estimate of what market participants would use in pricing the asset or liability at the measurement date.

The Company’s financial instruments consist of cash and cash equivalents, marketable securities, accounts receivable, accounts payable and accrued expenses. The carrying values of its financial instruments approximate fair value based on their short-term nature.

Cash, cash equivalents and marketable securities

The Company obtained the fair value of its available-for-sale investments, which are not in active markets, from a third-party professional pricing service using quoted market prices for identical or comparable instruments, rather than direct observations of quoted prices in active markets. The Company's professional pricing service gathers observable inputs for all of its fixed income securities from a variety of industry data providers (e.g., large custodial institutions) and other third-party sources. Once the observable inputs are gathered, all data points are considered, and the fair value is determined. The Company validates the quoted market prices provided by its primary pricing service by comparing their assessment of the fair values against the fair values provided by its investment managers. The Company's investment managers use similar techniques to its professional pricing service to derive pricing as described above. As all significant inputs were observable, derived from observable information in the marketplace or supported by observable levels at which transactions are executed in the marketplace, the Company has classified its marketable securities within Level 2 of the fair value hierarchy.

(amounts in thousands, except share and per share amounts)

The following table summarizes fair value measurements by level for the assets measured at fair value on a recurring basis for cash, cash equivalents and marketable securities:

	As of September 30, 2019				
	Adjusted cost	Gross unrealized gains	Fair value	Cash and cash equivalents	Marketable securities
Cash	$ 43,843	$ —	$ 43,843	$ 43,843	$ —
Level 1:					
Money market accounts	109,288	—	109,288	109,288	—
Level 2:					
Corporate bonds	6,530	7	6,537	—	6,537
U.S. Treasury securities	40,959	18	40,977	3,000	37,977
Total	$ 200,620	$ 25	$ 200,645	$ 156,131	$ 44,514

	As of December 31, 2018				
	Adjusted cost	Gross unrealized gains (losses)	Fair value	Cash and cash equivalents	Marketable securities
Cash	$ 33,671	$ —	$ 33,671	$ 33,671	$ —
Level 1:					
Money market accounts	158,438	—	158,438	158,438	—
Level 2:					
Corporate bonds	13,629	(16)	13,613	—	13,613
U.S. Treasury securities	34,620	7	34,627	4,525	30,102
Total	$ 240,358	$ (9)	$ 240,349	$ 196,634	$ 43,715

The following table summarizes the estimated fair value of the Company’s investments in marketable securities, classified by the contractual maturity date of the securities:

	September 30, 2019
Due within one year	$ 44,514

Derivative instruments and hedging activities

The Company transacts business in foreign currencies and has international sales and expenses denominated in foreign currencies, subjecting the Company to foreign currency risk. The Company has entered into foreign currency forward contracts, generally with maturities of twelve months or less, to reduce the volatility of cash flows primarily related to forecasted revenue denominated in certain foreign currencies. These contracts allow the Company to sell Euros in exchange for U.S. dollars at specified contract rates. Forward contracts are used to hedge forecasted sales over specific months. Changes in the fair value of these forward contracts designed as cash flow hedges are recorded as a component of accumulated other comprehensive income within stockholders’ equity and are recognized in the consolidated statements of comprehensive income during the period which approximates the time the corresponding sales occur. The Company may also enter into foreign exchange contracts that are not designated as hedging instruments for financial accounting purposes. These contracts are generally entered into to offset the gains and losses on certain asset and liability balances until the expected time of repayment. Accordingly, any gains or losses resulting from changes in the fair value of the non-designated contracts are reported in other expense, net in the consolidated statements of comprehensive income. The gains and losses on these contracts generally offset the gains and losses associated with the underlying foreign currency-denominated balances, which are also reported in other income (expense), net.

(amounts in thousands, except share and per share amounts)

The Company records the assets or liabilities associated with derivative instruments and hedging activities at fair value based on Level 2 inputs in other current assets or other current liabilities, respectively, in the consolidated balance sheet. The Company had related receivables of $300 and $472 as of September 30, 2019 and December 31, 2018, respectively. The Company classifies the foreign currency derivative instruments within Level 2 in the fair value hierarchy as the valuation inputs are based on quoted prices and market observable data of whether it is designated and qualifies for hedge accounting.

The Company documents the hedging relationship and its risk management objective and strategy for undertaking the hedge, the hedging instrument, the hedged transaction, the nature of the risk being hedged, how the hedging instrument's effectiveness in offsetting the hedged risk will be assessed prospectively and retrospectively, and a description of the method used to measure ineffectiveness. The Company assesses hedge effectiveness and ineffectiveness at a minimum quarterly but may assess it monthly. For derivative instruments that are designed and qualify as part of a cash flow hedging relationship, the effective portion of the gain or loss on the derivative is reported in other comprehensive income (loss) and reclassified into earnings in the same periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current period earnings.

The Company will discontinue hedge accounting prospectively when it determines that the derivative is no longer effective in offsetting cash flows attributable to the hedge risk. The cash flow hedge is de-designated because a forecasted transaction is not probable of occurring, or management determines to remove the designation of the cash flow hedge. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the Company continues to carry the derivative at its fair value on the balance sheet and recognizes any subsequent changes in the fair value in earnings. When it is probable that a forecasted transaction will not occur, the Company will discontinue hedge accounting and recognize immediately in earnings gains and losses that were accumulated in other comprehensive income related to the hedging relationship.

Accumulated other comprehensive income

The components of accumulated other comprehensive income were as follows:

	Foreign currency translation adjustments	Unrealized gains on marketable securities	Unrealized gains (losses) on cash flow hedges	Accumulated other comprehensive income
Balance as of December 31, 2018	$ 394	$ —	$ 330	$ 724
Other comprehensive income (loss)	(340)	18	(158)	(480)
Balance as of September 30, 2019	$ 54	$ 18	$ 172	$ 244

Comprehensive income (loss) is the total net earnings and all other non-owner changes in equity. Except for net income and unrealized gains and losses on cash flow hedges, the Company does not have any transactions or other economic events that qualify as comprehensive income (loss).

Earnout Liability

The Company has obligations to pay up to $31,400 in earnout payments in cash if certain future financial results are met.The earnout liability was valued using Level 3 inputs. The fair value of the earnout was determined by employing a Monte Carlo simulation in a risk-neutral framework. The underlying simulated variable includes recognized revenue. The recognized revenue volatility estimate was based on a study of historical asset volatility for a set of comparable public companies. The model includes other assumptions including the market price of risk, which was calculated as the weighted average cost of capital (WACC) less the long-term risk free rate. The earnout period for recognized revenue is each calendar year beginning with calendar year 2019 and ending on the calendar year in which the earnout consideration equals the earnout cap.

(amounts in thousands, except share and per share amounts)

The following table provides quantitative information about Level 3 inputs for fair value measurement of the earnout liability as of the acquisition date and September 30, 2019. Significant increases or decreases in these inputs in isolation could result in a significant impact on our fair value measurement:

Simulation input	**At acquisition August 9, 2019**	**As of September 30, 2019**
Revenue volatility	35.00 %	35.00 %
WACC	12.50 %	12.50 %
20-year risk free rate	2.03 %	1.94 %
Market price of risk	9.00 %	9.00 %

The reconciliation of the earnout liability measured and carried at fair value on a recurring basis is as follows:

	Three months ended September 30, 2019	**Nine months ended September 30, 2019**
Balance at beginning of period	$ —	$ —
Addition for acquisition	25,749	25,749
Balance at end of period	$ 25,749	$ 25,749

5. Balance sheet components

Cash, cash equivalents and marketable securities

The Company considers all short-term highly liquid investments with a maturity of three months or less to be cash equivalents. The Company's marketable debt securities are classified and accounted for as available-for-sale. Cash equivalents are recorded at cost plus accrued interest, which is considered adjusted cost, and approximates fair value. Marketable debt securities are included in cash equivalents and marketable securities based on the maturity date of the security. Short-term investments are included in marketable securities in the current period presentation.

The Company considers investments with maturities greater than three months, but less than one year, to be marketable securities. Investments are reported at fair value with realized and unrealized gains or losses reported in other income (expense), net.

The Company reviews its investments to identify and evaluate investments that have an indication of possible impairment. Factors considered in determining whether a loss is temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, and the Company's intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value. Credit losses and other-than-temporary impairments are declines in fair value that are not expected to recover and are charged to other income (expense), net. Cash, cash equivalents, and marketable securities consist of the following:

Cash and cash equivalents	**September 30, 2019**	**December 31, 2018**
Cash	$ 43,843	$ 33,671
Money market accounts	109,288	158,438
U.S. Treasury securities	3,000	4,525
Total cash and cash equivalents	$ 156,131	$ 196,634
Marketable securities		
Corporate bonds	$ 6,537	$ 13,613
U.S. Treasury securities	37,977	30,102
Total marketable securities	$ 44,514	$ 43,715

Accounts receivable and allowance for bad debts, returns, and adjustments

Accounts receivable are customer obligations due under normal sales and rental terms. The Company performs credit evaluations of the customers' financial condition and generally does not require collateral. The allowance for doubtful accounts is maintained at a level that, in management's opinion, is adequate to absorb potential losses related to accounts receivable and is based upon the Company's continuous evaluation of the collectability of outstanding balances. Management's evaluation takes into consideration such factors as past bad debt experience, economic conditions and information about specific receivables. The Company's evaluation also considers the age and composition of the outstanding amounts in determining their net realizable value.

(amounts in thousands, except share and per share amounts)

The allowance for doubtful accounts is based on estimates, and ultimate losses may vary from current estimates. As adjustments to these estimates become necessary, they are reported in general and administrative expense for sales revenue and as a reduction of rental revenue in the periods in which they become known. The allowance is increased by bad debt provisions, net of recoveries, and is reduced by direct write-offs.

The Company generally does not allow returns from providers for reasons not covered under its standard warranty. Therefore, provision for returns applies primarily to direct-to-consumer sales. This reserve is calculated based on actual historical return rates under the Company's 30-day return program and is applied to the related sales revenue for the last month of the quarter reported.

The Company also records an allowance for rental revenue adjustments which is recorded as a reduction of rental revenue and net rental accounts receivable balances. These adjustments result from contractual adjustments, audit adjustments, untimely claims filings, or billings not paid due to another provider performing same or similar functions for the patient in the same period, all of which prevent billed revenue from becoming realizable. The reserve is based on historical revenue adjustments as a percentage of rental revenue billed and unbilled during the related period.

When recording the allowance for doubtful accounts for sales revenue, the bad debt expense account (general and administrative expense account) is charged; when recording allowance for sales returns, the sales returns account (contra sales revenue account) is charged; and when recording the allowances for rental reserve adjustments and doubtful accounts, the rental revenue adjustments account (contra rental revenue account) is charged. Prior to the adoption of ASC 842, the Company separately recorded an allowance for doubtful accounts by charging bad debt expense, which is now recorded as part of rental revenue adjustments during the three and nine months ended September 30, 2019.

As of September 30, 2019 and December 31, 2018, included in accounts receivable on the consolidated balance sheets were earned but unbilled receivables of $580 and $589, respectively. These balances reflect gross unbilled receivables prior to any allowances for adjustments and write-offs. The Company consistently applies its allowance estimation methodology from period-to-period. The Company's best estimate is made on an accrual basis and adjusted in future periods as required. Any adjustments to the prior period estimates are included in the current period. As additional information becomes known, the Company adjusts its assumptions accordingly to change its estimate of the allowance.

Gross accounts receivable balance concentrations by major category as of September 30, 2019 and December 31, 2018 were as follows:

Gross accounts receivable	**September 30, 2019**	**December 31, 2018**
Rental (1)	$ 3,017	$ 3,406
Business-to-business and other receivables (2)	40,148	35,656
Total gross accounts receivable	$ 43,165	$ 39,062

(amounts in thousands, except share and per share amounts)

Net accounts receivable (gross accounts receivable, net of allowances) balance concentrations by major category as of September 30, 2019 and December 31, 2018 were as follows:

Net accounts receivable	September 30, 2019	December 31, 2018
Rental (1)	$ 2,362	$ 2,413
Business-to-business and other receivables (2)	38,818	34,628
Total net accounts receivable	$ 41,180	$ 37,041

(1) Rental includes Medicare, Medicaid/other government, private insurance and patient pay.

(2) Business-to-business receivables included one customer with a gross accounts receivable balance of $16,379 and $16,198 as of September 30, 2019 and December 31, 2018, respectively. This customer received extended payment terms through a direct financing plan offered. The Company also has a credit insurance policy in place, which allocated up to $20,000 in coverage as of September 30, 2019 and allocated up to $18,000 in coverage as of December 31, 2018 for this customer with a $400 deductible and 10% retention.

The following tables set forth the accounts receivable allowances as of September 30, 2019 and December 31, 2018:

Allowances - accounts receivable	September 30, 2019	December 31, 2018
Doubtful accounts (1)	$ 333	$ 693
Rental revenue adjustments (1)	446	438
Sales returns	1,206	890
Total allowances - accounts receivable	$ 1,985	$ 2,021

(1) Prior to the adoption of ASC 842, the Company separately recorded an allowance for doubtful accounts by charging bad debt expense. Upon adoption of ASC 842, such balances are recorded as part of rental revenue adjustments to report rental revenue at an expected collectible amount.

Concentration of credit risk

Financial instruments that potentially subject the Company to concentration of credit risk consist principally of cash, cash equivalents, marketable securities and accounts receivable. At times, cash account balances may be in excess of the amounts insured by the Federal Deposit Insurance Corporation (FDIC). However, management believes the risk of loss to be minimal. The Company performs periodic evaluations of the relative credit standing of these institutions and has not experienced any losses on its cash and cash equivalents to date. The Company has also entered into hedging relationships with a single counterparty to offset the forecasted Euro-based revenues. The credit risk has been reduced due to a net settlement arrangement whereby the Company is allowed to net settle transactions with a single net amount payable by one party to the other.

Concentration of customers and vendors

The Company primarily sells its products to traditional home medical equipment providers, distributors, and resellers in the United States and in foreign countries on a credit basis. The Company also sells its products direct-to-consumers on a primarily prepayment basis. No single customer represented more than 10% of the Company's total revenue for the nine months ended September 30, 2019, and one single customer represented more than 10% of the Company's total revenue for the nine months ended September 30, 2018. Two customers each represented more than 10% of the Company's net accounts receivable balance with accounts receivable balances of $16,379 and $6,504, respectively, as of September 30, 2019, and $16,198 and $4,155, respectively, as of December 31, 2018.

The Company currently purchases raw materials from a limited number of vendors, which resulted in a concentration of three major vendors. The three major vendors supply the Company with raw materials used to manufacture the Company's products. For the nine months ended September 30, 2019, the Company's three major vendors accounted for 22.1%, 13.8%, and 9.7%, respectively, of total raw material purchases. For the nine months ended September 30, 2018, the Company's three major vendors accounted for 19.8%, 12.6% and 9.6%, respectively, of total raw material purchases.

(amounts in thousands, except share and per share amounts)

A portion of revenue is earned from sales outside the United States. Approximately 70.3% and 77.2% of the non-U.S. revenue for the three months ended September 30, 2019 and September 30, 2018, respectively, were invoiced in Euros. Approximately 71.2% and 76.7% of the non-U.S. revenue for the nine months ended September 30, 2019 and September 30, 2018, respectively, were invoiced in Euros. A breakdown of the Company's revenue from U.S. and non-U.S. sources for the three and nine months ended September 30, 2019 and September 30, 2018, respectively, is as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
U.S. revenue	$ 73,269	$ 74,149	$ 222,167	$ 212,773
Non-U.S. revenue	18,492	21,142	60,859	58,807
Total revenue	$ 91,761	$ 95,291	$ 283,026	$ 271,580

Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using a standard cost method, including material, labor and manufacturing overhead, whereby the standard costs are updated at least quarterly to reflect approximate actual costs using the first-in, first-out (FIFO) method. The Company records adjustments at least quarterly to inventory for potentially excess, obsolete, slow-moving or impaired items. The Company recorded noncurrent inventory related to inventories that are expected to be realized or consumed after one year of $828 and $1,085 as of September 30, 2019 and December 31, 2018, respectively. Noncurrent inventories are primarily related to raw materials purchased in bulk to support long-term expected repairs to reduce costs and are classified in other assets. Inventories that are considered current consist of the following:

	September 30, 2019	December 31, 2018
Raw materials and work-in-progress	$ 31,565	$ 24,980
Finished goods	3,614	2,756
Less: reserves	(1,107)	(665)
Inventories, net	$ 34,072	$ 27,071

Property and equipment

Property and equipment are stated at cost. Depreciation and amortization are calculated using the straight-line method over the assets' estimated useful lives as follows:

Rental equipment	1.5-5 years
Manufacturing equipment and tooling	3-5 years
Computer equipment and software	2-3 years
Furniture and equipment	3-5 years
Leasehold improvements	Lesser of estimated useful life or remaining lease term

Expenditures for additions, improvements and replacements are capitalized and depreciated to a salvage value of $0. Repair and maintenance costs on rental equipment are included in cost of rental revenue on the consolidated statements of comprehensive income. Repair and maintenance expense, which includes labor, parts and freight, for rental equipment was $938 and $545 for the three months ended September 30, 2019 and September 30, 2018, respectively, and $2,301 and $1,734 for the nine months ended September 30, 2019 and September 30, 2018, respectively.

Included within property and equipment is construction in process, primarily related to the design and engineering of tooling, jigs and other machinery. In addition, this item also includes computer software or development costs that have been purchased but have not completed the final configuration process for implementation into the Company's systems. These items have not been placed in service; therefore, no depreciation or amortization was recognized for these items in the respective periods.

(amounts in thousands, except share and per share amounts)

Depreciation and amortization expense related to rental equipment and other property and equipment are summarized below for the three and nine months ended September 30, 2019 and September 30, 2018, respectively.

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Rental equipment	$ 1,482	$ 1,689	$ 4,781	$ 5,820
Other property and equipment	911	691	2,514	1,772
Total depreciation and amortization	$ 2,393	$ 2,380	$ 7,295	$ 7,592

Property and equipment and rental equipment with associated accumulated depreciation is summarized below as of September 30, 2019 and December 31, 2018, respectively.

Property and equipment	September 30, 2019	December 31, 2018
Rental equipment, net of allowances of $479 and $594, respectively	$ 39,821	$ 43,038
Other property and equipment	24,065	21,596
Property and equipment	63,886	64,634
Accumulated depreciation		
Rental equipment	31,038	31,813
Other property and equipment	12,960	10,480
Accumulated depreciation	43,998	42,293
Property and equipment, net		
Rental equipment, net of allowances of $479 and $594, respectively	8,783	11,225
Other property and equipment	11,105	11,116
Property and equipment, net	$ 19,888	$ 22,341

Long-lived assets

The Company accounts for the impairment and disposition of long-lived assets in accordance with ASC 360— *Property, Plant, and Equipment*. In accordance with ASC 360, long-lived assets to be held are reviewed for events or changes in circumstances that indicate that their carrying value may not be recoverable. The Company periodically reviews the carrying value of long-lived assets to determine whether or not impairment to such value has occurred. No impairments were recorded as of September 30, 2019 and September 30, 2018.

Goodwill

The changes in the carrying amount of goodwill for the nine months ended September 30, 2019 were as follows:

Balance as of December 31, 2018	$ 2,257
Translation adjustment	(104)
Acquisition	31,124
Balance as of September 30, 2019	$ 33,277

Intangible assets

There were no impairments recorded related to the Company's intangible assets as of September 30, 2019 and September 30, 2018. Amortization expense for intangible assets for the three months ended September 30, 2019 and September 30, 2018 was $1,269 and $332, respectively, and for the nine months ended September 30, 2019 and September 30, 2018 was $1,921 and $929, respectively.

(amounts in thousands, except share and per share amounts)

The following tables represent the changes in net carrying values of intangible assets as of the respective dates:

September 30, 2019	Average estimated useful lives (in years)	Gross carrying amount	Accumulated amortization	Net amount
Technology	10	$ 77,700	$ 971	$ 76,729
Licenses	10	185	162	23
Patents and websites	5	4,164	2,139	2,025
Customer relationships	4	1,310	792	518
Non-compete agreement	2.3	219	219	—
Commercials	2-3	664	423	241
Total		$ 84,242	$ 4,706	$ 79,536

December 31, 2018	Average estimated useful lives (in years)	Gross carrying amount	Accumulated amortization	Net amount
Licenses	10	$ 185	$ 155	$ 30
Patents and websites	5	4,164	1,640	2,524
Customer relationships	4	1,373	572	801
Non-compete agreement	2.3	229	154	75
Commercials	2-3	633	308	325
Total		$ 6,584	$ 2,829	$ 3,755

Annual estimated amortization expense for each of the succeeding fiscal years is as follows:

	September 30, 2019
Remaining 3 months of 2019	$ 2,226
2020	8,902
2021	8,617
2022	8,315
2023	7,770
Thereafter	43,706
	$ 79,536

Current liabilities

Accounts payable and accrued expenses as of September 30, 2019 and December 31, 2018 consisted of the following:

	September 30, 2019	December 31, 2018
Accounts payable	$ 18,469	$ 13,720
Accrued inventory (in-transit and unvouchered receipts) and trade payables	8,899	9,597
Accrued purchasing card liability	1,791	2,089
Accrued franchise, sales and use taxes	637	518
Other accrued expenses	622	862
Accounts payable and accrued expenses	$ 30,418	$ 26,786

(amounts in thousands, except share and per share amounts)

Accrued payroll as of September 30, 2019 and December 31, 2018 consisted of the following:

	September 30, 2019	December 31, 2018
Accrued bonuses	$ 301	$ 4,780
Accrued wages and other payroll related items	4,074	3,494
Accrued vacation	2,050	1,959
Accrued employee stock purchase plan deductions	275	1,174
Accrued payroll	$ 6,700	$ 11,407

6. Leases

The Company has entered into operating leases primarily for commercial buildings. These leases have terms which range from 2 years to 8 years, some of which include options to extend the leases for up to 5 years. There are no economic penalties for the Company to extend the lease, and it is not reasonably assured that the Company will exercise the extension options. Based on the present value of the lease payments for the remaining lease term of the Company's existing leases, the Company recognized operating lease right-of-use assets and operating lease liabilities of $6,418 on January 1, 2019. Operating lease right-of-use assets and liabilities commencing after January 1, 2019 are recognized at commencement date based on the present value of lease payments over the lease term. The operating leases do not contain material residual value guarantees or material restrictive covenants.

As a result of the MedSupport acquisition, the Company leases a property owned by a related party. Operating lease cost for the property was $8 and $23 for the three and nine months ended September 30, 2019, respectively, which was included in the total operating lease cost.

Information related to the Company's right-of-use assets and related operating lease liabilities were as follows:

		Nine months ended September 30, 2019
Cash paid for operating lease liabilities		$ 1,820
Operating lease cost		1,703
Non-cash right-of-use assets obtained in exchange for new operating lease obligations		6,418
Weighted-average remaining lease term		2.5 years
Weighted-average discount rate		3.8 %
Maturities of lease liabilities due in the 12-month period ending September 30,		
2020		$ 2,428
2021		1,668
2022		1,375
2023		1,223
2024		1,223
Thereafter		—
		7,917
Less imputed interest		(601)
	Total lease liabilities	$ 7,316
Operating lease liability - current		$ 2,193
Operating lease liability - noncurrent		$ 5,123
	Total lease liabilities	$ 7,316

(amounts in thousands, except share and per share amounts)

As of September 30, 2019, the Company has additional operating leases for its corporate headquarters in California and commercial and industrial space in Texas that have not yet commenced, with total minimum lease payments of $27,118. Lease payments for its corporate headquarters will increase annually by the lesser of the change, if any, in the Consumer Price Index of the Bureau of Labor Statistics of the U.S. Department of Labor or three and one-half percent (3.5%) at each annual adjustment date thereafter. Lease payments for the Company's commercial and industrial space in Texas will increase annually by two and one-half percent (2.5%) at each annual adjustment date thereafter. These operating leases will commence in 2020 with a lease term of 10-11 years. This table does not include lease payments that were not fixed at commencement or modification.

7. Earnings per share

Earnings per share (EPS) is computed in accordance with ASC 260—*Earnings per Share* and is calculated using the weighted-average number of common shares outstanding during each period. Diluted EPS assumes the conversion, exercise or issuance of all potential common stock equivalents (which can include dilution of outstanding stock options, restricted stock units and restricted stock awards) unless the effect is to reduce a loss or increase the income per share. For purposes of this calculation, common stock subject to repurchase by the Company, options, and other dilutive awards are considered to be common stock equivalents and are only included in the calculation of diluted earnings per share when their effect is dilutive.

Basic earnings per share is calculated using the Company's weighted-average outstanding common shares. Diluted earnings per share is calculated using the Company's weighted-average outstanding common shares including the dilutive effect of stock awards as determined under the treasury stock method.

The computation of EPS is as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Numerator—basic and diluted:				
Net income	$ 6,863	$ 16,432	$ 22,325	$ 41,800
Denominator:				
Weighted-average common shares - basic common stock (1)	21,840,473	21,324,256	21,802,468	21,175,286
Weighted-average common shares - diluted common stock	22,191,688	22,659,052	22,387,146	22,512,125
Net income per share - basic common stock	$ 0.31	$ 0.77	$ 1.02	$ 1.97
Net income per share - diluted common stock	$ 0.31	$ 0.73	$ 1.00	$ 1.86
Denominator calculation from basic to diluted:				
Weighted-average common shares - basic common stock (1)	21,840,473	21,324,256	21,802,468	21,175,286
Stock options and other dilutive awards	351,215	1,334,796	584,678	1,336,839
Weighted-average common shares - diluted common stock	22,191,688	22,659,052	22,387,146	22,512,125
Shares excluded from diluted weighted-average shares:				
Stock options	82,380	—	—	—
Restricted stock units and restricted stock awards	233,045	24,579	235,002	28,737
Shares excluded from diluted weighted-average shares	315,425	24,579	235,002	28,737

(1) Unvested restricted stock units and restricted stock awards are not included as shares outstanding in the calculation of basic earnings per share. Vested restricted stock units and restricted stock awards are included in basic earnings per share if all vesting and performance criteria have been met. Performance-based restricted stock units and restricted stock awards are included in the number of shares used to calculate diluted earnings per share as long as all applicable performance criteria are met, and their effect is dilutive. Restricted stock awards are eligible to receive all dividends declared on the Company's common shares during the vesting period; however, such dividends are not paid until the restrictions lapse.

The computations of diluted net income attributable to common stockholders exclude common stock options, restricted stock units, and restricted stock awards, which were anti-dilutive for the three and nine months ended September 30, 2019 and September 30, 2018.

8. Income taxes

The Company accounts for income taxes in accordance with ASC 740—*Income Taxes*. Under ASC 740, income taxes are recognized for the amount of taxes payable or refundable for the current period and deferred tax liabilities and assets are recognized for the future tax consequences of transactions that have been recognized in the Company's consolidated financial statements or tax returns. A valuation allowance is provided when it is more likely than not that some portion, or all, of the deferred tax asset will not be realized.

The Company accounts for uncertainties in income tax in accordance with ASC 740-10—*Accounting for Uncertainty in Income Taxes*. ASC 740-10 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This accounting standard also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

The Company recognizes interest and penalties on taxes, if any, within its income tax provision on its consolidated statements of comprehensive income.No significant interest or penalties were recognized during the periods presented.

The Company operates in several taxing jurisdictions, including U.S. federal, multiple U.S. states and the Netherlands. The statute of limitations has expired for all tax years prior to 2015 for federal and 2014 to 2015 for various state tax purposes. However, the net operating loss generated on the Company's federal and state tax returns in prior years may be subject to adjustments by the federal and state tax authorities.

The Company determined the income tax provision for interim periods using an estimate of the Company's annual effective tax rate, adjusted for discrete items arising in that quarter. In each quarter, the Company updates its estimated annual effective tax rate, and if the estimated annual effective tax rate changes, a cumulative adjustment is recorded in that quarter. The Company's quarterly income tax provision and quarterly estimate of the annual effective tax rate are subject to volatility due to several factors, including our ability to accurately predict the proportion of our income before provision for income taxes in multiple jurisdictions, the tax effects of our stock-based compensation, and the effects of its foreign entity.

9. Stockholders' equity

The Company has a 2002 Stock Incentive Plan (2002 Plan) as amended, under which the Company granted options to purchase shares of its common stock. As of September 30, 2019, options to purchase 333 shares of common stock remained outstanding under the 2002 Plan. The 2002 Plan was terminated in March 2012 in connection with the adoption of the 2012 Plan, and, accordingly, no new options are available for issuance under this plan. The 2002 Plan continues to govern outstanding awards granted thereunder.

The Company has a 2012 Equity Incentive Plan (2012 Plan) under which the Company granted options to purchase shares of its common stock. As of September 30, 2019, options to purchase 142,786 shares of common stock remained outstanding under the 2012 Plan. The 2012 Plan was terminated in connection with the Company's initial public offering in February 2014, and accordingly, no new options are available for issuance under this plan. The 2012 Plan continues to govern outstanding awards granted thereunder.

The Company has a 2014 Equity Incentive Plan (2014 Plan) that provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code, to the Company's employees and any parent and subsidiary corporation's employees, and for the grant of nonstatutory stock options, restricted stock, restricted stock units, restricted stock awards, stock appreciation rights, performance units and performance shares to its employees, directors and consultants and its parent and subsidiary corporations' employees and consultants.

As of September 30, 2019, awards with respect to1,087,876 shares of the Company's common stock were outstanding, and1,815,499 shares of common stock remained available for issuance under the 2014 Plan. The shares available for issuance under the 2014 Plan will be increased by any shares returned to the 2002 Plan, 2012 Plan and the 2014 Plan as a result of expiration or termination of awards (provided that the maximum number of shares that may be added to the 2014 Plan pursuant to such previously granted awards under the 2002 Plan and 2012 Plan is 2,328,569 shares). The number of shares available for issuance under the 2014 Plan also is increased annually on the first day of each fiscal year by an amount equal to the least of:

- 895,346 shares;

(amounts in thousands, except share and per share amounts)

- 4% of the outstanding shares of common stock as of the last day of the Company's immediately preceding fiscal year; or
- such other amount as the Company's board of directors may determine.

For 2019, no additional shares were added to the 2014 Plan share reserve pursuant to the provision described above.

Stock options

Options typically expire between seven and ten years from the date of grant and vest over one to four year terms. Options have been granted to employees, directors and consultants of the Company, as determined by the board of directors, at the deemed fair market value of the shares underlying the options at the date of grant.

The activity for stock options under the Company's stock plans is as follows:

	Options	Price per share	Weighted-average exercise price	Remaining weighted-average contractual terms (in years)	Per share average intrinsic value
Outstanding as of December 31, 2018	1,127,336	$0.75-$83.30	$ 34.89	3.84	$ 89.28
Granted	—	—	—		
Exercised	(82,053)	0.75-58.95	24.80		
Forfeited	(37,161)	38.54-58.95	44.58		
Expired	—	—	—		
Outstanding as of September 30, 2019	1,008,122	0.75-83.30	35.36	3.09	14.85
Vested and exercisable as of September 30, 2019	926,026	0.75-83.30	34.54	3.05	15.85
Vested and expected to vest as of September 30, 2019	1,002,824	$0.75-$83.30	$ 35.31	3.09	$ 14.91

The total intrinsic value of options exercised during the nine months ended September 30, 2019 and September 30, 2018 was $7,017 and $65,660, respectively. The unrecognized compensation expense related to non-vested stock-based compensation granted under the Plans as of September 30, 2019 was $1,118.

Stock incentive awards

The Company grants restricted stock units (RSUs) and restricted stock awards (RSAs) under the 2014 Plan (Stock Awards). The Stock Awards vest either based solely on the satisfaction of time-based service conditions or on the satisfaction of time-based service conditions combined with performance criteria. Stock Awards are subject to forfeiture if the holder's services to the Company terminate before vesting.

Stock Awards granted with only time-based service vesting conditions generally vest over a four-year service period, as defined in the terms of each award. Stock Awards that vest based on the satisfaction of time-based service conditions combined with performance criteria generally vest over a three-year service and performance period, based on performance criteria established at the time of the award. The portion of the Stock Award that is earned may equal or be less than the targeted number of shares subject to the Stock Award depending on whether the performance criteria are met.

(amounts in thousands, except share and per share amounts)

Stock Awards activity for the nine months ended September 30, 2019 are summarized below:

Restricted stock units	**Time-based**	**Performance and time-based**	**Total**	**Weighted-average grant date fair value per share**
Unvested restricted stock units outstanding as of December 31, 2018	58,589	8,739	67,328	$ 115.16
Granted	80,450	—	80,450	76.16
Vested	(21,257)	(4,366)	(25,623)	125.04
Forfeited/canceled	(10,935)	(1,239)	(12,174)	100.36
Unvested restricted stock units outstanding as of September 30, 2019 (1)	106,847	3,134	109,981	$ 85.97
Unvested and expected to vest restricted stock units outstanding as of September 30, 2019			101,117	$ 85.75

Restricted stock awards	**Time-based**	**Performance and time-based**	**Total**	**Weighted-average grant date fair value per share**
Unvested restricted stock awards outstanding as of December 31, 2018	36,937	47,821	84,758	$ 115.80
Granted	51,234	40,166	91,400	86.89
Vested	(10,986)	(15,732)	(26,718)	114.17
Forfeited/canceled	(7,093)	(9,627)	(16,720)	109.11
Unvested restricted stock awards outstanding as of September 30, 2019 (1)	70,092	62,628	132,720	$ 97.34
Unvested and expected to vest restricted stock awards outstanding as of September 30, 2019			78,627	$ 92.43

(1) Outstanding restricted stock units and restricted stock awards are based on the maximum payout of the targeted number of shares.

As of September 30, 2019, the unrecognized compensation cost related to unvested employee restricted stock units and restricted stock awards was $3,821, excluding estimated forfeitures. This amount is expected to be recognized over a weighted-average period of 2.8 years.

Employee stock purchase plan

The Company's 2014 Employee Stock Purchase Plan (ESPP) provides for the grant to all eligible employees an option to purchase stock under the ESPP, within the meaning Section 423 of the Internal Revenue Code. The ESPP permits participants to purchase common stock through payroll deductions of up to 15% of their eligible compensation, which includes a participant's base straight time gross earnings, incentive compensation, bonuses, overtime and shift premium, but exclusive of payments for equity compensation and other similar compensation. A participant may purchase a maximum of 1,500 shares during a purchase period. Amounts deducted and accumulated by the participant are used to purchase shares of the Company's common stock at the end of each six-month period. The purchase price of the shares will be 85% of the lower of the fair market value of the Company's common stock on the first trading day of each offering period or on the exercise date. The offering periods are currently approximately six months in length beginning on the first business day on or after March 1 and September 1 of each year and ending on the first business day on or after September 1 and March 1 approximately six months later.

As of September 30, 2019, a total of698,632 shares of common stock were available for sale pursuant to the ESPP.

(amounts in thousands, except share and per share amounts)

The number of shares available for sale under the ESPP is increased annually on the first day of each fiscal year by an amount equal to the least of:

- 179,069 shares;
- 1.5% of the outstanding shares of the Company's common stock on the last day of the Company's immediately preceding fiscal year; or
- such other amount as may be determined by the administrator.

For 2019, no additional shares were added to the ESPP share reserve pursuant to the provision described above.

Stock-based compensation

Stock-based compensation expense recognized for the three and nine months ended September 30, 2019 and September 30, 2018, respectively, was as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Stock-based compensation expense by type of award:				
Stock option plan awards	$ 590	$ 1,348	$ 2,513	$ 4,847
Restricted stock units and restricted stock awards	834	1,679	3,882	4,334
Employee stock purchase plan	141	189	535	602
Total stock-based compensation expense	$ 1,565	$ 3,216	$ 6,930	$ 9,783

Employee stock-based compensation expense was calculated based on awards of stock options, restricted stock units and restricted stock awards ultimately expected to vest based on the Company's historical award cancellations. The employee stock-based compensation expense recognized for the nine months ended September 30, 2019 and September 30, 2018 has been reduced for estimated forfeitures of stock option plan awards at a rate of 7.3% and 7.3%, respectively. ASC 718 – *Compensation-Stock Compensation* requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

For the three and nine months ended September 30, 2019 and September 30, 2018, respectively, stock-based compensation expense recognized under ASC 718, included in cost of revenue, research and development expense, sales and marketing expense, and general and administrative expense was as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Cost of revenue	$ 172	$ 187	$ 656	$ 719
Research and development	221	348	825	1,010
Sales and marketing	263	630	1,289	1,761
General and administrative	909	2,051	4,160	6,293
Total stock-based compensation expense	$ 1,565	$ 3,216	$ 6,930	$ 9,783

401(k) retirement savings plan

The Company maintains a 401(k) retirement savings plan for the benefit of eligible employees. Under the terms of this plan, eligible employees are able to make contributions to the plan on a tax-deferred basis. The Company began matching employees' contributions, effective January 1, 2017. The Company contributed $695, net of forfeitures, to the 401(k) plan for the nine months ended September 30, 2019 and $650, net of forfeitures, for the nine months ended September 30, 2018.

(amounts in thousands, except share and per share amounts)

10. Commitments and contingencies

Non-cancelable contractual obligations

The Company enters into non-cancelable contractual obligations for software licenses and maintenance agreements. As of September 30, 2019, the minimum aggregate payments due under specified non-cancelable contractual obligations are summarized as follows:

	Non-cancelable contractual obligations
Remaining 3 months of 2019	$ 144
2020	578
2021	457
2022	—
2023	—
Thereafter	—
	$ 1,179

Purchase obligations

The Company had approximately $61,700 of outstanding purchase orders with its outside vendors and suppliers as of September 30, 2019.

Warranty obligations

The following table identifies the changes in the Company's aggregate product warranty liabilities for the nine and twelve-month periods ended September 30, 2019 and December 31, 2018, respectively:

	September 30, 2019	December 31, 2018
Product warranty liability at beginning of period	$ 9,530	$ 6,171
Accruals for warranties issued	6,177	7,693
Adjustments related to preexisting warranties (including changes in estimates)	528	90
Settlements made (in cash or in kind)	(4,759)	(4,424)
Product warranty liability at end of period	$ 11,476	$ 9,530

Legislation and HIPAA

The healthcare industry is subject to numerous laws and regulations of federal, state and local governments. These laws and regulations include, but are not necessarily limited to, matters such as licensure, accreditation, government healthcare program participation requirements, reimbursement for patient services, and Medicare and Medicaid fraud and abuse. Government activity has continued with respect to investigations and allegations concerning possible violations of fraud and abuse statutes and regulations by healthcare providers. Violations of these laws and regulations could result in exclusion from government healthcare programs together with the imposition of significant fines and penalties, as well as significant repayments for patient services previously billed.

The Company believes that it is in compliance in all material respects with applicable fraud and abuse regulations and other applicable government laws and regulations. Compliance with such laws and regulations can be subject to future government review and interpretation as well as regulatory actions unknown or unasserted at this time. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) ensures health insurance portability, reduces healthcare fraud and abuse, guarantees security and privacy of health information, and enforces standards for health information. The Health Information Technology for Economic and Clinical Health Act (HITECH Act) imposes notification requirements of certain security breaches relating to protected health information. The Company believes that it complies in all material respects with the provisions of those regulations that are applicable to the Company's business.

Legal proceedings

Securities class action and derivative lawsuits

On March 6, 2019, plaintiff William Fabbri filed a lawsuit against Inogen, Scott Wilkinson, and Alison Bauerlein, in the United States District Court for the Central District of California on behalf of a purported class of purchasers of the Company's securities. On March 21, 2019, plaintiff Steven Friedland filed a substantially similar lawsuit against the same defendants in the same court. On May 20, 2019, the court issued an order consolidating the two lawsuits under the name *In re Inogen, Inc. Sec. Litig.,* No. 2:19-cv-01643-FMO-AGR, appointing Dr. John Vasil and Paragon Fund Management as lead plaintiffs, and appointing Robbins Geller Rudman & Dowd LLP and Glancy Prongay & Murray LLP as lead plaintiffs' counsel. On July 10, 2019, the lead plaintiffs filed a consolidated amended complaint on behalf of a purported class of purchasers of the Company's common stock between November 8, 2017 and May 7, 2019. The complaint generally alleges that the defendants failed to disclose that: (i) Inogen had overstated the true size of the total addressable market for its portable oxygen concentrators and had misstated the basis for its calculation of the total addressable market; (ii) Inogen had falsely attributed its sales growth to the strong sales acumen of its salesforce, rather than to deceptive sales practices; (iii) the growth in Inogen's domestic business-to-business sales to home medical equipment providers was inflated, unsustainable and was eroding direct-to-consumer sales; and (iv) Inogen's decision to focus on sales over rentals of portable oxygen concentrators harmed its ability to serve the Medicare market. The complaint seeks compensatory damages in an unspecified amount, costs and expenses, including attorneys' fees and expert fees, prejudgment and post-judgment interest and such other relief as the court deems proper. On August 30, 2019, the defendants filed a motion to dismiss the complaint. A hearing on the defendants' motion is scheduled for November 21, 2019. The Company intends to vigorously defend itself against these allegations.

On June 26, 2019, plaintiff Twana Brown filed a shareholder derivative lawsuit against Inogen, Scott Wilkinson, Alison Bauerlein, Benjamin Anderson-Ray, Scott Beardsley, R. Scott Greer, Raymond Huggenberger, Heath Lukatch, Loren McFarland, and Heather Rider in the United States District Court for the Central District of California. The complaint purports to bring claims on behalf of Inogen against the individual defendants for breaches of their fiduciary duties as directors and/or officers of Inogen, unjust enrichment, waste of corporate assets and violations of section 14(a) of the Securities Exchange Act of 1934, as amended. The complaint generally alleges similar claims to the securities class action. The complaint seeks compensatory damages in an unspecified amount, changes to the Company's corporate governance and internal procedures, costs and expenses, including attorneys' fees and expert fees, and such other relief as the court deems proper. On August 5, 2019, the court issued an order staying the derivative action pending the resolution of the motion to dismiss stage in *In re Inogen, Inc. Sec. Litig.* Between September 13, 2019 and October 31, 2019, five additional shareholder derivative complaints were filed in the United States District Court for the Central District of California and the United States District Court for the District of Delaware based on similar factual allegations. These lawsuits purport to bring claims on behalf of Inogen for breach of fiduciary duty, unjust enrichment, waste of corporate assets, abuse of control, gross mismanagement, insider trading and misappropriation of information, violations of sections 14(a) of the Securities Exchange Act of 1934, as amended, and contribution from certain of the individual defendants. The Company intends to vigorously defend these lawsuits.

Other litigation

In addition to the lawsuits discussed above, the Company is party to various legal proceedings arising in the normal course of business. The Company carries insurance, subject to specified deductibles under the policies, to protect against losses from certain types of legal claims. At this time, the Company does not anticipate that any of these other proceedings arising in the normal course of business will have a material adverse effect on the Company's business. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources, and other factors.

11. Foreign currency exchange contracts and hedging

As of September 30, 2019 and September 30, 2018, the Company's total non-designated and designated derivative contracts had notional amounts totaling approximately $1,176 and $2,955, respectively, and $4,105 and $27,310, respectively. These contracts were comprised of offsetting contracts with the same counterparty, each expires within one to six months. During the nine months ended September 30, 2019 and September 30, 2018, these contracts had, net of tax, an unrealized loss of $158 and an unrealized gain of $291, respectively.

The nonperformance risk of the Company and the counterparty did not have a material impact on the fair value of the derivatives. During the nine months ended September 30, 2019 and September 30, 2018, there were no ineffective portions relating to these hedges and the hedges remained effective through their respective settlement dates. As of September 30, 2019, the Company had five designated hedges and two non-designated hedges. As of September 30, 2018, the Company had thirty-nine designated hedges and seven non-designated hedges.

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

Forward-Looking Statements

The following discussion and analysis should be read together with our consolidated financial statements and the condensed notes to those statements included elsewhere in this Quarterly Report on Form 10-Q. This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are based on our management's beliefs and assumptions and on information currently available to our management. The forward-looking statements are contained principally in the section entitled "Risk Factors" and this Management's Discussion and Analysis of Financial Condition and Results of Operations. Forward-looking statements include, but are not limited to, statements concerning the following:

- information concerning our possible or assumed future cash flow, revenue, sources of revenue and results of operations, operating and other expenses;
- our assessment and expectations regarding reimbursement rates, future rounds of competitive bidding, and future changes in rental revenue;
- our expectations regarding regulatory approvals and government and third-party payor coverage and reimbursement;
- our ability to develop new products, improve our existing products and increase the value of our products, including the integration of non-invasive ventilation technology into our existing business;
- our expectations regarding Inogen Capital;
- our expectations regarding the timing of new products and product improvement launches, as well as product features and specifications;
- market share expectations, unit sales, business strategies, financing plans, expansion of our business, competitive position, industry environment, and potential growth opportunities;
- our expectations regarding the market size, market growth and the growth potential for our business;
- our ability to grow our business and enter new markets;
- our expectations regarding the average selling price and manufacturing costs of our products, including our expectations to continue to reduce average unit costs for our systems;
- our expectation to expand our sales and marketing channels, including through efforts to focus on improving the productivity of our sales team, changing our rental intake criteria, creating a separate rental intake team, and expanding our advertising campaigns;
- our expectations with respect to our European and U.S. facilities and our expectations with respect to our contract manufacturer in Europe;
- our expectations regarding tariffs being imposed by the United States on certain imported materials and products;
- our ability to successfully acquire and integrate companies and assets, including our recent acquisition of New Aera;
- our expectations regarding the impact and implementation of trade regulations on our supply chain;
- our expectations regarding excess tax benefits or deficiencies from stock-based compensation;
- our expectations of future accounting pronouncements or changes in our accounting policies;
- our assessments and estimates of our effective tax rate;
- our internal control environment;
- the effects of seasonal trends on our results of operations and estimated hiring plans;
- our expectations regarding the manufacturing ramp-up, international launch, and market acceptance of our Inogen One G5 portable oxygen concentrator;
- our expectation that our existing capital resources and the cash to be generated from expected product sales and rentals will be sufficient to meet our projected operating and investing requirements for at least the next twelve months; and
- the effects of competition.

Forward-looking statements include statements that are not historical facts and can be identified by terms such as “anticipates,” “believes,” “could,” “seeks,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “should,” “will,” “would,” or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. We discuss these risks in greater detail in Part II, Item 1A, “Risk Factors,” elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the future events and trends discussed in this Quarterly Report on Form 10-Q may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

The forward-looking statements made in this Quarterly Report on Form 10-Q relate only to events as of the date on which the statements are made. Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

This Quarterly Report on Form 10-Q also contains estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

“Inogen,” “Inogen One,” “Inogen One G2,” “Inogen One G3,” “G4,” “G5,” “Oxygenation,” “Live Life in Moments, not Minutes,” “Never Run Out of Oxygen,” “Oxygen Therapy on Your Terms,” “Oxygen.Anytime.Anywhere,” “Reclaim Your Independence,” “Intelligent Delivery Technology,” “Inogen At Home,” the Inogen design, “TIDAL ASSIST,” “TAV,” and “SIDEKICK” are registered trademarks with the United States Patent and Trademark Office of Inogen, Inc. We own pending applications for “MOMENTUM TRANSFER” and “SONIC BLADE” with the United States Patent and Trademark Office. We own trademark registrations for the mark “Inogen” in Australia, Canada, South Korea, Mexico, Europe (European Union Registration), India, Israel, Japan, New Zealand, Norway, Turkey, Singapore, and Switzerland. We own pending applications for the mark “Inogen” in Argentina, Brazil, Chile, China, Columbia, Ecuador, Iceland, Kuwait, Malaysia, Paraguay, Peru, South Africa and Uruguay. We own a trademark registration for the mark “イノジェン” in Japan. We own trademark applications for the marks “印诺真” and “艾诺根” in China. We own trademark registrations for the mark “Inogen One” in Australia, Canada, China, South Korea, Mexico, and Europe (European Union Registration). We own a trademark registration for the mark “Satellite Conserver” in Canada. We own a trademark registration for the mark “Inogen At Home” in Europe (European Union Registration). We own trademark registrations for the mark “G4” in Europe (European Union Registration) and the United Kingdom. We own trademark applications for the mark “G5” in Europe (European Union Registration) and the United Kingdom. We own trademark applications for the Inogen design in Bolivia and China. Other service marks, trademarks, and trade names referred to in this Quarterly Report on Form 10-Q are the property of their respective owners.

In this Quarterly Report on Form 10-Q, “we,” “us” and “our” refer to Inogen, Inc. and its subsidiaries.

The following discussion of our financial condition and results of operations should be read together with our consolidated financial statements and the accompanying condensed notes to those statements included elsewhere in this document. Also, forward-looking statements represent our management’s beliefs and assumptions only as of the date of this Quarterly Report on Form 10-Q.

Critical accounting policies and significant estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements which have been prepared in accordance with generally accepted accounting principles in the United States of America, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and related disclosure of contingent assets and liabilities, revenue and expenses at the date of the financial statements. Generally, we base our estimates on historical experience and on various other assumptions in accordance with U.S. GAAP that we believe to be reasonable under the circumstances. Actual results may differ from these estimates and such differences could be material to the financial position and results of operations.

There have been no material changes in our critical accounting policies and estimates in the preparation of our consolidated financial statements during the three and nine months ended September 30, 2019 compared to those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, as filed with the SEC on February 26, 2019.

Overview

We are a medical technology company that primarily develops, manufactures and markets innovative portable oxygen concentrators used to deliver supplemental long-term oxygen therapy to patients suffering from chronic respiratory conditions. Long-term oxygen therapy is defined as the provision of oxygen therapy for use at home in patients who have chronic low blood oxygen levels (hypoxemia). Traditionally, these patients have relied on stationary oxygen concentrator systems for use in the home and oxygen tanks or cylinders for mobile use, which we call the delivery model. The tanks and cylinders must be delivered regularly and have a finite amount of oxygen, which requires patients to plan activities outside of their homes around delivery schedules and a finite oxygen supply. Additionally, patients must attach long, cumbersome tubing to their stationary concentrators simply to enable mobility within their homes. Our proprietary Inogen One® systems concentrate the air around the patient to offer a single source of supplemental oxygen anytime, anywhere with a portable device weighing as little as approximately 2.8 pounds with a single battery. We believe our Inogen One systems reduce the patient's reliance on stationary concentrators and scheduled deliveries of tanks with a finite supply of oxygen, thereby improving patient quality of life and fostering mobility.

In May 2004, we received 510(k) clearance from the U.S. Food and Drug Administration, or the FDA, for our Inogen One portable oxygen concentrator. From our launch of the Inogen One in 2004, through 2008, we derived our revenue almost exclusively from sales to healthcare providers and distributors. In December 2008, we acquired Comfort Life Medical Supply, LLC in order to secure access to the Medicare rental market and began accepting Medicare reimbursement for our oxygen solutions in certain states. At the time of the acquisition, Comfort Life Medical Supply, LLC had an active Medicare billing number but few other assets and limited business activities. In January 2009, following the acquisition of Comfort Life Medical Supply, LLC, we initiated our direct-to-consumer rental strategy and began renting Inogen One systems directly to patients and building our Medicare rental business in the United States. In April 2009, we became a Durable, Medical Equipment, Prosthetics, Orthotics, and Supplies accredited Medicare supplier by the Accreditation Commission for Health Care. We believe that we were the first oxygen therapy manufacturer to employ a direct-to-consumer marketing strategy, meaning we advertise directly to patients, process their physician paperwork, and provide clinical support as needed, which we believe has contributed to our market leadership position in the portable oxygen concentrator market. While other manufacturers have also begun direct-to-consumer marketing campaigns to drive patient sales, we believe we are the only portable oxygen concentrator manufacturer that employs a direct-to-consumer rental strategy in the United States, meaning we bill Medicare or insurance on the consumer's behalf.

We derive the majority of our revenue from the sale and rental of our Inogen One systems and related accessories to patients, insurance carriers, home healthcare providers and distributors, including our private label partner. We sell multiple configurations of our Inogen One and Inogen At Home systems with various batteries, accessories, warranties, power cords and language settings. We also rent our products to Medicare beneficiaries and patients with other insurance coverage to support their long-term oxygen needs as prescribed by a physician as part of a care plan. Our goal is to design, build and market oxygen solutions that redefine how long-term oxygen therapy is delivered. To accomplish this goal and to grow our revenue, we intend to:

- *Expand our domestic sales and marketing channels.* During the year ended December 31, 2018, we increased our inside sales representatives to 446 from 263 as of December 31, 2017 in support of our direct-to-consumer domestic sales. We also opened a new facility in Cleveland, Ohio in the third quarter of 2017. In that facility, we had 333 employees as of December 31, 2018. We have been and plan to continue focusing on improving the productivity of our sales team, while also creating and scaling a separate rental intake team that is focused exclusively on new rental additions to drive overall sales productivity. However, the level of attrition was higher than expected in the nine months ended September 30, 2019 as many sales representatives were unable to meet our sales targets. The sales representative average headcount was down approximately 40% for the three months ended September 30, 2019 compared to the three months ended September 30, 2018 and down significantly compared to the headcount at December 31, 2018. We have restarted our sales capacity expansion efforts with new sales representatives hired across all three facilities in the third quarter of 2019; however, we are still experiencing net attrition in our total sales headcount. Going forward, we plan to hire at a more controlled pace than we did in 2018 to expand sales capacity, but we expect sales representative headcount to be down significantly at year-end 2019 compared to year-end 2018. Given the reduced sales representative headcount, we expect to realize slower growth in direct-to-consumer sales in 2019 and the first half of 2020. We believe we are making the necessary changes to improve sales management infrastructure to support sales representative training and onboarding and have made key changes to management personnel. We have seen increased productivity of our sales representatives in the third quarter of 2019 and believe we will see this increase through the remainder of 2019 and 2020; however, we also expect increased marketing spend.

While we have slightly changed our rental intake criteria to increase net rental patient additions, since rental reimbursement revenue is recognized monthly, compared to the mostly immediate revenue recognition of direct-to-consumer sales, we do not expect a meaningful rental revenue benefit from increasing new rental setups until next year and beyond and expect rental revenue to continue to decline in 2019 as compared to 2018. While we expect rental revenue to take time to ramp, we believe we can improve our close rate and lead usage by slightly altering our intake criteria for rental patients. Historically our minimum billable months threshold was high, which limited the number of patients we accepted through insurance. We have lowered this monthly threshold to improve sales representative productivity and lead usage. In focusing more on rentals, this could have an adverse impact on near term sales revenue in the U.S., but we believe it will lead to increased marketing conversion rates and increased portable oxygen concentrator adoption. Our patients on service slightly declined during the first three quarters of 2019; however, we believe patients on service will begin to increase in the first-half of 2020 and continue to increase throughout the year.

We are also focused on building our domestic business-to-business partnerships, including relationships with distributors, key accounts, resellers, our private label partner, and traditional home medical equipment (HME) providers. We launched Inogen Capital, an HME-focused financing program, in the fourth quarter of 2018, which we believe will support HME providers in securing financing to help convert their businesses to a non-delivery portable oxygen concentrator business model. Inogen Capital is financed through a third party to provide direct lease financing between the third party and our HME customer with no recourse obligation to us for events of default. We believe Inogen Capital will be a valuable tool for smaller homecare providers that have historically been capital constrained.

While HME providers have been adopting our products, we expect growth will be challenged due to difficulties in their ongoing efforts to restructure from the delivery model business model to the portable model, lack of access to available credit, and provider capital expenditure constraints. Additionally, we believe providers will be more conservative with investment in the next year due to pending competitive bidding Round 2021 and the lack of visibility to who will win contracts and any change in reimbursement rates. Home medical equipment providers have also communicated to us that they continue to be subject to capital constraints and certain providers have indicated that they intend to reduce or limit purchases in the future. We also have seen a slowing of growth in orders from our internet reseller partners, which may limit our growth prospects.

- *Invest in our product offerings to develop innovative products* We expended $2.6 million and $2.1 million for the three months ended September 30, 2019 and September 30, 2018, respectively, and $5.8 million and $5.3 million for the nine months ended September 30, 2019 and September 30, 2018, respectively, in research and development expenses, and we intend to continue to make such investments in the foreseeable future. We launched our fifth-generation portable oxygen concentrator, the Inogen One G5, in the second quarter of 2019 in our direct-to-consumer channel, in the third quarter of 2019 in our domestic business-to-business channel, and in our international business-to-business channel in the fourth quarter of 2019 after the application of CE marking to the product. However, some markets require additional regulatory or reimbursement clearances to release the product, which is in process. The Inogen One G5 weighs 4.7 pounds, and produces 1,260 ml per minute of oxygen output, with very quiet operation at 38 dBA and our longest battery life at 6.5 hours for a single battery and up to 13 hours for a double battery. We estimate that the Inogen One G5 is suitable for 95% of ambulatory long-term oxygen therapy patients based on our analysis of the patients who have contacted us and their clinical needs. We expect the Inogen One G5 to obsolete the Inogen One G3 over the intermediate term. At volume, we expect the Inogen One G5 to be our lowest cost product to manufacture. The Inogen One G5 was greater than 40% of total domestic shipments in the third quarter of 2019, showing the strong demand for this product from both patients and providers.

We launched our fourth-generation portable oxygen concentrator, the Inogen One G4, in May 2016. The Inogen One G4 weighs 2.8 pounds, versus 4.8 pounds for our Inogen One G3, and is approximately half the size of the Inogen One G3. The sound level is 40 dBA at setting 2 and it produces up to 630 ml per minute of oxygen output.

We launched Inogen Connect, our new connectivity platform on our Inogen One G4 system in the fourth quarter of 2018 in the direct-to-consumer channel and in the domestic business-to-business channel in the first quarter of 2019, and we launched Inogen Connect in our Inogen One G5 at launch of the product in the United States. Inogen Connect is compatible with Apple and Android platforms and includes patient features such as purity status, battery life, product support functions, notification alerts, and remote software updates. We believe home oxygen providers will also find features such as remote troubleshooting, equipment health checks, and location tracking to help drive operational efficiencies when transitioning away from the oxygen tank delivery model.

In August 2019, we acquired New Aera, Inc. (New Aera). New Aera's patented and FDA cleared Tidal Assist® Ventilator (TAV®) system is designed to deliver increased flow and pressure from an approximately 4-ounce pocket-size unit, features a state-of-the-art nasal pillow interface, and is compatible with certain oxygen concentrators, oxygen cylinders, wall gas, and certain medical air sources. TAV therapy with oxygen has been clinically demonstrated during periods of exercise to reduce breathlessness, increase exercise endurance, and improve oxygen saturation for patients suffering from certain chronic lung disease compared to oxygen therapy alone. We plan to incorporate the TAV technology directly into our Inogen One portable oxygen concentrators and make the SideKick TAV product compatible with our Inogen At Home stationary concentrator to continue to advance patient preference and maintain our technology leadership position in the long-term oxygen therapy market.

In addition, we plan to use this technology as a platform to expand our total addressable market into the high-growth non-invasive ventilation (NIV) market, where we believe there is a significant worldwide untreated market opportunity. We believe this market could undergo disruption similar to oxygen given the pending reimbursement changes due to the inclusion of this category in competitive bidding round 2021 and the immobile nature of legacy NIV product offerings. The monthly Medicare reimbursement rate is significantly higher for NIV products than oxygen therapy at a minimum of $934 a month. Also, effective January 1, 2019, a new Medicare HCPCS code has been added to allow billing for a multi-function ventilator that includes both ventilation and oxygen. We are targeting to launch a product for this purpose in 2021.

It is uncertain if the current product acquired from New Aera, the SideKick TAV, will be reimbursable in its current configuration under HCPCS code E0466. We requested confirmation on the assigned HCPCS codes for the SideKick TAV system from the Pricing, Data Analysis, and Coding (PDAC) Contractor in August 2019 following the closing of the New Aera transaction. In August 2019, we received positive confirmation that this product was assigned HCPCS code E0466. However, in September 2019, we received a revised communication that the product was assigned HCPCS code E1390 and E1352. In September 2019, we appealed to the Centers for Medicare and Medicaid Services but have not received a response yet. If we do not receive revised coding, it could limit this product's adoption by home medical equipment providers and also our direct rentals until revisions are made to the product to meet the coding requirements. For a discussion of certain significant risks relating to the SideKick TAV reimbursement and the upcoming round of competitive bidding, please see the risk factor entitled "The competitive bidding process under Medicare could negatively affect our business and financial condition."

- *Increase international business-to-business adoption.* Although our main growth opportunity remains portable oxygen concentrator adoption in the United States given what we still believe is a relatively low penetration rate, we are keenly aware of the large international market opportunity. In order to take advantage of these international opportunities, we have built out an infrastructure over the past few years, which includes sales in 46 international countries and a contract manufacturing partner, Foxconn, located in the Czech Republic to support European sales volumes. Further, we are also in the process of developing regulatory and sales pathways to capture opportunities in new and emerging markets. We expect to enter the Chinese market by year-end 2020. Over time, as the U.S. and European markets mature, our growth will depend on our ability to drive portable oxygen concentrator adoption in emerging markets, where limited oxygen therapy treatment exists today. However, growth may also be limited by currency fluctuations, capital expenditure constraints, ongoing restructuring challenges, and tenders.

We have been developing and refining the manufacturing of our Inogen One systems since 2004. While nearly all of our manufacturing and assembly processes were originally outsourced, assembly of the compressors, sieve beds, concentrators and certain manifolds were brought in-house in order to improve quality control and reduce cost. In support of our European sales, we established a physical presence in Europe by acquiring our former distributor, MedSupport Systems B.V. (MedSupport), on May 4, 2017 and began production of our Inogen One G3 concentrators in the fourth quarter of 2017 using a contract manufacturer located in the Czech Republic to improve our ability to service our European customers. We also plan to start manufacturing of the Inogen One G5 at our contract manufacturer in the first half of 2020. We expect to maintain our assembly operations for our Inogen One concentrators and Inogen At Home concentrators at our facilities in Richardson, Texas and Goleta, California.

We also use lean manufacturing practices to maximize manufacturing efficiency. We rely on third-party manufacturers to supply several components of our Inogen One and Inogen At Home systems. We typically enter into supply agreements for these components that specify quantity and quality requirements and delivery terms. In certain cases, these agreements can be terminated by either party upon relatively short notice. We have elected to source certain key components from single sources of supply, including our batteries, motors, valves, and some molded plastic components. We believe that maintaining a single source of supply allows us to control production costs and inventory levels and to manage component quality. However, any reduction or halt in supply from one of these single-source suppliers could limit our ability to manufacture our products or devices until a replacement supplier is found and qualified.

Historically, we have generated a majority of our revenue from sales and rentals to customers in the United States. In the three months ended September 30, 2019 and September 30, 2018, approximately 20.2% and 22.2%, respectively, and 21.5% and 21.6% for the nine months ended September 30, 2019 and September 30, 2018, respectively, of our total revenue was from sales to customers outside the United States, primarily in Europe. Approximately 70.3% and 77.2% of the non-U.S. revenue for the three months ended September 30, 2019 and September 30, 2018, respectively, and 71.2% and 76.7% for the nine months ended September 30, 2019 and September 30, 2018, respectively, was invoiced in Euros with the remainder invoiced in United States dollars. We sell our products in 46 countries outside the United States through our wholly owned subsidiary, distributors or directly to large "house" accounts, which include gas companies, HME oxygen providers, and resellers. In those instances, we sell to and bill the distributor or "house" accounts directly, leaving responsibility for the patient billing, support and clinical setup to the local provider.

Our total revenue was $91.8 million and $95.3 million for the three months ended September 30, 2019 and September 30, 2018, respectively, and $283.0 million and $271.6 million for the nine months ended September 30, 2019 and September 30, 2018, respectively. The decrease in total revenue in the three months ended September 30, 2019 was primarily due to a decline in international business-to-business sales. The increase in total revenue in the nine months ended September 30, 2019 was primarily due to growth in sales revenue associated with the increases in direct-to-consumer and international business-to-business sales, partially offset by a decline in domestic business-to-business sales. We generated net income of $6.9 million and $16.4 million for the three months ended September 30, 2019 and September 30, 2018, respectively, and $22.3 million and $41.8 million for the nine months ended September 30, 2019 and September 30, 2018, respectively. We generated Adjusted EBITDA of $12.8 million and $16.3 million in the three months ended September 30, 2019 and September 30, 2018, respectively, and $40.8 million and $50.8 million for the nine months ended September 30, 2019 and September 30, 2018, respectively, (see "Non-GAAP financial measures" for reconciliations between U.S. GAAP and non-GAAP results). As of September 30, 2019, our retained earnings were $82.8 million.

Sales revenue

Our future financial performance will be driven in part by the growth in sales of our Inogen One systems, and, to a lesser extent, sales of batteries, other accessories, sales of our Inogen At Home stationary oxygen concentrators and sales of the SideKick non-invasive ventilator. We plan to grow our system sales in the coming years through multiple strategies including: expanding our direct-to-consumer sales efforts through hiring additional sales representatives, productivity improvements in our direct-to-consumer sales team, creating and scaling a separate rental intake team who will focus exclusively on new rental additions to drive overall sales productivity, investing in consumer awareness through increased marketing efforts, expanding our sales infrastructure and efforts outside of the United States, expanding our business-to-business sales through key partnerships, and enhancing our product offerings through additional product launches. While HME providers continue to convert and purchase portable oxygen concentrators, we expect growth could be challenged due to ongoing restructure efforts, lack of access to available credit, and provider capital expenditure constraints. Additionally, we believe providers will be more conservative with investment in the next year due to pending competitive bidding Round 2021 and the lack of visibility to who will win contracts and any change in reimbursement rates. Even though we still believe the market is underpenetrated and patient demand is strong, we have lowered growth expectations for HME providers and internet resellers given these challenges and uncertainties. As our product offerings grow, we solicit feedback from our customers and focus our research and development efforts on continuing to improve patient preference and reduce the total cost of the product in order to further drive sales of our products.

Our direct-to-consumer sales process involves numerous interactions with the individual patient, the physician and the physician's staff, and includes an in-depth analysis and review of our product, the patient's diagnosis and prescribed oxygen therapy, including procuring an oxygen prescription. The patient may consider whether to finance the product through an Inogen-approved third-party or purchase the equipment. Product is not deployed until both the prescription and payment are received. Once a full system is deployed, the patient has 30 calendar days to return the product, subject to the payment of a minimal processing and handling fee. Approximately 7-12% of consumers who purchase a system return the system during this 30-day return period.

Our business-to-business efforts are focused on selling to distributors, HME oxygen providers, our private label partner and resellers, who are based inside and outside of the United States. This process involves interactions with various key customer stakeholders including sales, purchasing, product testing, and clinical personnel. Businesses that have patient demand that can be met with our oxygen concentrator systems place purchase orders to secure product deployment. This may be influenced based on outside factors, including the result of tender offerings, changes in insurance plan coverage, business restructuring activities toward a non-delivery oxygen model, capital constraints, and overall changes in the net long-term oxygen therapy patient population. Products are shipped freight on board (FOB) Inogen dock domestically, and based on financial history and profile, businesses may either prepay or receive extended payment terms. Products are shipped both FOB Inogen dock and Delivery Duty Paid (DDP) for certain international shipments depending on the shipper used. DDP shipments are Inogen's property until title has transferred which is upon duty being paid and delivered to the customer. As a result of these factors, product purchases can be subject to changes in demand by customers.

We sold approximately 51,600 systems in the three months ended September 30, 2019 compared to 52,400 systems for the same period in 2018. We sold approximately 158,500 systems in the nine months ended September 30, 2019 compared to 152,500 systems for the same period in 2018. Management focuses on system sales as an indicator of current business success.

Rental revenue

Our direct-to-consumer rental process involves numerous interactions with the individual patient, the physician and the physician's staff. The process includes an in-depth analysis and review of our product, the patient's diagnosis and prescribed oxygen therapy, and their medical history to confirm the appropriateness of our product for the patient's oxygen therapy and compliance with Medicare and private payor billing requirements, which often necessitates additional physician evaluation and/or testing as well as a Certificate of Medical Necessity. Once the product is deployed, the patient receives direction on product use and may receive a clinical titration from our licensed staff to confirm the product meets the patient's medical oxygen needs prior to billing. As a result, the time from initial contact with a patient to billing can vary significantly and be up to one month or longer.

We expect rental revenue to modestly decline in 2019 as compared to 2018 in spite of the slight change to our intake criteria on rental patients that we made in the second quarter of 2019, primarily due to fewer new rental setups due to reduced sales capacity, an additional 3.9% reduction in Medicare reimbursement rates for our products effective January 1, 2019, and the adoption of ASU No. 2018-19 that requires reclassification of rental bad debt expense to be charged to rental revenue. We expect rental revenue to increase modestly in 2020 as we scale the rental intake team and increase new rental setups. We plan to add new rental patients on service in future periods through multiple strategies, including expanding a rental intake team focused on adding rental patients, expanding our direct-to-consumer marketing efforts, investing in patient and physician awareness, and securing additional insurance contracts. However, insurance reimbursement rates are expected to decline. In addition, patients may come off our services due to death, a change in their condition, a change in location, a change in healthcare provider or other factors. In each case, we maintain asset ownership and can redeploy assets as appropriate following such events. Given the length and uncertainty of our patient acquisition cycle and potential returns we have experienced in the past, and likely will experience in the future, fluctuations in our net new patient setups will occur on a period-to-period basis and we may experience negative net patient additions in future periods. At this time, we do not plan to offer our Inogen One G5 and Inogen One G4 systems to rental patients but will continue to use the Inogen One G3 system as the primary ambulatory solution deployed in our rental fleet. We plan to use the Inogen One G5 system in our rental fleet once production of the Inogen One G3 system is discontinued.

A portion of rentals include a capped rental period during which no additional reimbursement is allowed unless additional criteria are met. In this scenario, the ratio of billable patients to total patients on service is critical to maintaining rental revenue growth as patients on service increases. Medicare has noted a certain percentage of beneficiaries, approximately 25%, based on their review of Medicare claims, reach the 36th month of eligible reimbursement and enter the capped rental period. Our capped patients as a percentage of total patients on service was approximately 20.2% as of September 30, 2019 compared to approximately 18.1% as of September 30, 2018. The percentage of capped patients may fluctuate over time as new patients come on service, patients come off of service before and during the capped rental period, and existing patients enter the capped rental period.

We had approximately 25,600 and 27,500 oxygen rental patients as of September 30, 2019 and September 30, 2018, respectively. Management focuses on patients on service as a leading indicator of likely future rental revenue; however, actual rental revenue recognized is subject to a variety of other factors, including reimbursement levels by payor, patient location, the number of capped patients, write-offs for uncollectable balances, and rental revenue adjustments.

Reimbursement

We rely heavily on reimbursement from Medicare, and secondarily, from private payors, including Medicare Advantage plans, Medicaid and patients for our rental revenue. For the three and nine months ended September 30, 2019, approximately 81.4% and 81.0%, respectively, of our rental revenue was derived from Medicare's traditional fee-for-service reimbursement programs. The U.S. list price for our stationary oxygen rentals (HCPCS E1390) is $260 per month and the U.S. list price for our oxygen generating portable equipment (OGPE) rentals (HCPCS E1392) is $70 per month. The average Medicare reimbursement rates in competitive bidding areas in 2018 were $77.03 a month for E1390 and $36.06 a month for E1392. These are the two primary codes that we bill to Medicare and other payors for our oxygen product rentals.

Effective January 1, 2019, Medicare beneficiaries may receive durable medical equipment from any Medicare-enrolled supplier until new contracts are in effect under competitive bidding Round 2021, which is expected to begin on January 1, 2021. Reimbursement rates between January 1, 2019 and December 31, 2020 are set at the current pricing level throughout the United States for all Medicare patients, subject to Consumer Price Index (CPI) and budget neutrality adjustments. Pricing in competitive bidding areas is subject to annual CPI adjustments beginning in 2019 until Round 2021 begins. However, Centers for Medicare and Medicaid Services (CMS) also changed the calculation on budget neutrality to apply the offset to all oxygen and oxygen equipment classes beginning January 1, 2019 instead of previously only applying these adjustments to stationary oxygen equipment and oxygen contents. Based on these CPI and budget neutrality adjustments, effective January 1, 2019, the average Medicare reimbursement rates were reduced to $72.92 a month for E1390 and $35.72 a month for E1392 in these regions that were previously subject to competitive bidding. Medicare also established new payment classes for liquid oxygen equipment and high flow portable liquid oxygen contents effective January 1, 2019.

In Round 2021 of durable medical equipment, prosthetics, orthotics and supplies (DMEPOS) competitive bidding program, there have been some revisions to the bidding methodology including bid surety bond requirements, lead item pricing, and setting reimbursement rates at the maximum winning bid rate instead of the median winning bid rate. In the prior round of competitive bidding, the product category where our products fell was respiratory equipment and related supplies and accessories, which included oxygen equipment, continuous positive airway pressure (CPAP) devices and respiratory assist devices (RADs) and related supplies and accessories. In Round 2021 of the competitive bidding program, oxygen and oxygen equipment is its own product category and the lead item has been established as E1390. However, due to the lead item pricing methodology based on the 2015 standard Medicare fee schedule, E1392 reimbursement rates could be reduced significantly (we estimate approximately 42%) even if E1390 reimbursement rates do not change. This would lead to combined E1390 plus E1392 reimbursement rates to decrease by approximately 15%. The bidding window closed on September 18, 2019 and we bid in 129 of the 130 total Competitive Bidding Areas (CBAs). It is unclear how pricing will be impacted due to these new bids. We expect contracts and pricing to be announced in 2020.

In addition to regional pricing, CMS imposed different pricing on “frontier states” and rural areas. CMS defines frontier states as states where more than 50% of the counties in the state have a population density of 6 people or less per square mile and rural states are defined as states where more than 50% of the population lives in rural areas per census data. Current frontier states include MT, ND, SD and WY; rural states include ME, MS, VT and WV; and non-contiguous United States areas include AK, HI, Guam and Puerto Rico. Effective June 1, 2018 through December 31, 2020, for frontier and rural states, frontier and rural zip codes in non-frontier/rural states and non-contiguous United States areas, the single payment amount will be 50/50 blended reimbursement rates based on an average of the pre-competitive bidding reimbursement rates and the current average reimbursement rates to account for higher servicing costs in these areas. In 2019, this rate is $134.71 a month for E1390 and $44.32 a month for E1392. We estimate that approximately 15% of our patients are eligible to receive the higher reimbursement rates based on the geographic locations of our current patient population.

Cumulatively in previous rounds of competitive bidding, we were offered contracts for a substantial majority of CBA and product categories for which we submitted bids. As of January 1, 2017, we believe we had access to over 90% of the Medicare oxygen therapy market based on our analysis of the 103 CBAs that we won out of the 130 total CBAs. These 130 CBAs represented approximately 36% of the Medicare market with the remaining approximately 64% of the market not subject to competitive bidding per Medicare’s data on 2018 traditional Medicare fee-for-service beneficiaries in CBAs as compared to the total Medicare fee-for-service beneficiaries. As of January 1, 2019, we can choose to accept Medicare oxygen patients throughout the United States. As of July 2018, we are operating in all 50 states in the U.S. We did not sell or rent to patients in Hawaii due to the licensure requirements from inception to June 2018.

We cannot guarantee that we will be offered contracts in subsequent rounds of competitive bidding. In all five rounds of competitive bidding in which we have participated, we have gained access to certain CBAs and been excluded from other CBAs.

Medicare revenue, including patient co-insurance and deductible obligations, represented 4.8% and 4.6% of our total revenue in the three and nine months ended September 30, 2019, respectively.

Medicare reimbursement for oxygen rental equipment is limited to a maximum of 36 months within a 60-month service period, and the equipment remains the property of the home oxygen supplier. The supplier that billed Medicare for the 36th month of service continues to be responsible for the patient’s oxygen therapy needs for months 37 through 60, and there is generally no additional reimbursement for oxygen generating portable equipment for these later months. Medicare does not separately reimburse suppliers for oxygen tubing, cannulas and supplies that may be required for the patient. The supplier is required to keep the equipment provided in working order and in some cases, Medicare will reimburse for repair costs. At the end of the five-year useful life of the equipment, the patient may request replacement equipment and, if he or she can be re-qualified for the Medicare benefit, a new maximum 36-month payment cycle out of the next 60 months of service would begin. The supplier may not arbitrarily issue new equipment. We have analyzed the potential impact to revenue associated with patients in the capped rental period and have deferred $0 associated with the capped rental period for the three and nine months ended September 30, 2019 and September 30, 2018, respectively. Our capped patients as a percentage of total patients on service was approximately 20.2% as of September 30, 2019, which was higher than the capped patients as a percentage of total patients on service of approximately 18.1% as of September 30, 2018. The percentage of capped patients may fluctuate over time as new patients come on service, patients come off of service before and during the capped rental period, and existing patients enter the capped rental period.

Our obligations to service Medicare patients over the rental period include supplying working equipment that meets each patient’s oxygen needs pursuant to his/her doctor’s prescription and certificate of medical necessity form and supplying all disposables required for the patient to operate the equipment, including cannulas, filters, replacement batteries, carts and carry bags, as needed. If the equipment malfunctions, we must repair or replace the equipment. We determine what equipment the patient receives, as long as that equipment meets the physician’s prescription, and we can deploy used assets in working order as long as the prescription requirements are met. We must also procure a recertification of the certificate of medical necessity from the patient’s doctor to confirm the patient’s need for continued oxygen therapy one year after the patient first receives oxygen therapy and one year after each new 36-month reimbursement period begins. The patient can choose to receive oxygen supplies and services from another supplier at any time, but the supplier may only transition the patient to another supplier in certain circumstances.

CMS issued a final rule to require Medicare prior authorization (PA) for certain DMEPOS that the agency characterizes as “frequently subject to unnecessary utilization.” The final rule was published on December 30, 2015 and specified an initial master list of 135 items that could potentially be subject to PA. Initially stationary oxygen rentals (code E1390) was included on the master list, but it was later removed. On April 22, 2019, stationary oxygen rentals (E1390) was again added to the list of potential codes that could be subject to PA. The master list is updated annually and published in the Federal Register. The presence of an item on the master list does not automatically mean that a PA is required. CMS will select a subset of these master list items for its “Required Prior Authorization List.” There will be a notice period of at least 60 days prior to implementation. The ruling does not create any new clinical documentation requirements; instead the same information necessary to support Medicare payment will be required *prior* to the item being furnished to the beneficiary. CMS has proposed that reasonable efforts are made to provide a PA decision within 10 days of receipt of all applicable information, unless this timeline could seriously jeopardize the life or health of the beneficiary or the beneficiary’s ability to regain maximum function, in which case the proposed PA decision would be 2 business days. CMS will issue additional sub regulatory guidance on these timelines in the future.

On May 15, 2019, a bi-partisan bill (H.R. 2771) was introduced in the House of Representatives that would provide relief from competitive bidding in non-bid areas. This bill has 51 co-sponsors as of October 28, 2019. If passed, the bill would provide retroactive relief to rural areas by applying the 50/50 blended reimbursement rate in rural and noncontiguous areas to all items and services furnished with dates of service from June 1, 2018, with no end date,and by introducing a 75/25 blended reimbursement rate for areas other than rural or noncontiguous areas. The legislation also proposes to remedy a double-dip cut to oxygen payments caused by the misapplication of a 2006 budget neutrality offset balancing increased utilization for oxygen generating portable equipment with lower reimbursement for stationary equipment. There is no known timing on voting on this bill.

On March 11, 2019, the current presidential administration sent Congress a 2020 budget proposal that included language on competitive bidding. Specifically, the proposal would eliminate the requirement under the competitive bidding program that CMS pay a single payment amount based on the median bid price, proposing instead that CMS pay winning suppliers at their own bid amounts. Additionally, this proposal would expand competitive bidding to all areas of the country, including rural areas, which will be based on competition in those areas rather than on competition in urban areas. This specific proposal is estimated to save the government $7.1 billion in Medicare savings and $0.4 billion in Medicaid savings over 10 years. In addition to changes to competitive bidding, the 2020 budget proposal would enable CMS not to impose the face-to-face requirement on all providers for durable medical equipment. Furthermore, the proposal seeks to address excessive billing of durable medical equipment that requires refills or serial claims. Specifically, Medicare would gain authority to test whether using a benefits manager for serial durable medical equipment claims would result in lower improper payments and reductions in inappropriate utilization. The benefits manager would be responsible for ensuring beneficiaries were receiving the correct quantity of supplies or service for the appropriate time period. In addition, the proposal allows an administrative penalty of $50 for Part B items/services and $100 for Part A services on providers for ordering high-risk, high-cost items or services without proper documentation, such as diagnosis or encounter data. Lastly, the proposal would expand prior authorization to additional items and services that are both high-cost and at high-risk for improper payments. These provisions were not included in the latest omnibus budget, so it is unclear if any of these proposals will be implemented. We believe additional cuts to reimbursement would continue to drive conversion to non-delivery technologies, including portable oxygen concentrators (POC), however this could also exacerbate patient access issues for treatment.

On July 29, 2019, CMS issued a proposed rule to establish methodologies to modernize pricing of new DMEPOS items and services based on commercial pricing data. In addition, the proposed rule recommends streamlining requirements related to face-to-face encounters, written orders prior to delivery and/or prior authorizations to reduce provider confusion. Lastly, the proposed rule recommends revising the existing DMEPOS competitive bidding program regulations to recognize that changes of ownership may occur on shorter timeframes and revising the submission of a hearing request in notices of breach of contract. CMS solicited comments on this proposed rule through September 27, 2019.

As of September 30, 2019, we had 91 contracts with Medicaid, Medicare Advantage, and private payors. These contracts qualify us as an in-network provider for these payors. As a result, patients can rent or purchase our systems at the same patient obligation as other in-network oxygen suppliers. Based on our patient population, we believe more than 40% of all oxygen therapy patients are covered by Medicare Advantage and other private payors. Private payors typically provide reimbursement at a rate similar to Medicare allowable for in-network plans. We anticipate that private payor reimbursement levels will generally be reset in accordance with Medicare payment amounts.

We cannot predict the full extent to which reimbursement for our products will be affected by competitive bidding, the 2019 federal budget or future federal budgets, prior authorization requirements, or by initiatives to reduce costs for private payors. We believe that we are well positioned to respond to the changing reimbursement environment because our product offerings are innovative, patient-focused and cost-effective. We have historically been able to reduce our costs through scalable manufacturing, better sourcing, continuous innovation, and reliability improvements, as well as innovations that reduce our product service costs by minimizing exchanges. As a result of design changes, supplier negotiations, bringing manufacturing and assembly largely in-house and our commitment to driving efficient manufacturing processes, we have reduced our overall system cost 58% from 2009 to 2018. We intend to continue to seek ways to reduce our cost of revenue through manufacturing and design improvements.

For additional discussion of the impact of the recent Medicare reimbursement proposals, see “Risk Factors” herein.

Basis of presentation

The following describes the line items set forth in our consolidated statements of comprehensive income.

Revenue

We classify our revenue in two main categories: sales revenue and rental revenue. There will be fluctuations in mix between business-to-business sales, direct-to-consumer sales and rental revenue from period-to-period. Inogen One and Inogen At Home system selling prices and gross margins may fluctuate as we introduce new products, reduce our product costs, have changes in purchase volumes, and as currency variations occur. For example, the gross margin for our Inogen One G4 system is higher than our Inogen One G3 system due to lower manufacturing costs and similar average selling prices. Thus, to the extent our sales of our Inogen One G4 systems are higher than sales of our Inogen One G3 systems, our overall gross margins should improve and, conversely, to the extent our sales of our Inogen One G3 systems are higher than sales of our Inogen One G4 systems, our overall gross margins should decline. Quarter-over-quarter results may vary due to seasonality in both the international and domestic markets. For example, we typically experience higher total sales in the second and third quarter, as a result of consumers traveling and vacationing during warmer weather in the spring and summer months, but this may vary year-over-year. As more HME providers adopt portable oxygen concentrators in their businesses, we expect our historical seasonality in the domestic business-to-business channel could change as well, which was previously influenced mainly by consumer buying patterns. Direct-to-consumer sales seasonality may also be impacted by the number of sales representatives, sales representative productivity, and the amount of marketing spend in each quarter.

Sales revenue

Our sales revenue is primarily derived from the sale of our Inogen One systems, Inogen At Home systems, and related accessories to individual consumers, our private label partner, HME providers, distributors and resellers worldwide. Sales revenue is classified into two areas: business-to-business sales and direct-to-consumer sales. For the three months ended September 30, 2019 and September 30, 2018, business-to-business sales as a percentage of total sales revenue were 56.3% and 57.3%, respectively. For the nine months ended September 30, 2019 and September 30, 2018, business-to-business sales as a percentage of total sales revenue were 54.9% and 58.8%, respectively. Generally, our direct-to-consumer sales have higher gross margins than our business-to-business sales.

We also offer a lifetime warranty for direct-to-consumer sales of our oxygen concentrators. For a fixed price, we agree to provide a fully functional oxygen concentrator for the remaining life of the patient. Lifetime warranties are only offered to patients upon the initial sale of oxygen concentrators by the Company and are non-transferable. Lifetime warranties are considered to be a distinct performance obligation that are accounted for separately from the sale of oxygen concentrators with a standard warranty of three years.

The revenue is allocated to the distinct lifetime warranty performance obligation based on a relative stand-alone selling price (SSP) method. We have vendor-specific objective evidence of the selling price for our equipment. To determine the selling price of the lifetime warranty, we use our best estimate of the SSP for the distinct performance obligation as the lifetime warranty is neither separately priced nor is the selling price available through third-party evidence. To calculate the selling price associated with the lifetime warranties, management considers the profit margins of service revenue, the average estimated cost of lifetime warranties and the price of extended warranties. Revenue from the distinct lifetime warranty is deferred after the delivery of the equipment and recognized based on an estimated mortality rate over five years, which is the estimated performance period of the contract based on the average patient life expectancy.

Revenue from the sale of our repair services is recognized when the performance obligations are satisfied, and collection of the receivables is probable. Other revenue from sale of replacement parts is generally recognized when product is shipped to customers.

Rental revenue

Our rental revenue is primarily derived from the rental of our Inogen One and Inogen At Home systems to patients through reimbursement from Medicare, private payors and Medicaid, which typically also includes a patient responsibility component for patient co-insurance and deductibles. We expect our rental revenue to modestly decline in 2019 in spite of the slight change to our intake criteria on rental patients that we made in the second quarter of 2019, primarily due to lower new rental setups due to reduced sales capacity, an additional 3.9% reduction in Medicare reimbursement rates for our products effective January 1, 2019 and the adoption of ASU No. 2018-19 that requires reclassification of rental bad debt expense to be charged to rental revenue. We expect our rental revenue to modestly increase in 2020 as we scale the rental intake team and increase new rental setups. We also expect that our rental revenue will be impacted by the number of sales representatives, the number of rental intake representatives, the level of and response from potential customers to direct-to-consumer marketing spend, product launches, and other uncontrollable factors such as changes in the market and competition.

We recognize equipment rental revenue over the non-cancelable lease term, which is one month, less estimated adjustments, in accordance with Accounting Standards Codification (ASC) 842 — *Leases*. We have a separate contract with each patient that is not subject to a master lease agreement with any payor. The lease term begins on the date products are shipped to patients and is recorded at amounts estimated to be received under reimbursement arrangements with third-party payors, including Medicare, private payors, and Medicaid. Due to the nature of the industry and the reimbursement environment in which we operate, certain estimates are required to record net revenue and accounts receivable at their net realizable values. Inherent in these estimates is the risk that they will have to be revised or updated as additional information becomes available. Specifically, the complexity of many third-party billing arrangements and the uncertainty of reimbursement amounts for certain services from certain payors may result in adjustments to amounts originally recorded. Such adjustments are typically identified and recorded at the point of cash application, claim denial or account review. Amounts billed but not earned due to the timing of the billing cycle are deferred and recognized in revenue on a straight-line basis over the monthly billing period. For example, if the first day of the billing period does not fall on the first of the month, then a portion of the monthly billing period will fall in the subsequent month and the related revenue and cost would be deferred based on the service days in the following month. Included in rental revenue are unbilled amounts for which the revenue recognition criteria had been met as of period-end but were not billed. The estimate of unbilled rental revenue accrual is reported net of adjustments that are based on historical trends and estimates of future collectability.

Cost of revenue

Cost of sales revenue

Cost of sales revenue consists primarily of costs incurred in the production process, including costs of component materials, assembly labor and overhead, warranty, provisions for slow-moving and obsolete inventory, rework and delivery costs for items sold. Labor and overhead expenses consist primarily of personnel-related expenses, including wages, bonuses, benefits, and stock-based compensation for manufacturing, logistics, repair and manufacturing engineering quality assurance employees, and temporary labor. Cost of sales revenue also includes manufacturing freight in, depreciation expense, facilities costs and materials. We provide a 3-year, 5-year or lifetime warranty on Inogen One systems sold and a 3-year and lifetime warranty on Inogen At Home systems sold. We establish a reserve for the cost of future warranty repairs based on historical warranty repair costs incurred as well as historical failure rates. Provisions for warranty obligations, which are included in cost of sales revenue, are provided for at the time of revenue recognition.

We continue to make progress towards reducing the average unit costs of our Inogen One and Inogen At Home systems as a result of our ongoing efforts to develop lower-cost systems, negotiations with our suppliers, improvements in our manufacturing processes, and increased production volume and yields. In the second quarter of 2018, we also signed an additional lease in Richardson, Texas to expand our current manufacturing facilities by approximately 23,000 square feet to enable increased production volumes. At the same time, recent United States policies related to global trade and tariffs may also increase the Company's average unit cost.

The current economic environment has introduced greater uncertainty with respect to potential trade regulations, including changes to United States policies related to global trade and tariffs. The Company continues to monitor the recently announced Section 301 tariffs being imposed by the United States on certain imported Chinese materials and products in addition to potential retaliatory responses from other nations. Through the first three quarters of 2019, the impact of the China tariffs on our financial results has been minimal as we have received some exemptions, negotiated cost sharing and price reductions with suppliers, and re-allocated purchases. Assuming the Chinese tariffs stay at the current levels, the Company currently expects the overall financial impact to our business to be minimal to the average unit cost for the remainder of 2019 and in 2020.

We expect the TAV system to have a higher sales gross margin than our existing oxygen therapy business.

For these reasons, we expect sales gross margin percentage to fluctuate over time based on the sales channel mix, product mix, and changes in average selling prices and cost per unit.

Cost of rental revenue

Cost of rental revenue consists primarily of depreciation expense; service costs for rental patients, including rework costs, material, labor, freight, and consumable disposables; and logistics costs.

We expect rental gross margin percentage to stay relatively flat in 2019 compared to 2018, primarily associated with higher rental revenue per patient, partially offset by higher service costs. We expect the average cost of rental revenue per patient to decline in future periods as a result of our ongoing efforts to reduce the average unit cost of our system, as well as reductions in depreciation, service costs, and logistics costs.

We expect the TAV system to have a higher rental gross margin than our existing oxygen therapy business.

Operating expense

Research and development

Our research and development expense consists primarily of personnel-related expenses, including wages, bonuses, benefits and stock-based compensation for research and development and engineering employees, facilities costs, laboratory supplies, product development materials, consulting fees and related costs, and testing costs for new product launches and enhancements to existing products. We have made substantial investments in research and development since our inception. Our research and development efforts have focused primarily on the tasks required to enhance our technologies and to support development and commercialization of new and existing products. Beginning in the third quarter of 2019, research and development expense also includes intangible amortization costs associated with the New Aera acquisition.

We plan to continue to invest in research and development activities to stay at the forefront of patient preference in oxygen therapy and non-invasive ventilation devices. We expect research and development expense to increase in absolute dollars in future periods as we continue to invest in our engineering and technology teams to support our new and enhanced product research and development efforts and manufacturing improvements. We expect increased research and development costs associated with the New Aera acquisition to incorporate the TAV technology into our oxygen concentrator and new non-invasive ventilator product portfolios as well as intangible amortization costs.

Sales and marketing

Our sales and marketing expense primarily supports our direct-to-consumer sales and rental strategy and consists mainly of personnel-related expenses, including wages, bonuses, commissions, benefits, and stock-based compensation for sales, marketing, customer service and clinical service employees. It also includes expenses for media and advertising, printing, informational kits, dues and fees, including credit card fees, recruiting, training, sales promotional and marketing activities, travel and entertainment expenses as well as allocated facilities costs. Sales and marketing expense increased throughout 2018 as compared to 2017, primarily due to an increase in marketing and sales force expenses and increased in the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018, primarily due to an increase in marketing expenses, partially offset by reduced personnel-related expenses. In the three months ended September 30, 2019, sales and marketing expense decreased versus the comparative period in the prior year, primarily due to lower personnel-related expenses. However, we have seen the cost per generated lead trend higher than historical averages. In addition, many of the sales representatives we hired in 2018 were unable to meet sales targets and were thus transitioned out. Going forward, we have restarted our sales capacity expansion efforts, but we plan to hire additional sales representatives at a more controlled pace across all of our facilities to expand sales capacity, and we expect sales representative headcount to be down meaningfully at year-end 2019 compared to year-end 2018. We still expect a further increase in sales and marketing expense in future periods as we continue to invest in our business, including expanding our sales and sales support team, increasing media spend to drive consumer awareness, and increasing patient support costs as our patient and customer base increases. In addition, we opened a new facility in Cleveland, Ohio in the third quarter of 2017 primarily for sales and customer service personnel. We also established a physical presence in Europe by acquiring MedSupport Systems B.V. on May 4, 2017. This acquisition has increased sales and marketing costs but has also improved customer service and repair services in the European markets. We expect increased sales and marketing costs associated with the New Aera acquisition as we plan to launch the SideKick TAV ventilator worldwide.

General and administrative

Our general and administrative expense consists primarily of personnel-related expenses, including wages, bonuses, benefits, and stock-based compensation for employees in our compliance, finance, medical billing, order intake, human resources, and information technology departments as well as facilities costs, sales bad debt expense, and board of directors' expenses, including stock-based compensation. In addition, general and administrative expense includes professional services, such as legal, patent registration and defense costs, insurance, consulting and accounting services, including audit and tax services, and travel and entertainment expenses.

We expect general and administrative expense to increase in future periods as the number of administrative personnel grows and we continue to introduce new products, broaden our customer base and grow our business. We expect general and administrative expense to increase in absolute dollars as we continue to invest in corporate infrastructure to support our growth including personnel-related expenses, professional services fees and compliance costs associated with operating as a public company as well as acquisition-related costs. Those costs include increases in our accounting, human resources, and IT personnel, as well as increases in additional consulting, legal and accounting fees, facilities costs, insurance costs, board members' compensation, and costs associated with the New Aera acquisition.

Other income (expense), net

Our other income (expense), net consists primarily of interest income earned on cash equivalents and marketable securities as well as foreign currency gains and (losses).

Income taxes

We account for income taxes in accordance with ASC 740—*Income Taxes*. Under ASC 740, income taxes are recognized for the amount of taxes payable or refundable for the current period and deferred tax liabilities and assets are recognized for the future tax consequences of transactions that have been recognized in our consolidated financial statements or tax returns. A valuation allowance is provided when it is more likely than not that some portion, or all, of the deferred tax asset will not be realized.

We account for uncertainties in income tax in accordance with ASC 740-10—*Accounting for Uncertainty in Income Taxes*. ASC 740-10 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This accounting standard also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

The accounting for stock-based compensation will increase or decrease our effective tax rate based upon the difference between our stock-based compensation expense and the deductions taken on our U.S. tax return, which depends upon the stock price at the time of employee option exercise or award vesting. We recognize excess tax benefits or deficiencies on a discrete basis, and we anticipate our effective tax rate will vary from quarter-to-quarter depending on our stock price in each period.

Results of operations

Comparison of three months ended September 30, 2019 and September 30, 2018

Revenue

	Three months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	2019	2018	$	%	2019	2018
Sales revenue	$ 86,392	$ 89,712	$ (3,320)	-3.7%	94.1%	94.1%
Rental revenue	5,369	5,579	(210)	-3.8%	5.9%	5.9%
Total revenue	$ 91,761	$ 95,291	$ (3,530)	-3.7%	100.0%	100.0%

Sales revenue decreased $3.3 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or a decrease of 3.7% from the comparable period. The decrease was primarily attributable to an 800-unit decrease in the number of oxygen systems sold. We sold approximately 51,600 oxygen systems during the three months ended September 30, 2019 compared to approximately 52,400 oxygen systems sold during the three months ended September 30, 2018, or a decrease of 1.5%. The decrease in the number of systems sold resulted mainly from a decrease in international business-to-business sales, primarily due to lower purchases from our European partners, and a decrease in direct-to-consumer sales in the United States, primarily due to a decline in sales representative headcount, mostly offset by increased sales representative productivity. There was also a modest decline in domestic business-to-business sales resulting from reduced orders from a large national provider who is a customer of our private label partner, mostly offset by increased orders from other providers. This national provider accounted for revenue of $0.8 million in the third quarter of 2019, down from $3.3 million in the third quarter of 2018.

Rental revenue decreased $0.2 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or a decrease of 3.8% from the comparable period. The decrease in rental revenue was primarily related to a 6.9% decline in rental patients on service from the comparative period, partially offset by higher rental revenue per patient.

(amounts in thousands)	Three months ended September 30,		Change 2019 vs. 2018		% of Revenue	
Revenue by region and category	2019	2018	$	%	2019	2018
Business-to-business domestic sales	$ 30,143	$ 30,263	$ (120)	-0.4%	32.8%	31.7%
Business-to-business international sales	18,492	21,142	(2,650)	-12.5%	20.2%	22.2%
Direct-to-consumer domestic sales	37,757	38,307	(550)	-1.4%	41.1%	40.2%
Direct-to-consumer domestic rentals	5,369	5,579	(210)	-3.8%	5.9%	5.9%
Total revenue	$ 91,761	$ 95,291	$ (3,530)	-3.7%	100.0%	100.0%

Domestic direct-to-consumer sales decreased 1.4% and domestic business-to-business sales decreased 0.4% for the three months ended September 30, 2019 compared to the three months ended September 30, 2018. The decrease in direct-to-consumer sales was primarily due to a decline in sales representative headcount, mostly offset by increased productivity of inside sales representatives. The modest decrease in domestic business-to-business sales resulting from reduced orders from a large national provider referenced above, mostly offset by increased orders from other providers.

Business-to-business international sales decreased 12.5% for the three months ended September 30, 2019 compared to the three months ended September 30, 2018, primarily due to decreased sales to our partners in Europe and unfavorable currency exchange rates. This decrease in the third quarter was primarily driven by a slowdown of orders in Great Britain and Spain due to tender uncertainty, capital expenditure constraints, and some softness of orders in France. We sell our products in 46 countries outside of the United States, and we plan to continue to expand our presence in other countries as the opportunities present themselves. Of our international sales revenue in the three months ended September 30, 2019, 84.2% was sold in Europe versus 87.6% in the comparative period in 2018.

Cost of revenue and gross profit

	Three months ended September 30,		**Change 2019 vs. 2018**		**% of Revenue**	
(amounts in thousands)	**2019**	**2018**	**$**	**%**	**2019**	**2018**
Cost of sales revenue	$ 44,769	$ 42,810	$ 1,959	4.6 %	48.8 %	44.9 %
Cost of rental revenue	3,677	3,668	9	0.2 %	4.0 %	3.9 %
Total cost of revenue	$ 48,446	$ 46,478	$ 1,968	4.2 %	52.8 %	48.8 %
Gross profit - sales revenue	$ 41,623	$ 46,902	$ (5,279)	-11.3 %	45.3 %	49.2 %
Gross profit - rental revenue	1,692	1,911	(219)	-11.5 %	1.9 %	2.0 %
Total gross profit	$ 43,315	$ 48,813	$ (5,498)	-11.3 %	47.2 %	51.2 %
Gross margin percentage - sales revenue	48.2 %	52.3 %				
Gross margin percentage- rental revenue	31.5 %	34.3 %				
Total gross margin percentage	47.2 %	51.2 %				

We manufacture our subassemblies and/or products in our Richardson, Texas and Goleta, California facilities. We also began production of our Inogen One G3 concentrators in the fourth quarter of 2017 using a contract manufacturer located in the Czech Republic to improve our ability to service our European customers. Our manufacturing process includes final assembly, testing, and packaging to quality and customer specifications. Cost of sales revenue increased $2.0 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or an increase of 4.6% over the comparable period. The increase in cost of sales revenue was primarily attributable to higher cost per unit associated with the Inogen One G5, which was still at a higher cost than the Inogen One G3 during the period, although at volume we expect the Inogen One G5 to be our lowest cost product to manufacture. We also had an one-time small contribution of higher costs primarily due to increased inventory reserves. We expect cost of sales revenue as a percentage of sales revenue in future periods to fluctuate based on changes in the sales channel mix, product mix, average selling prices and cost per unit.

Cost of rental revenue increased slightly for the three months ended September 30, 2019 from the three months ended September 30, 2018 with an increase of 0.2% over the comparable period. The slight increase in cost of rental revenue was primarily attributable to increased servicing costs, partially offset by lower depreciation expense. Cost of rental revenue included $1.5 million of rental asset depreciation for the three months ended September 30, 2019 compared to $1.7 million for the three months ended September 30, 2018.

Gross margin percentage is defined as revenue less cost of revenue divided by revenue. Sales revenue gross margin percentage decreased to 48.2% for the three months ended September 30, 2019 from 52.3% for the three months ended September 30, 2018. The decrease in sales revenue gross margin percentage was primarily attributable to lower average selling prices, which was mainly due to an increased mix of business-to-business domestic sales which typically are sold at lower margins versus business-to-business international sales, partially offset by increased mix of direct-to-consumer sales. In addition, we had higher cost per unit associated with the Inogen One G5 and increased inventory reserves. Total worldwide business-to-business sales revenue accounted for 56.3% of total sales revenue in the third quarter of 2019 versus 57.3% in the third quarter of 2018. We expect sales gross margin to fluctuate over time based on changes in the sales channel mix, product mix, average selling prices and cost per unit.

Rental revenue gross margin percentage decreased to 31.5% for the three months ended September 30, 2019 from 34.3% for the three months ended September 30, 2018, primarily due to increased servicing cost, partially offset by increased rental revenue per patient on service and lower depreciation costs.

Research and development expense

(amounts in thousands)	Three months ended September 30, 2019	2018	Change 2019 vs. 2018 $	%	% of Revenue 2019	2018
Research and development expense	$ 2,636	$ 2,096	$ 540	25.8%	2.9%	2.2%

Research and development expense increased $0.5 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or an increase of 25.8% from the comparable period, primarily due to $1.0 million in intangible amortization costs related to the New Aera acquisition. The increase was partially offset by a $0.4 million decrease in personnel-related expenses, which was primarily associated with lower bonus expense and stock compensation expense.

Sales and marketing expense

(amounts in thousands)	Three months ended September 30, 2019	2018	Change 2019 vs. 2018 $	%	% of Revenue 2019	2018
Sales and marketing expense	$ 24,047	$ 26,339	$ (2,292)	-8.7%	26.2%	27.6%

Sales and marketing expense decreased $2.3 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or a decrease of 8.7% from the comparable period. The decrease was primarily attributable to decreases of $2.9 million in sales and marketing personnel-related expenses (which included decreases of $1.4 million in payroll wages, taxes and benefits, $0.6 million in bonus expense, $0.5 million in commissions expense, and $0.4 million of stock compensation expense) and $0.2 million in credit card processing fees. These decreases were partially offset by increases of $0.4 million in dues, fees and license costs, $0.2 million in media spending and $0.2 million in professional and consulting fees. In the three months ended September 30, 2019, we spent $9.0 million in media and advertising costs versus $8.8 million in the comparative period in 2018.

General and administrative expense

(amounts in thousands)	Three months ended September 30, 2019	2018	Change 2019 vs. 2018 $	%	% of Revenue 2019	2018
General and administrative expense	$ 8,525	$ 9,982	$ (1,457)	-14.6%	9.3%	10.5%

General and administrative expense decreased $1.5 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or a decrease of 14.6% from the comparable period. The decrease was primarily attributable to decreases of $1.1 million in stock compensation expense, $0.6 million in bonus expense, $0.3 million in other personnel-related expense, and $0.3 million in bad debt expense. These decreases were partially offset by increases of $0.4 million in legal fees and $0.3 million in acquisition-related expenses for the New Aera transaction.

Bad debt expense, expressed as a percentage of total revenue, decreased to 0.0% in the three months ended September 30, 2019 from 0.4% in the three months ended September 30, 2018, primarily due to the adoption of ASU No. 2018-19.

Other income (expense), net

(amounts in thousands)	Three months ended September 30, 2019	2018	Change 2019 vs. 2018 $	%	% of Revenue 2019	2018
Interest income	$ 1,149	$ 895	$ 254	28.4%	1.2%	0.9%
Other income (expense)	(503)	8	(511)	-6387.5%	-0.5%	0.0%
Total other income, net	$ 646	$ 903	$ (257)	-28.5%	0.7%	0.9%

Total other income, net decreased $0.3 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or a decrease of 28.5% from the comparable period. The decrease was primarily attributable to an increase of $0.4 million in net other expense related to foreign currency losses arising from transactions in Euros at a lower U.S. dollar exchange rate to the Euro in the three months ended September 30, 2019, partially offset by an increase of $0.2 million in interest income on cash equivalents and marketable securities versus the amount recorded in the comparable period.

Income tax expense (benefit)

	Three months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	**2019**	**2018**	**$**	**%**	**2019**	**2018**
Income tax expense (benefit)	$ 1,890	$ (5,133)	$ 7,023	136.8%	2.0%	-5.4%
Effective income tax rate	*21.6%*	*-45.4%*				

Income tax expense increased $7.0 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, primarily attributable to $8.2 million of lower excess tax benefits recognized from stock-based compensation, partially offset by a $1.2 million decrease in income tax expense.

Our effective tax rate in the third quarter of 2019 increased compared to the third quarter of 2018, primarily due to the decrease in excess tax benefits recognized from stock-based compensation in income before income tax expense (benefit). In the third quarter of 2019, excess tax deficiencies recognized from stock-based compensation increased our income tax expense by $0.1 million and our effective tax rate by 0.7%, as compared to the tax rate without such deficiencies. For comparison, in the third quarter of 2018, excess tax benefits recognized from stock-based compensation decreased our income tax expense by $8.1 million and our effective tax rate by 71.8%, as compared to the tax rate without such benefits.

Net income

	Three months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	**2019**	**2018**	**$**	**%**	**2019**	**2018**
Net income	$ 6,863	$ 16,432	$ (9,569)	-58.2%	7.5%	17.2%

Net income decreased $9.6 million for the three months ended September 30, 2019 from the three months ended September 30, 2018, or a decrease of 58.2% from the comparable period. The decrease in net income was primarily related a our higher effective tax rate and a decrease in total revenue and gross profit dollars, partially offset by lower operating expense.

Comparison of nine months ended September 30, 2019 and September 30, 2018

Revenue

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	**2019**	**2018**	**$**	**%**	**2019**	**2018**
Sales revenue	$ 267,073	$ 255,283	$ 11,790	4.6%	94.4%	94.0%
Rental revenue	15,953	16,297	(344)	-2.1%	5.6%	6.0%
Total revenue	$ 283,026	$ 271,580	$ 11,446	4.2%	100.0%	100.0%

Sales revenue increased $11.8 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or an increase of 4.6% over the comparable period. The increase was primarily attributable to a 6,000-unit increase in the number of oxygen systems sold. We sold approximately 158,500 oxygen systems during the nine months ended September 30, 2019 compared to approximately 152,500 oxygen systems sold during the nine months ended September 30, 2018, or an increase of 3.9%. The increase in the number of systems sold resulted mainly from an increase in direct-to-consumer sales in the United States, primarily due to increased marketing expenditures and increased sales representative productivity, partially offset by a decline in sales representative headcount and an increase in international business-to-business sales, primarily from our partners in Canada, South America, Europe and Australia, partially offset by unfavorable currency rates. These increases were partially offset by a decline in domestic business-to-business sales, primarily due to reduced orders from a national provider who is a customer of our private label partner, partially offset by increased orders from other providers. This national provider accounted for revenue of $2.3 million in the first nine months of 2019, down from $20.9 million in the first nine months of 2018.

Rental revenue decreased $0.3 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or a decrease of 2.1% from the comparable period. The decrease in rental revenue was primarily related to a 6.9% decline in rental patients on service from the comparative period, partially offset byan increase in rental revenue per patient mainly due to lower rental revenue adjustments.

(amounts in thousands)	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
Revenue by region and category	**2019**	**2018**	**$**	**%**	**2019**	**2018**
Business-to-business domestic sales	$ 85,857	$ 91,222	$ (5,365)	-5.9%	30.3%	33.6%
Business-to-business international sales	60,859	58,807	2,052	3.5%	21.5%	21.6%
Direct-to-consumer domestic sales	120,357	105,254	15,103	14.3%	42.6%	38.8%
Direct-to-consumer domestic rentals	15,953	16,297	(344)	-2.1%	5.6%	6.0%
Total revenue	$ 283,026	$ 271,580	$ 11,446	4.2%	100.0%	100.0%

Domestic direct-to-consumer sales increased 14.3% and domestic business-to-business sales decreased 5.9% for the nine months ended September 30, 2019 compared to the nine months ended September 30, 2018. The increase in direct-to-consumer sales was primarily due to increased marketing expenditures and increased productivity of inside sales representatives, partially offset by a decline in sales representative headcount. The decrease in domestic business-to-business sales was primarily the result of decreased demand from our private label partner due to reduced orders from the large national provider referenced above partner and reduced demand from internet reseller customers, partially offset by increased demand from traditional HME providers.

Business-to-business international sales increased 3.5% for the nine months ended September 30, 2019 compared to the nine months ended September 30, 2018, primarily due to increased sales to our partners in Canada, South America, Europe, and Australia partially offset by unfavorable currency exchange rates. We sell our products in 46 countries outside of the United States, and we plan to continue to expand our presence in other countries as the opportunities present themselves. In the nine months ended September 30, 2019, sales in Europe as a percentage of total international sales revenue decreased to 86.4% versus 88.4% in the comparative period in 2018, primarily because of the increase in sales in Canada, South America, and Australia.

Cost of revenue and gross profit

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	**2019**	**2018**	**$**	**%**	**2019**	**2018**
Cost of sales revenue	$ 134,066	$ 124,726	$ 9,340	7.5%	47.4%	45.9%
Cost of rental revenue	11,021	11,844	(823)	-6.9%	3.9%	4.4%
Total cost of revenue	$ 145,087	$ 136,570	$ 8,517	6.2%	51.3%	50.3%
Gross profit - sales revenue	$ 133,007	$ 130,557	$ 2,450	1.9%	47.0%	48.1%
Gross profit - rental revenue	4,932	4,453	479	10.8%	1.7%	1.6%
Total gross profit	$ 137,939	$ 135,010	$ 2,929	2.2%	48.7%	49.7%
Gross margin percentage - sales revenue	49.8%	51.1%				
Gross margin percentage- rental revenue	30.9%	27.3%				
Total gross margin percentage	48.7%	49.7%				

We manufacture our subassemblies and/or products in our Richardson, Texas and Goleta, California facilities. We also began production of our Inogen One G3 concentrators in the fourth quarter of 2017 using a contract manufacturer located in the Czech Republic to improve our ability to service our European customers. Our manufacturing process includes final assembly, testing, and packaging to quality and customer specifications. Cost of sales revenue increased $9.3 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or an increase of 7.5% over the comparable period. The increase in cost of sales revenue was primarily attributable to the 4.6% increase in sales revenue, product and sales channel mix, as well as higher cost per unit associated with the Inogen One G5 during the period. We expect cost of sales revenue as a percentage of sales revenue in future periods to fluctuate based on changes in the sales channel mix, product mix, and average selling prices and cost per unit.

Cost of rental revenue decreased $0.8 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or a decrease of 6.9% from the comparable period. The decrease in cost of rental revenue was primarily attributable to a 6.9% decrease in total patients on service and rental asset depreciation expense, partially offset by increased servicing costs. Cost of rental revenue included $4.8 million of rental asset depreciation for the nine months ended September 30, 2019 compared to $5.8 million for the nine months ended September 30, 2018.

Gross margin percentage is defined as revenue less cost of revenue divided by revenue. Sales revenue gross margin percentage decreased to 49.8% for the nine months ended September 30, 2019 from 51.1% for the nine months ended September 30, 2018. The decrease in sales gross margin percentage was primarily related to higher cost of goods sold and lower average selling prices. Total worldwide business-to-business sales revenue accounted for 54.9% of total sales revenue in the first nine months of 2019 versus 58.8% in the first nine months of 2018. We expect sales gross margin to fluctuate over time based on changes in the sales channel mix, product mix, average selling prices and cost per unit.

Rental revenue gross margin percentage increased to 30.9% for the nine months ended September 30, 2019 from 27.3% for the nine months ended September 30, 2018, primarily due to higher rental revenue per patient on service and lower depreciation costs, partially offset by increased servicing costs.

Research and development expense

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	2019	2018	$	%	2019	2018
Research and development expense	$ 5,773	$ 5,287	$ 486	9.2%	2.0%	1.9%

Research and development expense increased $0.5 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or an increase of 9.2% over the comparable period, primarily due to $1.0 million in intangible amortization costs related to the New Aera acquisition and an increase of $0.2 million in product development expenses for engineering projects. These increases were partially offset by a $0.8 million decrease in personnel-related expenses (which included decreases of $0.4 million in bonus expense, $0.2 million in stock compensation expense and $0.2 million in wages, benefits and payroll tax expense).

Sales and marketing expense

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	2019	2018	$	%	2019	2018
Sales and marketing expense	$ 80,006	$ 67,376	$ 12,630	18.7%	28.3%	24.8%

Sales and marketing expense increased $12.6 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or an increase of 18.7% over the comparable period. The increase was primarily attributable to increases of $10.8 million in media spending, $0.9 million of dues, fees and license costs, $0.4 million in facilities costs, $0.2 million in other professional fees, and $0.2 million in depreciation expense. These increases were partially offset by $0.1 million of lower personnel-related expenses (which included decreases of $1.6 million in bonus expense, $0.5 million in stock compensation expense and $0.3 million in recruiting and relocation costs, partially offset by increases of $1.3 million in commissions expense and $1.0 million in wages, benefits and payroll tax expense). In the nine months ended September 30, 2019, we spent $30.8 million in media and advertising costs versus $19.9 million in the comparative period in 2018.

General and administrative expense

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	2019	2018	$	%	2019	2018
General and administrative expense	$ 27,050	$ 29,230	$ (2,180)	-7.5%	9.5%	10.8%

General and administrative expense decreased $2.2 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or a decrease of 7.5% from the comparable period. The decrease was primarily attributable to decreases of $2.8 million in personnel-related expenses (which included decreases of $2.1 million in stock compensation expense and $1.6 million in bonus expense, partially offset by an increase of $0.9 million in wages, benefits and payroll tax expense), $1.3 million in bad debt expense and $0.3 million in general office expense. These decreases were partially offset by $0.7 million in acquisition-related expenses for the New Aera transaction as well as increases of $0.6 million in legal fees, $0.4 million in license fees, $0.3 million in depreciation expense and $0.3 million in lower net proceeds received from sale of assets.

Bad debt expense, expressed as a percentage of total revenue,decreased to 0.0% in the nine months ended September 30, 2019 from 0.5% in the nine months ended September 30, 2018, primarily due to the adoption of ASU 2018-19.

Other income (expense), net

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	2019	2018	$	%	2019	2018
Interest income	$ 3,877	$ 2,111	$ 1,766	83.7%	1.4%	0.8%
Other expense	(478)	(596)	118	19.8%	-0.2%	-0.2%
Total other income, net	$ 3,399	$ 1,515	$ 1,884	124.4%	1.2%	0.6%

Total other income, net increased $1.9 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or an increase of 124.4% over the comparable period. The increase was primarily attributable to $1.6 million in interest income on cash equivalents and marketable securities and $0.2 million in interest income on the lease asset, partially offset by a decrease of $0.2 million in other expense related to net foreign currency losses arising from increased transactions in Euros at a lower U.S. dollar exchange rate to the Euro compared to net foreign currency losses recorded in the comparable period.

Income tax expense (benefit)

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	2019	2018	$	%	2019	2018
Income tax expense (benefit)	$ 6,184	$ (7,168)	$ 13,352	186.3%	2.2%	-2.6%
Effective income tax rate	*21.7%*	*-20.7%*				

Income tax expense increased $13.4 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, primarily attributable to lower excess tax benefits of $14.8 million recognized from stock-based compensation, partially offset by a $1.5 million decrease in the income tax provision expense, primarily resulting from a 17.7% decrease in income before income tax expense (benefit).

Our effective tax rate in the first nine months of 2019 increased compared to the first nine months of 2018, primarily due to the decrease in excess tax benefits recognized from stock-based compensation, partially offset by the changes in income before income tax expense (benefit). In the first nine months of 2019, excess tax benefits recognized from stock-based compensation decreased our income tax expense by $0.4 million and our effective tax rate by 1.3%, as compared to the tax rate without such benefits. For comparison, in the first nine months of 2018, excess tax benefits recognized from stock-based compensation decreased our income tax expense by $15.2 million and our effective tax rate by 44.0%, as compared to the tax rate without such benefits.

Net income

	Nine months ended September 30,		Change 2019 vs. 2018		% of Revenue	
(amounts in thousands)	2019	2018	$	%	2019	2018
Net income	$ 22,325	$ 41,800	$ (19,475)	-46.6%	7.9%	15.4%

Net income decreased $19.5 million for the nine months ended September 30, 2019 from the nine months ended September 30, 2018, or a decrease of 46.6% from the comparable period. The decrease in net income was primarily related to an increase in operating expenses and a higher effective tax rate.

Contractual obligations

We obtain individual components for our products from a wide variety of individual suppliers. Consistent with industry practice, we acquire components through a combination of purchase orders, supplier contracts, and open orders based on projected demand information. Where appropriate, the purchases are applied to inventory component prepayments that are outstanding with the respective supplier. As of September 30, 2019, we had purchase obligations with outside vendors and suppliers of approximately $61.7 million of which the timing varies depending on demand, current supply on hand and other factors. The obligations normally do not extend beyond twelve-month time frames.

On June 19, 2019, we entered into a commercial and industrial building lease for approximately 50,000 rentable square feet located in Goleta, California (New Headquarters). The New Headquarters will replace the lease for our existing Goleta headquarters, which expires on October 31, 2020. The term of the New Headquarters lease commences on November 1, 2020, at which time we expect to move into the New Headquarters, and expires on December 31, 2030. The minimum monthly base rent under tlis lease will initially be approximately $94,660 per month. Base rent will increase annually by the lesser of the change, if any, in the Consumer Price Index of the Bureau of Labor Statistics of the U.S. Department of Labor or three and one-half percent (3.5%) at each annual adjustment date thereafter. For additional information regarding our total lease obligations, refer to Note 6 – Leases in the condensed notes to our consolidated financial statements included in this report.

On August 29, 2019, we entered into a commercial and industrial building lease for approximately 53,600 rentable square feet located in Plano, Texas (Texas Facility). The Texas Facility lease will replace the leases for our existing Richardson, Texas facilities, which expire between December 31, 2019 and February 1, 2022. The term of the Texas Facility lease commences on January 1, 2020, at which time we expect to move into the Texas Facility, and expires on December 31, 2030. The minimum monthly base rent under the Texas Facility lease for the initial 53,600 rentable square feet will be $39,085 per month, and escalating for years 2020 through 2030, until reaching $51,283 per month in 2030. Pursuant to the terms of the Texas Facility lease, the initial rentable square footage will be automatically expanded on January 1, 2021 by approximately 100,500 rentable square feet. The minimum monthly base rent under the Texas facility lease for the expanded rentable square footage will be $75,108 per month, and escalating for years 2021 through 2030, until reaching $96,145 per month in 2030. For additional information regarding our total lease obligations, refer to Note 6 – Leases in the condensed notes to our consolidated financial statements included in this report.

Except as indicated above, there have been no other material changes, outside of the ordinary course of business, in our outstanding contractual obligations from those disclosed within “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section contained in our Annual Report on Form 10-K filed with the SEC on February 26, 2019.

Off-balance sheet arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for any other contractually narrow or limited purpose. However, from time-to-time, we enter into certain types of contracts that contingently require us to indemnify parties against third-party claims including certain real estate leases, supply purchase agreements, and directors and officers. The terms of such obligations vary by contract and in most instances a maximum dollar amount is not explicitly stated therein. Generally, amounts under these contracts cannot be reasonably estimated until a specific claim is asserted thus no liabilities have been recorded for these obligations on our balance sheets for any of the periods presented.

Liquidity and capital resources

As of September 30, 2019, we had cash and cash equivalents of $156.1 million, which consisted of highly-liquid investments with a maturity of three months or less. In addition, we held marketable securities of $44.5 million in available-for-sale corporate bonds and U.S. Treasury securities, which had maturities greater than three months. Since inception, we have received net proceeds of $91.7 million from the issuance of redeemable convertible preferred stock and convertible preferred stock and $52.5 million ($49.7 million net proceeds) in connection with the sale of common stock in our initial public offering. Since 2013, we have received $50.0 million from proceeds related to stock option exercises and our employee stock purchase plan. For the nine months ended September 30, 2019 and September 30, 2018, we received $4.8 million and $13.3 million, respectively, in proceeds related to these stock programs.

Our principal uses of cash for liquidity and capital resources in the nine months ended September 30, 2019 consisted of payment for the New Aera acquisition of $70.4 million (net of cash acquired), capital expenditures of $4.5 million including additional rental equipment, intangible assets, and other property, plant and equipment, and net purchases of marketable securities of $0.8 million.

We believe that our current cash, cash equivalents, marketable securities, and the cash to be generated from expected product sales and rentals will be sufficient to meet our projected operating and investing requirements for at least the next twelve months. However, our liquidity assumptions may prove to be incorrect, and we could utilize our available financial resources sooner than we currently expect. Our future funding requirements will depend on many factors, including market acceptance of our products; the cost of our research and development activities; payments from customers; the cost, timing, and outcome of litigation or disputes involving our products, employee relations, cyber security incidents, or otherwise; the cost and timing of acquisitions; the cost and timing of regulatory clearances or approvals; the cost and timing of establishing additional sales, marketing, and distribution capabilities; and the effect of competing technological and market developments. In the future, we may acquire businesses or technologies from third parties, and we may decide to raise additional capital through debt or equity financing to the extent we believe this is necessary to successfully complete these acquisitions. Our future capital requirements will also depend on many additional factors, including those set forth in the section of this Quarterly Report on Form 10-Q entitled “Risk Factors.”

If we require additional funds in the future, we may not be able to obtain such funds on acceptable terms, or at all. In the future, we may also attempt to raise additional capital through the sale of equity securities or through equity-linked or debt financing arrangements. If we raise additional funds by issuing equity or equity-linked securities, the ownership of our existing stockholders will be diluted. If we raise additional financing by the incurrence of indebtedness, we will be subject to increased fixed payment obligations and could also be subject to restrictive covenants, such as limitations on our ability to incur additional debt, and other operating restrictions that could adversely impact our ability to conduct our business. Any future indebtedness we incur may result in terms that could be unfavorable to equity investors. There can be no assurances that we will be able to raise additional capital, which would adversely affect our ability to achieve our business objectives. In addition, if our operating performance during the next twelve months is below our expectations, our liquidity and ability to operate our business could be adversely affected.

The following tables show a summary of our cash flows and working capital for the periods and as of the dates indicated:

(amounts in thousands)	Nine months ended September 30,		Change 2019 vs. 2018	
Summary of consolidated cash flows	**2019**	**2018**	**$**	**%**
Cash provided by operating activities	$ 31,204	$ 47,640	$ (16,436)	-34.5%
Cash used in investing activities	(75,509)	(26,965)	(48,544)	-180.0%
Cash provided by financing activities	3,947	12,209	(8,262)	-67.7%
Effect of exchange rates on cash	(145)	445	(590)	-132.6%
Net increase (decrease) in cash and cash equivalents	$ (40,503)	$ 33,329	$ (73,832)	-221.5%

(amounts in thousands) **Working capital**	**September 30, 2019**	**December 31, 2018**
Cash and cash equivalents	$ 156,131	$ 196,634
Marketable securities	44,514	43,715
Accounts receivable, net	41,180	37,041
Inventories, net	34,072	27,071
Deferred cost of revenue	356	359
Income tax receivable	2,867	2,655
Prepaid expenses and other current assets	10,716	7,108
Total current assets	289,836	314,583
Accounts payable and accrued expenses	30,418	26,786
Accrued payroll	6,700	11,407
Warranty reserve - current	4,311	3,549
Operating lease liability - current	2,193	—
Deferred revenue - current	5,835	4,451
Income tax payable	586	392
Total current liabilities	50,043	46,585
Net working capital	$ 239,793	$ 267,998

Operating activities

We derive operating cash flows from cash collected from the sales and rental of our products and services. These cash flows received are partially offset by our use of cash for operating expenses to support the growth of our business.

Net cash provided by operating activities for the nine months ended September 30, 2019 consisted primarily of our net income of $22.3 million as well as non-cash expense items such as provision for sales returns and doubtful accounts of $13.2 million, depreciation of equipment and leasehold improvements and amortization of our intangibles of $9.2 million, stock-based compensation expense of $6.9 million, deferred tax assets of $5.9 million, provision for rental revenue adjustments of $1.7 million, provision for inventory obsolescence and other inventory losses of $0.6 million, and net loss on disposal of rental equipment and other fixed assets of $0.4 million. The net changes in operating assets and liabilities resulted in a net use of cash of $29.1 million.

Net cash provided by operating activities for the nine months ended September 30, 2018 consisted primarily of our net income of $41.8 million and non-cash expense items such as provision for sales returns and doubtful accounts of $14.1 million, stock-based compensation expense of $9.8 million, depreciation of equipment and leasehold improvements and amortization of our intangibles of $8.5 million, provision for rental revenue adjustments of $2.2 million, and loss on disposal of rental equipment and other fixed assets of $0.8 million. These were partially offset by an increase in deferred tax assets of $7.6 million and gain on sale of former rental assets of $0.4 million. The net changes in operating assets and liabilities resulted in a net use of cash of $21.8 million.

Investing activities

Net cash used in investing activities for each of the periods presented included cash used for acquisitions and in the production and purchase of rental assets, manufacturing tooling, and computer equipment and software to support our expanding business as well as net (purchases) maturities of marketable securities.

For the nine months ended September 30, 2019, we acquired New Aera for a net cash payment of $70.4 million and invested $58.7 million in corporate bonds and U.S. Treasury securities with maturities greater than three months that were classified as marketable securities, partially offset by $57.9 million in maturities of marketable securities. In addition, we invested $4.5 million in the production and purchase of rental assets and other property, equipment, and leasehold improvements, partially offset by gross proceeds received from the sale of former assets of $0.2 million.

For the nine months ended September 30, 2018, we had $50.3 million of purchases that we invested in certificates of deposits, corporate bonds, agency mortgage-backed securities, and U.S. Treasury securities with maturities greater than three months that were classified as marketable securities, partially offset by $33.7 million in maturities of available-for-sale investments. In addition, we invested $11.1 million in the production and purchase of rental assets and other property, equipment, and leasehold improvements, partially offset by gross proceeds received from the sale of former rental assets of $0.7 million.

We expect to continue investing in property, equipment and leasehold improvements as we expand our operations. Our business is inherently capital intensive. For example, we expend significant manufacturing and production expense in connection with the development and production of our oxygen concentrator products and, in connection with our rental business, we incur expense in the deployment of rental equipment to our patients. Investments will continue to be required in order to grow our sales and rental revenue and continue to supply and replace rental equipment to our rental patients on service.

Financing activities

Historically, we have funded our operations through our sales and rental revenue, the issuance of preferred and common stock, and the incurrence of indebtedness.

For the nine months ended September 30, 2019, net cash provided by financing activities consisted of $4.8 million from the proceeds received from stock options that were exercised and purchases under our employee stock purchase program, partially offset by the payment of employment taxes related to the vesting of restricted stock awards and restricted stock units of $0.8 million.

For the nine months ended September 30, 2018, net cash provided by financing activities consisted of $13.3 million from the proceeds received from stock options that were exercised and purchases under our employee stock purchase program, partially offset by the payment of employment taxes related to the vesting of restricted stock awards and restricted stock units of $1.1 million.

Working capital

Working capital at any specific point in time is subject to many variables including seasonality, inventory management, and the timing of cash receipts and payments.

Current assets decreased $24.7 million during the nine months ended September 30, 2019 from December 31, 2018, primarily due to a net decrease of $39.7 million in cash, cash equivalents and marketable securities, which was mainly related to the New Aera acquisition, partially offset by cash generated from operating activities. This net decrease was partially offset by increases of $7.0 million in net inventories, $4.1 million in net accounts receivable, and $3.6 million in prepaid expenses and other current assets.

Gross accounts receivable increased $4.1 million during the nine months ended September 30, 2019 from December 31, 2018, primarily due to an increase in gross business-to-business accounts receivable and other receivables balance of $4.5 million, partially offset by a decrease in gross rental accounts receivable balance of $0.4 million. Allowances on accounts receivable slightly decreased during the nine months ended September 30, 2019 from December 31, 2018, primarily due to a decrease of $0.4 million in the allowance for doubtful accounts, partially offset by an increase of $0.3 million in the allowance for sales returns from the comparative consolidated balance sheet date.

Allowances on accounts receivable vary based on credit quality, age, and accounts receivable source. Rental revenue has higher allowances for adjustments and doubtful accounts on accounts receivable versus sales revenue due to the nature of the collectability of these balances.

Current liabilities increased by $3.5 million during the nine months ended September 30, 2019 from December 31, 2018, primarily due to increases of $3.6 million in accounts payable and accrued expenses, $2.2 million in the operating lease liability, $1.4 million in deferred revenue, and $0.8 million in warranty reserve, partially offset by a decrease of $4.7 million in accrued payroll.

Sources of funds

Our cash provided by operating activities in the nine months ended September 30, 2019 was $31.2 million compared to $47.6 million in the nine months ended September 30, 2018. As of September 30, 2019, we had cash and cash equivalents of $156.1 million.

Use of funds

Our principal uses of cash are funding our new rental asset deployments and other capital purchases, operations, and other working capital requirements and, from time-to-time, the acquisition of businesses. Over the past several years, our revenue has increased significantly from year-to-year and, as a result, our cash flows from customer collections have increased as have our profits. As a result, our annual cash provided by operating activities has generally increased over time and has been a significant source of capital to the business, which we expect to continue in the future.

We may need to raise additional funds to support our investing operations, and such funding may not be available to us on acceptable terms, or at all. If we are unable to raise additional funds when needed, our operations and ability to execute our business strategy could be adversely affected. We may seek to raise additional funds through equity, equity-linked or debt financings. If we raise additional funds through the incurrence of indebtedness, such indebtedness would have rights that are senior to holders of our equity securities and could contain covenants that restrict our operations. Any additional equity financing may be dilutive to our stockholders.

Non-GAAP financial measures

EBITDA and Adjusted EBITDA are financial measures that are not calculated in accordance with U.S. GAAP. We define EBITDA as net income excluding interest income, interest expense, taxes and depreciation and amortization. Adjusted EBITDA also excludes stock-based compensation. Below, we have provided a reconciliation of EBITDA and Adjusted EBITDA to our net income, the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP. EBITDA and Adjusted EBITDA should not be considered alternatives to net income or any other measure of financial performance calculated and presented in accordance with U.S. GAAP. Our EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures of other organizations because other organizations may not calculate EBITDA and Adjusted EBITDA in the same manner as we calculate these measures.

We include EBITDA and Adjusted EBITDA in this Quarterly Report on Form 10-Q because they are important measures upon which our management assesses our operating performance. We use EBITDA and Adjusted EBITDA as key performance measures because we believe they facilitate operating performance comparisons from period-to-period by excluding potential differences primarily caused by variations in capital structures, tax positions, the impact of depreciation and amortization expense on our fixed assets and intangible assets, and the impact of stock-based compensation expense. Because EBITDA and Adjusted EBITDA facilitate internal comparisons of our historical operating performance on a more consistent basis, we also use EBITDA and Adjusted EBITDA for business planning purposes, to incentivize and compensate our management personnel, and in evaluating acquisition opportunities. In addition, we believe EBITDA, Adjusted EBITDA, and similar measures are widely used by investors, securities analysts, ratings agencies, and other parties in evaluating companies in our industry as a measure of financial performance and debt-service capabilities.

Our uses of EBITDA and Adjusted EBITDA have limitations as analytical tools and should not be considered in isolation or as a substitute for analysis of our results as reported under U.S. GAAP. Some of these limitations are:

- EBITDA and Adjusted EBITDA do not reflect our cash expenditures for capital equipment or other contractual commitments;
- although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and EBITDA and Adjusted EBITDA do not reflect capital expenditure requirements for such replacements;
- EBITDA and Adjusted EBITDA do not reflect changes in, or cash requirements for, our working capital needs; and
- other companies, including companies in our industry, may calculate EBITDA and Adjusted EBITDA measures differently, which reduces their usefulness as a comparative measure.

In evaluating EBITDA and Adjusted EBITDA, we anticipate that in the future we will incur expenses within these categories similar to this presentation. Our presentation of EBITDA and Adjusted EBITDA should not be construed as an inference that our future results will be unaffected by certain expenses. When evaluating our performance, EBITDA and Adjusted EBITDA should be considered alongside other financial performance measures, including U.S. GAAP results.

The following table presents a reconciliation of EBITDA and Adjusted EBITDA to our net income, the most comparable U.S. GAAP measure, for each of the periods indicated:

(amounts in thousands)	**Three months ended September 30,**		**Nine months ended September 30,**	
Non-GAAP EBITDA and Adjusted EBITDA	**2019**	**2018**	**2019**	**2018**
Net income	$ 6,863	$ 16,432	$ 22,325	$ 41,800
Non-GAAP adjustments:				
Interest income	(1,149)	(895)	(3,877)	(2,111)
Provision (benefit) for income taxes	1,890	(5,133)	6,184	(7,168)
Depreciation and amortization	3,662	2,712	9,216	8,521
EBITDA (non-GAAP)	11,266	13,116	33,848	41,042
Stock-based compensation	1,565	3,216	6,930	9,783
Adjusted EBITDA (non-GAAP)	$ 12,831	$ 16,332	$ 40,778	$ 50,825

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to various market risks, including fluctuation in interest rates, foreign currency, and exchange rates. Market risk is the potential loss arising from adverse changes in market rates and prices. We do not hold or issue financial instruments for trading purposes.

Interest rate fluctuation risk

The principal market risk we face is interest rate risk. We had cash and cash equivalents of $156.1 million as of September 30, 2019, which consisted of highly-liquid investments with a maturity of three months or less, and $44.5 million of marketable securities with maturity dates of greater than three months. The primary goals of our investment policy are liquidity and capital preservation. We do not enter into investments for trading or speculative purposes. We believe that we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the short-term nature of our cash and cash equivalents. Declines in interest rates, however, would reduce future investment income. We considered the historical volatility of short-term interest rates and determined that it was reasonably possible that an adverse change of 100 basis points could be experienced in the near term. A hypothetical 1.00% (100 basis points) increase in interest rates would not have materially impacted the fair value of our marketable securities as of September 30, 2019 and December 31, 2018. If overall interest rates had decreased by 1.00% (100 basis points), our interest income would not have been materially affected for the three months or nine months ended September 30, 2019 or September 30, 2018.

Foreign currency exchange risk

The majority of our revenue is denominated in U.S. dollars while the majority of our European sales are denominated in Euros. In addition, we acquired MedSupport in the second quarter of 2017 with net assets denominated in Euros. Our results of operations, certain balance sheet balances and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. The volatility of exchange rates depends on many factors that we cannot forecast with reliable accuracy. We have experienced and will continue to experience fluctuations in our net income or loss as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency in which they are recorded. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables as of September 30, 2019 would not have had a material effect on our financial position, results of operations or cash flows. As our operations in countries outside of the United States grow, our results of operations and cash flows will be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future.

We began entering into foreign exchange forward contracts to protect our forecasted U.S. dollar-equivalent earnings from adverse changes in foreign currency exchange rates in December 2015. These hedging contracts reduce, but will not entirely eliminate, the impact of adverse currency exchange rate movements on revenue. We performed a sensitivity analysis assuming a hypothetical 10% adverse movement in foreign exchange rates to the hedging contracts and the underlying exposures described above. As of September 30, 2019, the analysis indicated that these hypothetical market movements would not have a material effect on our financial position, results of operations or cash flows. We estimate prior to any hedging activity that a 10% adverse change in exchange rates on our foreign denominated sales would have resulted in a $4.3 million decline in revenue for the first nine months of 2019. We designate these forward contracts as cash flow hedges for accounting purposes. The fair value of the forward contract is separated into intrinsic and time values. The fair value of forward currency-exchange contracts is sensitive to changes in currency exchange rates. Changes in the time value are coded in other income (expense), net. Changes in the intrinsic value are recorded as a component of accumulated other comprehensive income and subsequently reclassified into revenue to offset the hedged exposures as they occur.

Inflation risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we might not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and results of operations.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures

The Company maintains a system of disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which are designed to provide reasonable assurance that information required to be disclosed in the reports that the Company files or submits under the Exchange Act, is recorded, processed, summarized and reported accurately and completely within the time periods specified in the SEC's rules and forms. These disclosure controls and procedures include, among other processes, controls and procedures designed to ensure that information required to be disclosed in the reports that the Company files or submits under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Due to inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Further, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions over time, or that the degree of compliance with the policies and procedures may deteriorate. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2019. Based upon the evaluation described above, our Chief Executive Officer and Chief Financial Officer concluded that, as of September 30, 2019, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in internal control over financial reporting

There has been no change in our internal control over financial reporting during the three months ended September 30, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting, except for new controls implemented to record the purchase price allocation for the New Aera acquisition.

Limitations on effectiveness of controls

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Because of the inherent limitations in any control system, misstatements due to error or fraud may occur and not be detected.

Part II. OTHER INFORMATION

Item 1. Legal Proceedings

Securities class action and derivative lawsuits

On March 6, 2019, plaintiff William Fabbri filed a lawsuit against Inogen, Scott Wilkinson, and Alison Bauerlein, in the United States District Court for the Central District of California on behalf of a purported class of purchasers of the Company's securities. On March 21, 2019, plaintiff Steven Friedland filed a substantially similar lawsuit against the same defendants in the same court. On May 20, 2019, the court issued an order consolidating the two lawsuits under the name *In re Inogen, Inc. Sec. Litig.,* No. 2:19-cv-01643-FMO-AGR, appointing Dr. John Vasil and Paragon Fund Management as lead plaintiffs, and appointing Robbins Geller Rudman & Dowd LLP and Glancy Prongay & Murray LLP as lead plaintiffs' counsel. On July 10, 2019, the lead plaintiffs filed a consolidated amended complaint on behalf of a purported class of purchasers of the Company's common stock between November 8, 217 and May 7, 2019. The complaint generally alleges that the defendants failed to disclose that: (i) Inogen had overstated the true size of the total addressable market for its portable oxygen concentrators and had misstated the basis for its calculation of the total addressable market; (ii) Inogen had falsely attributed its sales growth to the strong sales acumen of its salesforce, rather than to deceptive sales practices; (iii) the growth in Inogen's domestic business-to-business sales to home medical equipment providers was inflated, unsustainable and was eroding direct-to-consumer sales; and (iv) Inogen's decision to focus on sales over rentals of portable oxygen concentrators harmed its ability to serve the Medicare market. The complaint seeks compensatory damages in an unspecified amount, costs and expenses, including attorneys' fees and expert fees, pre-judgment and post-judgment interest and such other relief as the court deems proper. On August 30, 2019, the defendants filed a motion to dismiss the complaint. A hearing on the defendants' motion is scheduled for November 21, 2019. We intend to vigorously defend ourselves against these allegations.

On June 26, 2019, plaintiff Twana Brown filed a shareholder derivative lawsuit against Inogen, Scott Wilkinson, Alison Bauerlein, Benjamin Anderson-Ray, Scott Beardsley, R. Scott Greer, Raymond Huggenberger, Heath Lukatch, Loren McFarland, and Heather Rider in the United States District Court for the Central District of California. The complaint purports to bring claims on behalf of Inogen against the individual defendants for breaches of their fiduciary duties as directors and/or officers of Inogen, unjust enrichment, waste of corporate assets, and violations of section 14(a) of the Securities Exchange Act of 1934, as amended. The complaint generally alleges similar claims to the securities class action. The complaint seeks compensatory damages in an unspecified amount, changes to the Company's corporate governance and internal procedures, costs and expenses, including attorneys' fees and expert fees, and such other relief as the court deems proper. On August 5, 2019, the court issued an order staying the derivative action pending the resolution of the motion to dismiss stage in *In re Inogen, Inc. Sec. Litig.* Between September 13, 2019 and October 31, 2019, five additional shareholder derivative complaints were filed in the United States District Court for the Central District of California and the United States District Court for the District of Delaware based on similar factual allegations. These lawsuits purport to bring claims on behalf of Inogen for breach of fiduciary duty, unjust enrichment, waste of corporate assets, abuse of control, gross mismanagement, insider trading and misappropriation of information, violations of sections 14(a) of the Securities Exchange Act of 1934, as amended, and contribution from certain of the individual defendants. We intend to vigorously defend these lawsuits.

Other litigation

In the normal course of business, we are from time to time involved in various legal proceedings or potential legal proceedings, including matters involving employment, product liability and intellectual property. We carry insurance, subject to specified deductibles under our policies, to protect against losses from certain liabilities and costs. At this time, we do not anticipate that any of these proceedings arising in the normal course of business will have a material adverse effect on our business. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

Item 1A. Risk Factors

We operate in a rapidly changing environment that involves numerous uncertainties and risks. In addition to the other information included in this Quarterly Report on Form 10-Q, the following risks and uncertainties may have a material and adverse effect on our business, financial condition, results of operations, or stock price. You should consider these risks and uncertainties carefully, together with all of the other information included or incorporated by reference in this Quarterly Report on Form 10-Q. The risks and uncertainties described below may not be the only ones we face. If any of the risks or uncertainties we face were to occur, the trading price of our securities could decline, and you may lose all or part of your investment. This Quarterly Report on Form 10-Q also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this report.

Risks related to our business and strategy

We face intense international, national, regional and local competition and if we are unable to compete successfully, it could have an adverse effect on our revenue, revenue growth rate, if any, and market share.

The long-term oxygen therapy market and the non-invasive ventilator market are highly competitive industries. We compete with a number of manufacturers and distributors of portable oxygen concentrators, as well as providers of other long-term oxygen therapy solutions such as home delivery of oxygen tanks or cylinders, stationary concentrators, transfilling concentrators, and liquid oxygen. In the non-invasive ventilator market, we compete with manufacturers and distributors of other portable non-invasive ventilators, as well as non-invasive HME providers that supply these products.

Our significant manufacturing competitors are Respironics (a subsidiary of Koninklijke Philips N.V.), Invacare Corporation, Caire Medical (subsidiary of NGK Spark Plug), DeVilbiss Healthcare (a subsidiary of Drive Medical), O2 Concepts, Precision Medical, Resmed, Gas Control Equipment (subsidiary of Colfax), Breathe Technologies, Inc. (recently announced to be acquired by Hill-Rom Holdings, Inc.), Breas Medical, Ventec Life Systems, and Covidien. Additional competitors have also pre-announced upcoming product launches of portable oxygen concentrators expected in 2019 including 3B Medical, SysMed, and Bellascura. Given the relatively straightforward regulatory path in the oxygen therapy device manufacturing market, we expect that the industry will become increasingly competitive in the future. For example, some major competitors have implemented direct-to-consumer sales models which may increase their competitiveness and sales to patients and we have recently seen the cost per generated lead trend higher than historical averages that may in part be due to increased competition; however, these strategies are limited to direct-to-consumer sales and do not include direct-to-consumer rentals where they would be responsible to meet national accreditation and state-by-state licensing requirements and secure Medicare billing privileges. Manufacturing companies compete for sales to providers primarily on the basis of price, quality/reliability, financing, bundling, product features, and service.

For many years, Lincare, Inc. (a subsidiary of the Linde Group), Apria Healthcare, Inc., AdaptHealth (formerly QMES LLC), Aerocare Holdings, Inc. and Rotech Healthcare, Inc. have been among the market leaders in providing respiratory therapy products, while the remaining market is serviced by local providers. Because of reimbursement reductions, we expect more industry consolidation and volatility in ordering patterns based on how providers are restructuring their businesses and their access to capital. Respiratory therapy providers compete primarily on the basis of product features and service, rather than price, since reimbursement levels are established by Medicare and Medicaid, or by the individual determinations of private payors.

Some of our competitors are large, well-capitalized companies with greater resources than we have. As a consequence, they are able to spend more aggressively on product development, marketing, sales and other product initiatives than we can. Some of these competitors have:

- significantly greater name recognition;
- established relationships with healthcare professionals, customers and third-party payors;
- established distribution networks;
- additional lines of products, and the ability to offer rebates or bundle products to offer higher discounts, lower pricing, longer warranties, financing or extended terms, other incentives to gain a competitive advantage;
- greater history in conducting research and development, manufacturing, marketing and obtaining regulatory approval for respiratory device products; and
- greater financial and human resources for product development, sales and marketing, and patent litigation.

As a result, our competitors may be able to respond more quickly and effectively than we can due to new or changing opportunities, technologies, standard regulatory and reimbursement development and customer requirements. In light of these advantages that our competitors maintain, even if our technology and direct-to-consumer distribution strategy is more effective than the technology and distribution strategy of our competitors, including those who have adopted or may in the future adopt direct-to-consumer sales models, current or potential customers might accept competitor products and services in lieu of purchasing our products. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and distribution strategies and as new companies enter the market with new technologies and distribution strategies. We may not be able to compete effectively against these organizations. Our ability to compete successfully and to increase our market share is dependent upon our reputation for providing responsive, professional and high-quality products and services and achieving strong customer satisfaction. Increased competition in the future could adversely affect our revenue, revenue growth rate, margins and market share.

If we are unable to continue to enhance our existing products and develop and market new products that respond to customer needs and preferences and achieve market acceptance, we may experience a decrease in demand for our products and our business could suffer.

We may not be able to compete as effectively with our competitors and ultimately satisfy the needs and preferences of our customers unless we can continue to enhance existing products and develop new innovative products. Product development requires significant financial, technological and other resources. While we expended $2.6 million and $2.1 million for the three months ended September 30, 2019 and September 30, 2018, respectively, and $5.8 million and $5.3 million for the nine months ended September 30, 2019 and September 30, 2018, respectively, in research and development efforts, we cannot assure that this level of investment will be sufficient to maintain a competitive advantage in product innovation, which could cause our business to suffer. In addition, we plan to sell the Tidal Assist® Ventilator (TAV®), the newly acquired technology from New Aera, through our domestic direct-to-consumer sales channel and our business-to-business sales channels worldwide, pending regulatory clearances outside of the United States. We also plan to incorporate the TAV technology directly into our oxygen concentrators.Product improvements and new product introductions also require significant planning, design, development, patent protection, and testing at the technological, product, and manufacturing process levels and we may not be able to timely develop product improvements or new products or obtain necessary patent protection and regulatory clearances or approvals for such product improvements or new products in a timely manner, or at all. Our competitors' new products may enter the market before our new products reach market, be more effective with more features, obtain better market acceptance, or render our products obsolete. Any new products that we develop or acquire, including the TAV, may not receive market acceptance or otherwise generate any meaningful sales or profits for us relative to our expectations based on, among other things, existing and anticipated investments in manufacturing capacity and commitments to fund advertising, marketing, promotional programs and research and development. In addition, if we are unable to seek and obtain regulatory approval or adequate coverage and reimbursement for any new products that we develop or introduce, including the TAV, in a timely manner or at all, we may realize lower revenue than expected or even no revenue at all from these products. As a result, our business, financial condition and results of operations could be materially harmed.

We depend on a limited number of customers for a significant portion of our sales revenue and the loss of, or a significant shortfall in demand from, these customers could have a material adverse effect on our financial condition and operating results.

We receive a significant amount of our sales revenue from a limited number of customers, including distributors, HME providers, our private label partner and resellers. For the three months ended September 30, 2019 and September 30, 2018, sales revenue to our top 10 customers accounted for approximately 34.7% and 35.8%, respectively, of our total revenue. No single customer represented more than 10% of our total revenue for the three months ended September 30, 2019, and no single customer represented more than 10% of our total revenue for the three months ended September 30, 2018. For the nine months ended September 30, 2019 and September 30, 2018, sales revenue to our top 10 customers accounted for approximately 34.3% and 38.7%, respectively, of our total revenue. No single customer represented more than 10% of our total revenue for the nine months ended September 30, 2019 and one single customer represented more than 10% of our total revenue for the nine months ended September 30, 2018. We expect that sales to relatively few customers will continue to account for a significant percentage of our total revenue in future periods. Our future success will significantly depend upon the timing and volume of business from our largest customers and the financial and operational success of these customers. However, we can provide no assurance that any of these customers or any of our other customers will continue to purchase our products at current levels, pricing, or at all, and our revenue could fluctuate significantly due to changes in customer order levels, economic conditions, the adoption of competitive products, or the loss of, reduction of business with, or less favorable terms with any of our largest customers. For example, we have previously experienced a decline in sales to one large national homecare provider who purchased through our private label partner. Other home medical equipment providers have communicated to us that they continue to be subject to capital constraints and certain providers have indicated that they intend to reduce or limit purchases in the future. If we were to lose one of our key customers or have a key customer significantly reduce its volume of business with us, such as we previously experienced with the large national homecare provider, our revenue may be materially reduced and there would be an adverse effect on our business, financial condition and results of operations.

We obtain some of the components, subassemblies and completed products included in our Inogen One systems and our Inogen At Home systems from a single source or a limited group of manufacturers or suppliers, and the partial or complete loss of one or more of these manufacturers or suppliers could cause significant production delays, an inability to meet customer demand, substantial loss in revenue, and an adverse effect on our financial condition and results of operations.

We utilize single-source suppliers for some of the components and subassemblies we use in our Inogen One systems and our Inogen At Home systems. For example, we have elected to source certain key components from single sources of supply, including our batteries, motors, valves, and some molded plastic components. Our dependence on single-source suppliers of components may expose us to several risks, including, among other things:

- our suppliers may encounter financial hardships as a result of unfavorable economic and market conditions unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements;

- suppliers may fail to comply with regulatory requirements, be subject to lengthy compliance, validation or qualification periods, or make errors in manufacturing components that could negatively affect the performance or safety of our products or cause delays in supplying of our products to our customers;
- newly identified suppliers may not qualify under the stringent quality regulatory standards to which our business is subject, which could inhibit their ability to fulfill our orders and meet our requirements;
- we or our suppliers may not be able to respond to unanticipated changes in customer orders, and if orders do not match forecasts, we or our suppliers may have excess or inadequate inventory of materials and components;
- we may be subject to price fluctuations due to a lack of long-term supply arrangements for key components or changes in import tariffs;
- we may experience delays in delivery by our suppliers due to customs clearing delays, shipping delays, scarcity of raw materials or changes in demand from us or their other customers;
- we or our suppliers may lose access to critical services and components, resulting in an interruption in the manufacture, assembly and shipment of our systems;
- our suppliers may be subject to allegations by other parties of misappropriation of proprietary information in connection with their supply of products to us, which could inhibit their ability to fulfill our orders and meet our requirements;
- fluctuations in demand for products that our suppliers manufacture for others may affect their ability or willingness to deliver components to us in a timely manner;
- our suppliers may wish to discontinue supplying components or services to us; and
- we may not be able to find new or alternative components or reconfigure our system and manufacturing processes in a timely manner if the necessary components become unavailable.

We have in the past experienced supply problems with some of our suppliers and may again experience problems in the future. For example, we have previously had issues with our suppliers sourcing certain components of our Inogen One products. If we had not been able to obtain sufficient quantities of the required component, we would have been required to delay manufacturing until additional supplies become available, or we would have been required to validate an alternative component. We may not be able to quickly establish additional or replacement suppliers, particularly for our single source components or subassemblies. Any interruption or delay in the supply of components or subassemblies, or our inability to obtain components or subassemblies from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers and cause them to cancel orders or switch to competitive products.

In addition, we may be deemed to manufacture or contract to manufacture products that contain certain minerals that have been designated as “conflict minerals” under the Dodd-Frank Wall Street Reform and Consumer Protection Act. As a result, we may be required to perform due diligence to determine the origin of such minerals and disclose and report whether or not such minerals originated in the Democratic Republic of the Congo or adjoining countries. The implementation of these requirements could adversely affect the sourcing, availability, and pricing of minerals used in the manufacture of our products. In addition, we have incurred additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. If any of these risks materialize, costs could significantly increase and our ability to meet demand for our products could be impacted. If we fail to comply with the applicable regulations, we could be required to pay civil penalties, face criminal prosecution and, in some cases, be prohibited from distributing our products in commerce until the products or component substances are brought into compliance. If we are unable to satisfy commercial demand for our Inogen One systems and Inogen At Home systems in a timely manner, our ability to generate revenue would be impaired, market acceptance of our products could be adversely affected, and customers may instead purchase or use alternative products. In addition, we could be forced to secure new or alternative components and subassemblies through a replacement supplier. Finding alternative sources for these components and subassemblies could be difficult in certain cases and may entail a significant amount of time and disruption. In some cases, we would need to change the components or subassemblies if we sourced them from an alternative supplier. This, in turn, could require a redesign of our Inogen One systems and Inogen At Home systems and, potentially, require additional Food and Drug Administration (FDA) clearance or approval before we could use any redesigned product with new components or subassemblies, thereby causing further costs and delays that could adversely affect our business, financial condition and results of operations.

A significant majority of our rental patients who use our product have health coverage under the Medicare program, and recently enacted and future changes in the reimbursement rates or payment methodologies under Medicare, Medicaid and other government programs have affected and could continue to materially and adversely affect our business and operating results.

As a provider of oxygen equipment rentals, we depend heavily on Medicare reimbursement as a result of the higher proportion of elderly persons suffering from chronic long-term respiratory conditions. Medicare Part B, or Supplementary Medical Insurance Benefits, provides coverage to eligible beneficiaries that include items of durable medical equipment for use in the home, such as oxygen equipment and other respiratory devices. We believe that up to 60% of long-term oxygen therapy patients in the United States have primary coverage under traditional fee-for-service Medicare Part B. There are increasing pressures on Medicare to control healthcare costs and to reduce or limit reimbursement rates for home medical products.

Legislation, including the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, the Deficit Reduction Act of 2005, the Medicare Improvements for Patients and Providers Act of 2008, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, and the 21st Century Cures Act (Cures Act) contain provisions that directly impact reimbursement for the durable medical equipment products provided by us:

- The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 significantly reduced reimbursement for inhalation drug therapies beginning in 2005, reduced payment amounts for certain durable medical equipment, including oxygen, beginning in 2005, froze payment amounts for other covered home medical equipment items through 2008, established a competitive bidding program for home medical equipment and implemented quality standards and accreditation requirements for durable medical equipment suppliers.
- The Deficit Reduction Act of 2005 limited the total number of continuous rental months for which Medicare will pay for oxygen equipment to 36 months, after which time there is generally no additional reimbursement to the supplier (other than for periodic, in-home maintenance and servicing). The Deficit Reduction Act of 2005 also provided that title of the equipment would transfer to the beneficiary, which was later repealed by the Medicare Improvements for Patients and Providers Act of 2008. For purposes of the rental cap, the Deficit Reduction Act of 2005 provided for a new 36-month rental period that began January 1, 2006 for all oxygen equipment. After the 36th continuous month during which payment is made for the oxygen equipment, the supplier is generally required to continue to furnish the equipment during the period of medical need for the remainder of the useful lifetime of the equipment, provided there are no breaks in service due to medical necessity that exceed 60 days. The reasonable useful lifetime for our portable oxygen equipment is 60 months. After 60 months, if the patient requests, and the patient meets Medicare coverage criteria, the rental cycle starts over and a new 36-month rental period begins. There are no limits on the number of 60-month cycles over which a Medicare patient may receive benefits and an oxygen therapy provider may receive reimbursement, so long as such equipment continues to be medically necessary for the patient. We anticipate that the Deficit Reduction Act of 2005 oxygen payment rules will continue to negatively affect our net revenue on an ongoing basis, as each month additional customers reach the capped rental period in month thirty-seven, resulting in potentially two or more years without rental income from these customers while we continue to incur customer service and maintenance costs. Our capped patients as a percentage of total patients on service was approximately 20.2% as of September 30, 2019, which is higher than the capped patients as a percentage of total patients on service of approximately 18.1% as of September 30, 2018. The percentage of capped patients may fluctuate over time as new patients come on service, patients come off of service before and during the capped rental period, and existing patients enter the capped rental period. We cannot predict the potential impact to rental revenues in future periods associated with patients in the capped rental period.
- The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, includes, among other things, new face-to-face physician encounter requirements for certain durable medical equipment and home health services, and a requirement that by 2016, the competitive bidding process must be nationalized or prices in non-competitive bidding areas must be adjusted to match competitive bidding prices. As of January 1, 2017, CMS has decreased prices for durable medical equipment in non-competitive bidding areas to match competitive bidding prices.
- The Cures Act was passed in December 2016 and included a provision to roll-back the second cut to the non-CBA areas that was effective July 1, 2016 through December 31, 2016. Reimbursement in these areas was increased to the rates experienced in the period from January 1, 2016 through June 30, 2016. This led to a benefit in rental revenue of $2.0 million in the fourth quarter of 2016 and $0.2 million in the first quarter of 2017. Effective January 1, 2017, rates are set at 100% of the adjusted fee schedule amount, based on the regional competitive bidding rates. The Cures Act also called for a study of the impact of the competitive bidding pricing on rural areas.

These legislative provisions as currently in effect have had and may continue to have a material and/or adverse effect on our business, financial condition and results of operations.

The Health and Human Services (HHS) Office of Inspector General (OIG) has recommended states to review Medicaid reimbursement for durable medical equipment (DME) and supplies. The OIG cites an earlier report estimating that four states (California, Minnesota, New York, and Ohio) could have saved more than $18.1 million on selected DME items if their Medicaid prices were comparable to those under round one of the Medicare competitive bidding program. Since issuing those reports, the OIG identified $12 million in additional savings that the four states could have obtained on the selected items by using pricing similar to the Medicare round two competitive bidding and national mail-order programs. In light of varying Medicaid provider rates for DME and the potential for lower spending, the OIG recommends that CMS (1) seek legislative authority to limit state Medicaid DME reimbursement rates to Medicare program rates, and (2) encourage further reduction of Medicaid reimbursement rates through competitive bidding or manufacturer rebates (the OIG did not determine the cost of implementing a rebate or competitive bidding program in each state). This was effective beginning January 1, 2018.

On January 28, 2016, the Department of Health and Human Services (DHHS) published a final rule to implement Medicare's face-to-face provisions for home health and DME under the Medicaid program, effective July 1, 2016. Medicaid programs are run by state agencies that must coordinate with state legislative bodies, therefore the state agencies have until July 1, 2017 or July 1, 2018 (depending on the timing of their legislative sessions) to allow state agencies to publish compliant initiatives on this rule. All states except Montana, Nevada, North Dakota, and Texas initiated this requirement effective July 1, 2017. Montana, Nevada, North Dakota, and Texas implemented the requirements by July 1, 2018. The Medicaid definition of medical supplies, equipment and appliances were aligned with the Medicare definitions. In addition, the DHHS has implemented the requirement for a face-to-face visit related to the beneficiary's primary need for medical equipment within 6 months prior to the start of certain durable medical equipment services, including oxygen. These legislative provisions could have an adverse effect on our business, financial condition and results of operations.

Due to budgetary shortfalls, many states are considering, or have enacted, cuts to their Medicaid programs. In addition, many private payors reimburse at a percentage of the Medicare rates. Medicare, Medicaid and private payor reimbursement rate cuts have included, or may include, elimination or reduction of coverage for our products, amounts eligible for payment under co-insurance arrangements, or payment rates for covered items. Continued state budgetary pressures could lead to further reductions in funding for the reimbursement for our products which, in turn, would adversely affect our business, financial condition and results of operations.

On January 17, 2017, the U.S. Department of Health and Human Services published a final rule effective March 20, 2017 to address the appeals backlog that includes allowing certain decisions to be made by the Medicare Appeals Council to set precedent for lower levels of appeal, expansion of the pool of available adjudicators, and increasing decision-making consistency among the levels of appeal. In addition, it included provisions to improve the efficiency by streamlining the appeals process, allowing attorneys to handle some procedural matters at the administrative law judge level, and proposed funding increases and legislative actions outlined in the federal budget for 2017. DHHS estimates this could eliminate the backlog in appeals by 2021. However, if this plan is not effective, the appeals backlog could increase, which could increase our collection times and decrease our cash flow, increase billing administrative costs, and/or increase the provision for rental revenue adjustments, which would adversely affect our business, financial condition and results of operations.

The competitive bidding process under Medicare could negatively affect our business and financial condition.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires the Secretary of Health and Human Services to establish and implement programs under which competitive acquisition areas are established throughout the United States for purposes of awarding contracts for the furnishing of competitively priced items of durable medical equipment, including oxygen equipment.

Effective January 1, 2019, Medicare beneficiaries may receive durable medical equipment from any Medicare-enrolled supplier until new contracts are in effect under competitive bidding Round 2021, which is expected to begin on January 1, 2021. Reimbursement rates between January 1, 2019 and December 31, 2020 will be set at the current pricing level throughout the United States for all Medicare patients, subject to Consumer Price Index (CPI) and budget neutrality adjustments. Pricing in competitive bidding areas will be subject to annual CPI adjustments beginning in 2019 until Round 2021 begins. However, CMS also changed the calculation on budget neutrality to apply the offset to all oxygen and oxygen equipment classes beginning January 1, 2019 instead of previously only applying these adjustments to stationary oxygen equipment and oxygen contents. Based on these CPI and budget neutrality adjustments, effective January 1, 2019, the average Medicare rates were reduced to $72.92 a month for E1390 and $35.72 a month for E1392 in these regions that were previously subject to competitive bidding. Medicare also established new payment classes for liquid oxygen equipment and high flow portable liquid oxygen contents effective January 1, 2019.

In Round 2021 of DMEPOS competitive bidding program, there have been some revisions to the bidding methodology including surety bond requirements, lead item pricing, and setting reimbursement rates at the maximum winning bid rate instead of the median winning bid rate. In prior rounds of competitive bidding, the product category where our products fell was respiratory equipment and related supplies and accessories, which included oxygen equipment, continuous positive airway pressure (CPAP) devices and respiratory assist devices (RADs) and related supplies and accessories. In Round 2021 of bidding, oxygen and oxygen equipment is its own product category and the lead item has been established as E1390. However, due to the lead item pricing methodology based on the 2015 standard Medicare fee schedule, E1392 reimbursement rates could be reduced significantly (we estimate approximately 42%) even if E1390 reimbursement rates do not change. This would lead to combined E1390 plus E1392 reimbursement rates to decrease by approximately 15%. The bidding window closed on September 18, 2019. It is unclear how pricing will be impacted due to these new bids. We expect contracts and pricing to be announced in 2020.

In addition to regional pricing, CMS imposed different pricing on “frontier states” and rural areas. CMS defines frontier states as states where more than 50% of the counties in the state have a population density of 6 people or less per square mile and rural states are defined as states where more than 50% of the population lives in rural areas per census data. Current frontier states include MT, ND, SD and WY; rural states include ME, MS, VT and WV; and non-contiguous United States areas include AK, HI, Guam and Puerto Rico. Effective June 1, 2018 through December 31, 2020, for frontier and rural states, frontier and rural zip codes in non-frontier/rural states and non-contiguous United States areas, the single payment amount will be the 50/50 blended reimbursement rates based on an average of the pre-competitive reimbursement bidding rates and the current average reimbursement rates to account for higher servicing costs in these areas. In 2019, this rate is $134.71 a month for E1390 and $44.32 a month for E1392. We estimate that less than 15% of our patients are eligible to receive the higher reimbursement rates based on the geographic locations of our current patient population.

Cumulatively in previous rounds of competitive bidding, we were offered contracts for a substantial majority of the CBAs and product categories for which we submitted bids. Effective January 1, 2017, we believe we had access to over 90% of the Medicare oxygen therapy market based on our analysis of the 103 CBAs that we won out of the 130 total CBAs. These 130 CBAs represented approximately 36% of the Medicare market with the remaining approximately 64% of the market not subject to competitive bidding. As of January 1, 2019, and until Round 2021 of competitive bidding becomes effective, we can choose to accept Medicare oxygen patients throughout the United States. As of July 2018, we currently operate in all 50 states in the U.S. We did not sell or rent to patients in Hawaii due to the licensure requirements from inception to June 2018.

We cannot guarantee that we will be offered contracts in subsequent rounds of competitive bidding. In all five rounds of competitive bidding in which we have participated, we have gained access to certain CBAs and been excluded from other CBAs.

Medicare revenue, including patient co-insurance and deductible obligations, represented 4.8% and 4.7% of our total revenue in the three months ended September 30, 2019 and September 30, 2018, respectively, and 4.6% and 4.6% in the nine months ended September 30, 2019 and September 30, 2018, respectively.

Medicare reimbursement for oxygen rental equipment is limited to a maximum of 36 months within a 60-month service period, and the equipment remains the property of the home oxygen supplier. The supplier that billed Medicare for the 36th month of service continues to be responsible for the patient’s oxygen therapy needs for months 37 through 60, and there is generally no additional reimbursement for oxygen generating portable equipment for these later months. CMS does not separately reimburse suppliers for oxygen tubing, cannulas and supplies that may be required for the patient. The supplier is required to keep the equipment provided in working order and in some cases, CMS will reimburse for repair costs. At the end of the five-year useful life of the equipment, the patient may request replacement equipment and, if he or she can be re-qualified for the Medicare benefit, a new maximum 36-month payment cycle out of the next 60 months of service would begin. The supplier may not arbitrarily issue new equipment. We have analyzed the potential impact to revenue associated with patients in the capped rental period and have deferred $0 associated with the capped rental period as of September 30, 2019 and September 30, 2018. Our capped patients as a percentage of total patients on service was approximately 20.2% as of September 30, 2019, which is higher than the capped patients as a percentage of total patients on service of approximately 18.1% as of September 30, 2018. The percentage of capped patients may fluctuate over time as new patients come on service, patients come off of service before and during the capped rental period, and existing patients enter the capped rental period.

Our obligations to service Medicare patients over the rental period include supplying working equipment that meets each patient’s oxygen needs pursuant to his/her doctor’s prescription and certificate of medical necessity form and supplying all disposables required for the patient to operate the equipment, including cannulas, filters, replacement batteries, carts and carry bags, as needed. If the equipment malfunctions, we must repair or replace the equipment. We determine what equipment the patient receives, as long as that equipment meets the physician’s prescription, and we can deploy used assets in working order as long as the prescription requirements are met. We must also procure a recertification of the certificate of medical necessity from the patient’s doctor to confirm the patient’s need for oxygen therapy one year after the patient first receives oxygen therapy and one year after each new 36-month reimbursement period begins. The patient can choose to receive oxygen supplies and services from another supplier at any time, but the supplier may only transition the patient to another supplier in certain circumstances.

Round 2021 of the competitive bidding program includes non-invasive ventilation (NIV) as a new product category effective January 1, 2021 for code E0466. Current Medicare reimbursement rates for HCPCS code E0466 are monthly, non-capped rental and are at $934 to $1,099 a month, excluding Puerto Rico wherethe monthly Medicare reimbursement rate for E0466 is $1,827 per month. Since this is the first-time non-invasive ventilators are being included in thecompetitive bidding program, it is uncertain what impact bidding will have on the reimbursement rates. If there is a significant decline in reimbursement rates or changes in coverage criteria, this may negatively impact the adoption of the SideKick TAV product by home medical equipment providers, or increase pricing pressure, as well as negatively impact our rental reimbursement rates,which would adversely affect our business, financial condition and results of operations

It is also uncertain if we will win any bids for NIV for Round 2021 of the competitive bidding program. We have not previously provided NIV products to Medicare beneficiaries. If we do not win contracts to service Medicare beneficiaries for NIV in Round 2021, that may limit our ability to grow rental revenue for NIV.

It is also uncertain if the current product acquired from New Aera, the SideKick TAV, will be reimbursable in its current configuration under HCPCS code E0466. We requested confirmation on the assigned HCPCS codes for the SideKick TAV system from the Pricing, Data Analysis, and Coding Contractor in August 2019 following the closing of the New Aera transaction. In August 2019, we received positive confirmation that this product was assigned HCPCS code E0466. However, in September 2019, we received a revised communication that the product was assigned HCPCS code E1390 and E1352. Based on these CPI and budget neutrality adjustments, effective January 1, 2019, the average Medicare rates were $72.92 a month for E1390 and $0 a month for E1352. In September 2019, we appealed to the Centers for Medicare and Medicaid Services but have not received a response yet. If we do not receive revised coding, it could limit this product’s adoption by home medical equipment providers and also our direct rentals.

On May 15, 2019, a bi-partisan bill was introduced in the House of Representatives that would provide relief from competitive bidding in non-bid areas. As of October 28, 2019, there were 51 co-sponsors on this bill. If passed, the bill would provide retroactive relief to rural areas by making the 50/50 blended reimbursement rate in rural and noncontiguous areas to all items and services furnished with dates of service from June 1, 2018, with no end date, and by introducing a 75/25 blended reimbursement rate for areas other than rural or noncontiguous areas. The legislation also proposes to remedy a double-dip cut to oxygen payments caused by the misapplication of a 2006 budget neutrality offset balancing increased utilization for oxygen generating portable equipment with lower reimbursement for stationary equipment. There is no known timing on voting on this bill.

On March 11, 2019, the current presidential administration sent Congress a 2020 budget proposal that included language on competitive bidding. Specifically, the proposal would eliminate the requirement under the competitive bidding program that CMS pay a single payment amount based on the median bid price, proposing instead that CMS pay winning suppliers at their own bid amounts. Additionally, this proposal would expand competitive bidding to all areas of the country, including rural areas, which will be based on competition in those areas rather than on competition in urban areas. This specific proposal is estimated to save the government $7.1 billion in Medicare savings and $0.4 billion in Medicaid savings over 10 years. In addition to changes to competitive bidding, the 2020 budget proposal would enable CMS not to impose the face-to-face requirement on all providers for durable medical equipment. Furthermore, the proposal seeks to address excessive billing of durable medical equipment that requires refills or serial claims. Specifically, Medicare would gain authority to test whether using a benefits manager for serial durable medical equipment claims would result in lower improper payments and reductions in inappropriate utilization. The benefits manager would be responsible for ensuring beneficiaries were receiving the correct quantity of supplies or service for the appropriate time period. In addition, the proposal allows an administrative penalty of $50 for Part B items/services and $100 for Part A services on providers for ordering high-risk, high-cost items or services without proper documentation, such as diagnosis or encounter data. Lastly, the proposal would expand prior authorization to additional items and services that are both high-cost and at high-risk for improper payments. These provisions were not included in the latest omnibus budget, so it is unclear if any of these proposals will be implemented. We believe additional cuts to reimbursement would continue to drive conversion to non-delivery technologies, including portable oxygen concentrators, however this could also exacerbate patient access issues for treatment.

On July 29, 2019, CMS issued a proposed rule to establish methodologies to modernize pricing of new DMEPOS items and services based on commercial pricing data. In addition, the proposed rule recommends streamlining requirements related to face-to-face encounters, written orders prior to delivery and/or prior authorizations to reduce provider confusion. Lastly, the proposed rule recommends revising the existing DMEPOS competitive bidding program regulations to recognize that changes of ownership may occur on shorter timeframes and revising the submission of a hearing request in notices of breach of contract. CMS solicited comments on this proposed rule through September 27, 2019.

Although we continue to monitor developments regarding the implementation of the competitive bidding program, we cannot predict the outcome of the competitive bidding program on our business when fully implemented, nor the Medicare reimbursement rates that will be in effect in future years for the items subject to competitive bidding, including our products. We expect that the stationary oxygen and non-delivery ambulatory oxygen reimbursement rates will continue to fluctuate, and a large negative payment adjustment would adversely affect our business, financial condition and results of operations.

The Medicare Fee-For-Service (FFS) sequestration reduction has and may continue to negatively affect our revenue and profits.

Medicare FFS claims with dates of service on or after April 1, 2013 are subject to a 2% reduction in Medicare payment, including claims for DMEPOS, including in competitive bidding areas. The claims payment adjustment is applied to all claims after determining co-insurance, any applicable deductible, and any applicable Medicare secondary payment adjustments. These reductions are included in rental revenue adjustments. This sequestration reduction will continue until further notice. As a result, this could adversely affect our financial condition and results of operations.

The implementation of prior authorization rules for DMEPOS under Medicare could negatively affect our business and financial condition.

CMS has issued a final rule to require Medicare prior authorization (PA) for certain durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) that the agency characterizes as “frequent subject to unnecessary utilization.” The final rule was published on December 30, 2015 and specified an initial master list of 135 items that could potentially be subject to PA. Initially stationary oxygen rentals (code E1390) was included on the master list, but it was later removed. On April 22, 2019, stationary oxygen rentals (E1390) was again added to the list of potential codes that could be subject to PA. The master list is updated annually and published in the Federal Register. The presence of an item on the master list does not automatically mean that a PA is required. CMS will select a subset of these master list items for its “Required Prior Authorization List.” There will be a notice period of at least 60 days prior to implementation. The ruling does not create any new clinical documentation requirements; instead the same information necessary to support Medicare payment will be required *prior* to the item being furnished to the beneficiary. CMS has proposed that reasonable efforts are made to provide a PA decision within 10 days of receipt of all applicable information, unless this timeline could seriously jeopardize the life or health of the beneficiary or the beneficiary’s ability to regain maximum function, in which case the proposed PA decision would be 2 business days. CMS will issue additional sub-regulatory guidance on these timelines in the future. If our products are subject to prior authorization, it could reduce the number of patients qualified to come on service using their Medicare benefits, it could delay the start of those patients while we wait for the prior authorization to be received, and/or it could decrease sales productivity. As a result, this could adversely affect our business, financial conditions and results of operations.

Healthcare reform measures may have a material adverse effect on our business and results of operations.

In the United States, the legislative landscape, particularly as it relates to healthcare regulation and reimbursement coverage, continues to evolve. In March 2010, the Patient Protection and Affordable Care Act was passed, which has the potential to substantially change healthcare financing by both governmental and private insurers, and significantly impact the U.S. medical device industry.

In addition, other legislative changes have been proposed and adopted in the United States since the Patient Protection and Affordable Care Act was enacted. On August 2, 2011, the Budget Control Act of 2011 created, among other things, measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation’s automatic reduction to several government programs. This includes aggregate reductions of Medicare reimbursements to providers up to 2% per fiscal year, which went into effect on April 1, 2013, and will remain in effect through 2024 unless additional Congressional action is taken. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressures.

In addition to the legislative changes discussed above, the Patient Protection and Affordable Care Act also requires healthcare providers to voluntarily report and return an identified overpayment within 60 days after identifying the overpayment. Failure to repay the overpayment within 60 days will result in the claim being considered a “false claim” and the healthcare provider will be subject to False Claims Act liability.

State legislative bodies also have the right to enact legislation that would impact requirements of home medical equipment providers, including oxygen therapy providers. Some states have already enacted legislation that would require in-state facilities. We are monitoring all state requirements to maintain compliance with state-specific legislation and access to service patients in these states. To the extent such legislation is enacted, it could result in increased administrative costs or otherwise exclude us from doing business in a particular state, which would adversely impact our business, financial condition and results of operations.

We face uncertainties that might result from modification or repeal of any of the provisions of the Patient Protection and Affordable Care Act, including as a result of current and future executive orders and legislative actions. The impact of those changes on us and potential effect on the durable medical equipment industry as a whole is currently unknown. But, any changes to the Patient Protection and Affordable Care Act are likely to have an impact on our results of operations and may have a material adverse effect on our results of operations. We cannot predict what other healthcare programs and regulations will ultimately be implemented at the federal or state level or the effect of any future legislation or regulation in the United States may have on our business.

We depend upon reimbursement from Medicare, private payors, Medicaid and payments from patients for a significant portion of our revenue, and if we fail to manage the complex and lengthy reimbursement process, our business and operating results could be adversely affected.

A significant portion of our rental revenue is derived from reimbursement by third-party payors. We accept assignment of insurance benefits from customers and, in a majority of cases, invoice and collect payments directly from Medicare, private payors and Medicaid, as well as direct from patients under co-insurance provisions. For the three months ended September 30, 2019 and September 30, 2018, approximately 5.9% and 5.9%, respectively, and for the nine months ended September 30, 2019 and September 30, 2018, approximately 5.6% and 6.0%, respectively, of our total revenue was derived from Medicare, private payors, Medicaid, and individual patients who directly receive reimbursement from third-party payors and this percentage could increase as a percent of total revenue if we increase net patient additions faster than our sales revenue growth.

Our financial condition and results of operations may be affected by the healthcare industry’s reimbursement process, which is complex and can involve lengthy delays between the time that a product is delivered to the consumer and the time that the reimbursement amounts are settled. Depending on the payor, we may be required to obtain certain payor-specific documentation from physicians and other healthcare providers before submitting claims for reimbursement. Certain payors have filing deadlines and they will not pay claims submitted after such time. We are also subject to extensive pre-payment and post-payment audits by governmental and private payors that could result in material delays, refunds of monies received or denials of claims submitted for payment under such third-party payor programs and contracts. We cannot ensure that we will be able to continue to effectively manage the process, it would adversely affect our business, financial condition and results of operations.

We do not have long-term supply contracts with many of our third-party suppliers.

We purchase components and subassemblies from third-party suppliers, including some of our single-source suppliers, through purchase orders and do not have long-term supply contracts with many of these third-party suppliers. Many of our third-party suppliers, therefore, are not obligated to perform services or supply products to us for any specific period, in any specific quantity or at any specific price, except as may be provided in a particular purchase order. We do not maintain large volumes of inventory from most of these suppliers. If we inaccurately forecast demand or fail to place orders timely enough relative to fluctuating lead time requirements for components or subassemblies, our ability to manufacture and commercialize our Inogen One systems and Inogen At Home systems could be delayed and our competitive position and reputation could be harmed. In addition, if we fail to effectively manage our relationships with these suppliers, we may be required to change suppliers which would be time consuming and disruptive and could adversely affect our business, financial condition and results of operations.

If our manufacturing facilities become unavailable or inoperable, we could be unable to continue manufacturing our Inogen One systems and Inogen At Home systems and, as a result, our business, financial condition and results of operations could be adversely affected until we are able to secure a new facility.

We assemble our Inogen One concentrators and Inogen At Home concentrators at our facilities in Richardson, Texas and Goleta, California and through our contract manufacturer in the Czech Republic. In the fourth quarter of 2017, we began using a contract manufacturer in the Czech Republic to assemble our Inogen One G3 concentrators for our international customers. The Company expects to manufacture the TAV in Goleta, California. No other manufacturing facilities are currently available to us, particularly facilities of the size and scope of our Texas facility. Our facilities and the equipment we use to manufacture our Inogen One systems and Inogen At Home systems would be costly to replace and could require substantial lead time to procure, repair or replace. Our facilities may be harmed or rendered inoperable by natural or man-made disasters, including, but not limited to, fire, flood, earthquakes and power outages, which may render it difficult or impossible for us to manufacture our products for some period of time. If any of our facilities become unavailable to us, we cannot provide assurances that we will be able to secure and equip a new manufacturing facility on acceptable terms, in a timely manner. The inability to manufactureour products, combined with delays in replacing parts inventory and manufacturing supplies and equipment, may result in the loss of customers and/or harm our reputation, and we may be unable to reestablish relationships with those customers in the future. Although we have insurance coverage for certain types of disasters and business interruptions which may help us recover some of the costs of damage to our property, costs of recovery and lost income from the disruption of our business, insurance coverage of certain perils may be limited or unavailable at cost effective rates and may therefore not be sufficient to cover any or all of our potential losses and may not continue to be available to us on acceptable terms, or at all. If our manufacturing capabilities are impaired, we could not be able to manufacture, store, and ship our products in sufficient quantity or a cost effective or timely manner, which would adversely affect our business, financial condition and results of operations.

We rely upon a third-party contract manufacturer for certain manufacturing operations and our business and results of operations may be adversely affected by risks associated with their business, financial condition and the geography in which they operate.

Beginning in the fourth quarter of 2017, we began utilizing a third-party contract manufacturer located in the Czech Republic for production of a portion of our Inogen One G3 concentrators. In 2018 and the nine months ended September 30, 2019, our contract manufacturer produced the vast majority of the Inogen One G3 concentrators required to support our European demand and we expect this to continue in the remainder of 2019 and 2020. In addition we plan to expand manufacturing at our contract manufacturer to include the Inogen One G5 in the first half of 2020. There are a number of risks associated with our dependence on a contract manufacturer, including:

- reduced control over delivery schedules and planning;
- reliance on the quality assurance procedures of a third party;
- risks associated with our contract manufacturer failing to manufacture our products according to our specifications, quality regulations, including the FDA's Quality System regulations, or otherwise manufacturing products that we or regulatory authorities deem to be unsuitable for commercial use;
- risks associated with our contract manufacturer's ability to successfully undergo FDA and other regulatory authority quality inspections;
- potential uncertainty regarding manufacturing yields and costs;
- availability of manufacturing capability and capacity, particularly during periods of high demand;
- risks and uncertainties associated with the location or country where our products are manufactured, including potential manufacturing disruptions caused by social, geopolitical or environmental factors;
- changes in U.S. law or policy governing foreign trade, manufacturing, development and investment in the countries where we manufacture our products, including the World Trade Organization Information Technology Agreement or other free trade agreements;
- delays in delivery by suppliers due to customs clearing delays, shipping delays, scarcity of raw materials and changes in demand from us or their other customers;
- limited warranties provided to us; and
- potential misappropriation of our intellectual property.

These and other risks could impair our ability to fulfill orders, harm our sales and impact our reputation with customers. If our contract manufacturer is unable or unwilling to manufacture our products or components of our products, or if our contract manufacturer discontinues operations, we may be required to identify and qualify alternative manufacturers, which could cause us to be unable to meet our supply requirements to our customers and result in the breach of our customer agreements. The process of qualifying a new contract manufacturer and commencing volume production is expensive and time-consuming, and if we are required to change or qualify a new contract manufacturer, we would likely lose sales revenue and damage our existing customer relationships.

Failure to maintain or obtain new private payor contracts and future reductions in reimbursement rates from private payors could have a material adverse effect on our financial condition and results of operations.

A portion of our rental revenue is derived from private payors. Based on our patient population, we estimate approximately 40% of potential customers have non-Medicare insurance coverage (including Medicare Advantage plans). Failing to maintain and obtain private payor contracts from private insurance companies and employers and secure in-network provider status could have a material adverse effect on our financial condition and results of operations. In addition, private payors are under pressure to increase profitability and reduce costs. In response, certain private payors are limiting coverage or reducing reimbursement rates for the products we provide. We believe that private payor reimbursement levels will generally be reset in accordance with the Medicare reimbursement amounts determined by competitive bidding. We cannot predict the extent to which reimbursement for our products will be affected by competitive bidding or by initiatives to reduce costs for private payors. Failure to maintain or obtain new private payor contracts or the unavailability of third-party coverage or inadequacy of reimbursement for our products would adversely affect our business, financial condition and results of operations.

If we are unable to manage our anticipated growth effectively, our business could be harmed.

We have previously experienced periods of rapid growth in short periods of time. These periods of rapid growth of our business have placed a significant strain on our managerial and operational resources and systems. For example, as our business has grown, we have seen the cost per generated lead trend higher than historical averages. In addition, many of the sales representatives we hired in 2018 were unable to meet sales targets and were thus transitioned out To continue to grow our business, we must attract and retain capable personnel and manage and train them effectively, particularly related to sales representatives and supporting sales personnel. We must also upgrade our internal business processes and capabilities to create the scalability that a growing business demands. Going forward, we are hiring additional sales representatives at a more controlled pace across all three facilities to expand sales capacity, but we expect sales representative headcount to be down significantly at year-end 2019 compared to year-end 2018. Given the reduced sales representative headcount, we expect to realize headwinds to growth in direct-to-consumer sales in 2019 and the first half of 2020. We believe we are making the necessary changes to improve sales management infrastructure to support sales representative training and onboarding and have made key changes to management personnel. We have seen increased productivity of our sales representatives in the third quarter of 2019 and believe we will see this increase through the remainder of 2019 and in 2020; however, we also expect increased marketing spend.

We plan to continue the expansion of our facilities located in Richardson, Texas and Goleta, California and have signed leases to expand such facilities. Domestic expansion, combined with our use of a contract manufacturer in Europe to produce a portion of our Inogen One G3 concentrators and Inogen One G5 concentrators in the first half of 2020, is expected to be sufficient to meet our manufacturing needs. However, our anticipated growth will place additional strain on our supply chain and manufacturing facilities, resulting in an increased need for us to carefully monitor parts inventory, capable staffing and quality assurance. Any failure by us to manage the scalability of our process or other aspects of our growth effectively could have an adverse effect on our ability to achieve our development and commercialization goals and negatively affect our financial condition and results of operations.

We may expand through acquisitions of, or investments in, other companies, each of which may divert our management's attention, result in additional dilution to our stockholders, increase expenses, disrupt our operations, and harm our results of operations.

Our business strategy may, from time to time, include acquiring or investing in complementary services, technologies or businesses, such as our acquisition of MedSupport Systems B.V. in 2017 and our acquisition of New Aera in August 2019. We do not have an extensive history of acquiring other companies and cannot assure you that we will successfully identify suitable acquisition candidates, integrate or manage disparate technologies, lines of business, personnel and corporate cultures, realize our business strategy or the expected return on our investment, or manage a geographically dispersed company. Any such acquisition or investment could materially and adversely affect our financial condition and results of operations. We may issue equity securities which could dilute current stockholders' ownership, incur debt, assume contingent or other liabilities and expend cash in acquisitions, which could negatively impact our financial condition, stockholder equity, and stock price. We completed our acquisition of New Aera in August 2019 and have begun the integration process. The acquisition and integration process is complex, expensive and time-consuming, and may cause an interruption of, or loss of momentum in, product development and sales activities and operations of both companies, and we may incur substantial cost and expense, as well as divert the attention of management.

Acquisitions and other strategic investments involve significant risks and uncertainties, including:

- the potential failure to achieve the expected benefits of the combination or acquisition;
- the potential failure to successfully develop or commercialize the acquired products or technology;
- unanticipated costs and liabilities;
- difficulties in integrating new products, businesses, operations, and technology infrastructure in an efficient and effective manner;
- difficulties in maintaining customer relations;
- the potential loss of key employees of the acquired businesses;

- the diversion of the attention of our senior management from the operation of our daily business;
- the potential adverse effect on our cash position to the extent that we use cash for the purchase price;
- the potential incurrence of interest expense and debt service requirements if we incur debt to pay for an acquisition;
- the potential issuance of securities that would dilute our stockholders' percentage ownership;
- the potential to incur large and immediate write-offs and restructuring and other related expenses;
- the potential of amortization expenses related to intangible assets;
- the potential to become involved in intellectual property litigation related to such acquisitions or strategic investments; and
- the inability to maintain uniform standards, controls, policies, and procedures.

Any acquisition or investment, including our acquisition of New Aera, could expose us to unknown liabilities. Moreover, we cannot assure you that we will realize the anticipated benefits of any acquisition or investment. In addition, our inability to successfully operate and integrate newly acquired businesses appropriately, effectively, and in a timely manner could impair our ability to take advantage of future growth opportunities and other advances in technology, as well as on our revenues, gross margins, and expenses.

As part of our ongoing efforts to advance patient preference and maintain our technology leadership position, we acquired New Aera in August 2019. We have made certain assumptions relating to the acquisition, which assumptions may be inaccurate, including the failure to realize the expected benefits of the acquisition, failure to realize expected revenue, higher than expected operating, transaction and integration costs, as well as general economic and business conditions that adversely affect the combined company following the acquisition. If our assumptions relating to the acquisition are inaccurate, we may not be able to realize anticipated synergies and opportunities as a result of the acquisition, and the business may not perform as planned as a result of many of the risks and uncertainties that apply to the acquisition and to the rest of our business. For example, additional risks and uncertainties that could cause actual results to differ materially from currently anticipated results include, but are not limited to; risks relating to our ability to successfully integrate New Aera's business and operations within our existing business and operations; our ability to commercialize the TAV; market acceptance of the TAV; Medicare or commercial reimbursement for the TAV; our ability to successfully incorporate TAV into our existing products; competition; our sales, marketing and distribution capabilities; our planned sales, marketing, and research and development activities; interruptions or delays in the supply of components or materials for, or manufacturing of, our products, which in certain cases are purchased through sole and single source suppliers; seasonal variations in customer operations; unanticipated increases in costs or expenses; risks associated with international operations; intellectual property risks and the other risks identified in this Quarterly Report on Form 10-Q. We may also encounter difficulties in integrating New Aera into our existing business. If anticipated synergies and opportunities are not realized, our business, operating results and financial condition would be harmed.

We may experience manufacturing problems or delays that could limit our growth or adversely affect our operating results.

Our products are manufactured using complex parts and processes, sophisticated equipment and strict adherence to design specifications and quality standards. Any unforeseen manufacturing problems, such as contamination of our facility, equipment malfunction or miscalibration, supply chain shortages, regulatory findings, or failure to strictly follow procedures or meet design specifications, could result in delays or shortfalls in production of our products. Identifying and resolving the cause of any such manufacturing issues could require substantial time and resources. If we are unable to keep up with demand for our products by successfully manufacturing and shipping our products in a timely and quality manner, our operating results could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products. For example, in July 2019 we initiated a software change for approximately eight thousand Inogen One G3 and OxyGo products in the field that were manufactured in the second quarter of 2019 due to an operating condition that may cause an abrupt shut down of the product from an over-draw that may occur when a fully charged 8-cell battery is connected to the portable oxygen concentrator as its only power source, which may cause the portable oxygen concentrator to become unresponsive for up to one minute, after which it will behave as though a battery was just connected with standard flash screen on display. If powered on again, this cycle may need to be repeated until the 8-cell battery has been adequately discharged allowing the product to operate as normal. Units remain in working order, and the product and battery are in no way being damaged or their performance compromised even with repeated cycling. In addition, the recently released Inogen One G5 system had a part on the motherboard that was not released via design controls and caused a higher incidence rate of component failures on approximately five hundred systems. We are replacing or field servicing all affected units (Inogen One G3, OxyGo, and Inogen One G5) which may increase our cost of goods sold and adversely affect our operating results and also harm our reputation. Additionally, regulators may disagree with our handling of this incident and take action. Also, although we believe we are addressing these issues, we may experience additional unexpected product defects or errors that could have adverse effects.

In addition, the introduction of new products may require the development of new manufacturing processes and procedures. While all of our products are assembled using essentially the same basic processes, significant changes in technology, programming, and other variations may be required to meet product specifications. Developing new processes can be very time consuming and affect quality, as such any unexpected difficulty in doing so could delay the introduction of a new product and our ability to produce sufficient quantities of existing products.

We are exposed to the credit and non-payment risk of our HME providers, distributors, private label partners and resellers, especially during times of economic uncertainty and tight credit markets, which could result in material losses.

We sell our products to certain HME providers, distributors, private label partner and resellers on unsecured credit, with terms that vary depending upon the customer's credit history, solvency, cash flow, credit limits and sales history, as well as prevailing terms with similarly situated customers and whether sufficient credit insurance can be obtained. In particular, two customers each represented more than 10% of our net accounts receivable balance with accounts receivable balances of $16.4 million and $6.5 million, respectively, as of September 30, 2019, and $16.2 million and $4.2 million, respectively, as of December 31, 2018. Challenging economic conditions may impair the ability of our customers to pay for products they have purchased, and as a result, our reserve for doubtful accounts could increase and, even if increased, may turn out to be insufficient. Moreover, even in cases where we have insolvency risk insurance to protect against a customer's bankruptcy, insolvency or liquidation, this insurance typically contains a significant deductible and co-payment obligation and does not cover all instances of non-payment. Our exposure to credit risks of our business partners may increase if our business partners and their end customers are adversely affected by global or regional economic conditions. One or more of these business partners could delay payments or default on credit extended to them, either of which could adversely affect our business, financial condition and results of operations.

We generate a substantial portion of our revenue internationally and are subject to various risks relating to such international activities, which could adversely affect our operating results. In addition, any disruption or delay in the shipping of our products, whether domestically or internationally, may have an adverse effect on our financial condition and results of operations.

During the nine months ended September 30, 2019 and September 30, 2018, approximately 21.5% and 21.6%, respectively, of our total revenue was generated from customers located outside of the United States. We believe that a significant percentage of our future revenue will continue to come from international sources as we expand our international operations and develop opportunities in other countries. Engaging in international business inherently involves a number of difficulties and risks, including:

- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, data privacy regulations, such as the European Union General Data Protection Regulation (GDPR), labor laws, and anti-competition regulations;
- export or import delays and restrictions;
- obtaining and maintaining regulatory clearances, approvals and certifications;
- laws and business practices favoring local companies;
- difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- unstable economic, political, and regulatory conditions;
- supply chain complexities;
- fluctuations in currency exchange rates;
- fluctuations in demand due to country-specific tenders and tender uncertainty and capital expenditure constraints;
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements, and other trade barriers; and
- difficulties protecting or procuring intellectual property rights.

If one or more of these risks occurs, it could require us to dedicate significant resources to remedy, and if we are unsuccessful in finding a solution, our financial condition and results of operations will suffer.

In addition, on June 23, 2016, the United Kingdom (U.K.) held a referendum in which voters approved an exit from the European Union, commonly referred to as "Brexit." In February 2017, the British Parliament voted in favor of allowing the British government to begin the formal process of Brexit and discussions with the European Union began in March 2017. Adverse consequences concerning Brexit or the future of the European Union could include deterioration in global economic conditions, instability in global financial markets, political uncertainty, volatility in currency exchange rates or adverse changes in the cross-border agreements currently in place, any of which could have an adverse impact on our financial results in the future.

A significant amount of our international product sales are currently denominated in U.S. dollars and fluctuations in the value of the U.S. dollar relative to foreign currencies could decrease demand for our products and adversely impact our financial performance. For example, if the value of the U.S. dollar increases relative to foreign currencies, our products could become more costly to the international consumer and therefore less competitive in international markets. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. The volatility of exchange rates depends on many factors that we cannot forecast with reliable accuracy. We have experienced and will continue to experience fluctuations in our net income or loss as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. For example, for the nine months ended September 30, 2019 and September 30, 2018, we experienced net foreign currency losses of approximately $0.4 million and $0.6 million, respectively. Fluctuations in currency exchange rates could have an adverse impact on our financial results in the future. While we have a hedging program for Euros that attempts to manage currency exchange rate risks to an acceptable level based on management's judgment of the appropriate trade-off between risk, opportunity, and cost, this hedging program does not completely eliminate the effects of currency exchange rate fluctuations. In addition, currency hedging may result in a reduction or increase in revenue should the currency strengthen or decline during the contract period. A discussion of the hedging program is contained in Item 7A, Quantitative and Qualitative Disclosures about Market Risk in our Annual Report on Form 10-K for the year ended December 31, 2018. Additional information on our hedging arrangements is also contained in Note 4 – Fair value measurements in the condensed notes to our consolidated financial statements in this Quarterly Report on Form 10-Q.

We rely on shipping providers to deliver products to our customers globally. Labor, tariff, or World Trade Organization-related disputes, piracy, physical damage to shipping facilities or equipment caused by severe weather or terrorist incidents, congestion at shipping facilities, inadequate equipment to load, dock, and offload our products, energy-related tie-ups, or other factors could disrupt or delay shipping or offloading of our products domestically and internationally. Such disruptions or delays may have an adverse effect on our financial condition and results of operations.

Failure to comply with anti-bribery, anti-corruption, and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, and similar laws associated with our activities outside of the United States could subject us to penalties and other adverse consequences.

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, the United Kingdom Bribery Act of 2010 and possibly other anti-corruption, anti-bribery and anti-money laundering laws in the more than forty countries around the world where we conduct activities and sell our products. We face significant risks and liability if we fail to comply with the FCPA and other anti-corruption and anti-bribery laws that prohibit companies and their employees and third-party business partners, such as distributors or resellers, from authorizing, offering or providing, directly or indirectly, improper payments or benefits to foreign government officials, political parties or candidates, employees of public international organizations including healthcare professionals, or private-sector recipients for the corrupt purpose of obtaining or retaining business, directing business to any person, or securing any advantage.

We leverage various third parties to sell our products and conduct our business abroad. We, our distributors and channel partners, and our other third-party intermediaries and manufacturer may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities (such as in the context of obtaining government approvals, registrations, or licenses) and may be held liable for the corrupt or other illegal activities of these third-party business partners and intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses engage in practices that are prohibited by the FCPA or other applicable laws and regulations. We provide training to all employees, including management, to ensure compliance with the FCPA. As such, we intend to continue to implement an FCPA/anti-corruption compliance program to ensure compliance with such laws but cannot assure you that all of our employees and agents, as well as those companies to which we outsource certain of our business operations, will not take actions in violation of our policies and applicable law, for which we have to defend ourselves and may be ultimately held responsible.

Any violation of the FCPA, other applicable anti-bribery, anti-corruption laws, and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions and, in the case of the FCPA, suspension or debarment from U.S. government contracts, which could have a material and adverse effect on our reputation, business, operating results and prospects. In addition, responding to any enforcement action or related investigation may result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees.

If we fail to comply with U.S. export control and economic sanctions or fail to expand and maintain an effective sales force or successfully develop our international distribution network, our business, financial condition and results of operations may be adversely affected.

We currently derive the majority of our revenue from rentals or sales generated from our own direct sales force. Failure to maintain or expand our direct sales force could adversely affect our financial condition and results of operations. Additionally, we use international distributors to augment our sales efforts, certain of which are exclusive distributors in certain foreign countries. We cannot assure you that we will be able to successfully retain or develop our relationships with third-party distributors internationally. In addition, we are subject to United States export control and economic sanctions laws relating to the sale of our products, the violation of which could result in substantial penalties being imposed against us. In particular, we have secured annual export licenses from the U.S. Treasury Department's Office of Foreign Assets Control to sell our products to a distributor and hospital and clinic end-users in Iran. The use of this license requires us to observe strict conditions with respect to products sold, end-user limitations and payment requirements. Although we believe we have maintained compliance with license requirements, there can be no assurance that the license will not be revoked, be renewed in the future or that we will remain in compliance. More broadly, if we fail to comply with export control laws or successfully develop our relationship with international distributors, our sales could fail to grow or could decline, and our ability to grow our business could be adversely affected. Distributors that are in the business of selling other medical products may not devote a sufficient level of resources and support required to generate awareness of our products and grow or maintain product sales. If our distributors are unwilling or unable to market and sell our products, or if they do not perform to our expectations, we could experience delayed or reduced market acceptance and sales of our products resulting in adverse results of operations.

We may be subject to substantial warranty or product liability claims or other litigation in the ordinary course of business that may adversely affect our business, financial condition and results of operations.

As manufacturers of medical devices, we may be subject to substantial warranty or product liability claims or other litigation in the ordinary course of business that may require us to make significant expenditures to defend these claims or pay damage awards. For example, our Inogen One systems contain lithium ion batteries, which, under certain circumstances, can be a fire hazard. We, as well as our key suppliers, maintain product liability insurance, but this insurance is limited in amount and subject to significant deductibles. There is no guarantee that insurance will be available or adequate to protect against all claims. Our insurance policies are subject to annual renewal and we may not be able to obtain liability or product insurance in the future on acceptable terms or at all. In addition, our insurance premiums could be subject to increases in the future, which may be material. If the coverage limits are inadequate to cover our liabilities or our insurance costs continue to increase as a result of warranty or product liability claims or other litigation, then our business, financial condition and results of operations may be adversely affected.

We may also be subject to other types of claims arising from our normal business activities. These may include claims, suits, and proceedings involving labor and employment, wage and hour, commercial, alleged securities laws violations or other investor claims, patent defense and other matters. The outcome of any litigation, regardless of its merits, is inherently uncertain. Any claims and lawsuits, and the disposition of such claims and lawsuits, could be time-consuming and expensive to resolve, divert management attention and resources, and lead to attempts on the part of other parties to pursue similar claims. Any adverse determination related to litigation could require us to change our technology or our business practices, pay monetary damages or enter into royalty or licensing arrangements, which could adversely affect our business, financial condition and results of operations.

Increases in our operating costs could have a material adverse effect on our business, financial condition and results of operations.

Reimbursement rates are established by fee schedules mandated by Medicare, private payors and Medicaid, and are likely to remain constant or decrease due, in part, to federal and state government budgetary constraints. As a result, with respect to Medicare and Medicaid related revenue, we are not able to offset the effects of general inflation on our operating costs through increases in prices for our products. In particular, labor and related costs account for a significant portion of our operating costs and we compete with other healthcare providers to attract and retain qualified or skilled personnel and with various industries for administrative and service employees. This competitive environment could result in increased labor costs. As such, we must control our operating costs, particularly labor and related costs and failing to do so could adversely affect our financial condition and results of operations.

We depend on the services of our senior executives and other key technical personnel, the loss of whom could negatively affect our business.

Our success depends upon the skills, experience and efforts of our senior executives and other key technical personnel, including certain members of our engineering, accounting and compliance staff as well as our sales and marketing personnel. Much of our corporate expertise is concentrated in relatively few employees, the loss of which for any reason could negatively affect our business. Competition for our highly skilled employees is intense and we cannot prevent the resignation of any employee. We do not maintain “key man” life insurance on any of our senior executives. None of our senior executive team is bound by written employment contracts to remain with us for a specified period. In addition, we have not entered into non-compete agreements with members of our executive management team. The loss of any member of our executive management team could harm our ability to implement our business strategy and respond to the market conditions in which we operate.

We and our vendors and service providers rely on information technology networks and systems, and if we are unable to protect against service interruptions, data corruption, cybersecurity risks, data security incidents and/or network security breaches, our operations could be disrupted and our business could be negatively affected.

We rely on information technology networks and systems to process, transmit and store electronic, customer, operational, compliance, and financial information; to coordinate our business; and to communicate within our company and with customers, suppliers, partners and other third-parties. These information technology networks and systems may be susceptible to damage, disruptions or shutdowns, hardware or software failures, power outages, computer viruses, cybersecurity risks, data security incidents, telecommunication failures, user errors or catastrophic events. Like other companies, we have experienced data security incidents before. For example, on April 13, 2018, we announced that messages within an employee email account were accessed by unknown persons outside of our company without authorization. Some of the messages and attached files in that email account contained personal information belonging to our rental customers. We immediately took steps to secure customer information and hired a leading forensics firm to investigate the incident and to bolster our security. The unauthorized access of the potentially impacted email account appears to have occurred between January 2, 2018 and March 14, 2018. We notified approximately 30,000 current and former rental customers of this incident as well as the applicable regulatory authorities. We also provided resources, including credit monitoring and an insurance reimbursement policy, to assist all potentially affected individuals. We have incurred remedial, legal and other costs in connection with this incident. We have insurance coverage in place for certain potential liabilities and costs relating to service interruptions, data corruption, cybersecurity risks, data security incidents and/or network security breaches, but this insurance is limited in amount, subject to a deductible, and may not be adequate to cover us for all costs arising from these incidents.

If our information technology networks and systems suffer unauthorized access, severe damage, disruption or shutdown, and our business does not effectively identify or resolve the issues in a timely manner, our operations could be disrupted, we could be subject to regulatory and consumer lawsuits and our business could be negatively affected. In addition, cybersecurity risks and data security incidents could lead to potential unauthorized access to or acquisition of confidential information (including protected health information), and data loss and corruption. There is no assurance that we will not experience service interruptions, security breaches, cyber security risks and data security incidents, or other information technology failures in the future.

The methods used to obtain unauthorized access, disable or degrade service or sabotage systems are constantly evolving and may be difficult to anticipate or to detect for long periods of time. As a result of these types of risks and attacks, we have implemented and periodically review and update systems, processes, and procedures to protect against unauthorized access to or use of data and to prevent data loss. For example, we have increased the security of our systems by requiring all email users to change their passwords following our recent data security incident and sooner than they would have otherwise been required to. We also implemented multi-factor authentication for remote email access and have taken additional steps to further limit access to our systems. However, the ever-evolving threats mean we and our third-party service providers and vendors must continually evaluate and adapt our respective systems and processes and overall security environment. There is no guarantee that these measures will be adequate to safeguard against all data security breaches, system compromises or misuses of data.

The compromise of our technology systems resulting in the loss, disclosure, misappropriation of, or access to, customers’, employees’ or business partners’ information or failure to comply with regulatory or contractual obligations with respect to such information could result in legal claims or proceedings, liability or regulatory penalties under laws protecting the privacy of personal information, disruption to our operations and damage to our reputation, any or all of which could adversely affect our business. The costs to remediate breaches and similar system compromises that do occur could adversely affect our results of operations.

Any new laws, regulations, other legal obligations or industry standards, or any changed interpretation of existing laws, regulations or other standards may require us to incur additional costs and restrict our business operations. For example, many jurisdictions have enacted laws requiring companies to notify individuals of data security breaches involving certain types of personal data. These mandatory disclosures regarding a security breach could result in negative publicity to us, which may cause our customers to lose confidence in the effectiveness of our data security measures which could adversely affect our business, financial condition and results of operations.

Increasing data privacy regulations could impact our business and expose us to increased liability.

We must comply with increasingly complex and rigorous regulatory standards enacted to protect business and personal data in the U.S., Europe and elsewhere. For example, the European Union adopted the GDPR, which became effective on May 25, 2018. The GDPR imposes additional obligations on companies regarding the processing of personal data and provides certain individual privacy rights to natural persons whose data is stored. Compliance with existing, proposed and recently enacted laws (including implementation of the privacy and process enhancements called for under the GDPR) and regulations can be costly and any failure to comply with these regulatory standards could subject us to legal and reputational risks. In addition, we are required under the GDPR to respond to customers' Subject Access Reports (SARs) within a certain time period, which entails determining what personal data is being processed, the purpose of any such data processing, to whom such personal data has been disclosed and whether personal data is being disclosed for the purpose of making automated decisions relating to that customer. We may dedicate significant resources to responding to our customers' SARs, which could adversely affect our business, financial condition and results of operations. Misuse of or failure to secure or properly process personal information could also result in violation of data privacy laws and regulations, proceedings against the Company by governmental entities or others, damage to our reputation and credibility and could have a negative impact on revenues and profits. As the regulatory environment related to information security, data collection and use, and privacy becomes increasingly rigorous, with new and constantly changing requirements applicable to our business, compliance with those requirements could continue to result in significant costs.

Following the GDPR, a number of states in the U.S. have introduced bills, which, if passed, would impose operational requirements on U.S. companies similar to the requirements reflected in the GDPR. In 2018, California passed a privacy law (the “CCPA”), which gives consumers significant rights over the use of their personal information, including the right to object to the “sale” of their personal information. These rights may restrict our ability to use personal information in connection with our business operations. The CCPA also provides a private right of action for security breaches. Washington and Massachusetts have introduced significant privacy bills and Congress is debating federal privacy legislation, which if passed, may restrict our business operations and require us to incur additional costs for compliance.

Any new laws, regulations, other legal obligations or industry standards, or any changed interpretation of existing laws, regulations or other standards may require us to incur additional costs and restrict our business operations.

Our financial condition and results of operations may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and results of operations have varied in the past and may continue to vary significantly from quarter-to-quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including: fluctuations in consumer demand for our products; seasonal cycles in consumer spending; HME providers’ ability to adopt and finance portable oxygen concentrator purchases and restructure their businesses to remove delivery expenses; our ability to design, manufacture and deliver products to our consumers in a timely and cost-effective manner; quality control problems in our manufacturing operations; our ability to timely obtain adequate quantities of the components used in our products; new product introductions and enhancements by us and our competitors; unanticipated increases in costs or expenses; declines in sales personnel productivity; increased marketing cost per generated lead; unanticipated regulatory reimbursement changes that could result in positive or negative impacts to our earnings; changes or updates to generally accepted accounting principles; and fluctuations in foreign currency exchange rates. As more HME providers adopt portable oxygen concentrators in their businesses, we expect that this could change our historical seasonality in the domestic business-to-business channel as well, which was previously influenced mainly by consumer buying patterns. The foregoing factors are difficult to forecast, and these, as well as other factors, could materially and adversely affect our quarterly and annual results of operations. We have experienced significant revenue growth in the past, but we may not achieve similar growth rates, profit margins and/or net income in future periods. You should not rely on our operating results for any prior quarterly or annual period as an indication of our future operating performance. If we are unable to maintain adequate revenue growth and cost control, our operating results could suffer, and our stock price could decline, primarily because a significant amount of our expenses are fixed and would take additional time to reduce. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. Our results of operations may not meet the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly.

Given our levels of stock-based compensation, our tax rate may vary significantly depending on our stock price.

The tax effects of the accounting for share-based compensation may significantly impact our effective tax rate from period to period. In periods in which our stock price is higher than the grant price of the stock-based compensation vesting in that period, we will recognize excess tax benefits that will decrease our effective tax rate. For example, in the nine months ended September 30, 2019 excess tax benefits recognized from stock-based compensation decreased our provision for income taxes by $0.4 million and our effective tax rate by 1.3% as compared to the tax rate without such benefits. However, in periods in which our stock price may be lower than the grant price of the stock-based compensation vesting in that period, our effective tax rate may increase. For example, in the three months ended September 30, 2019 excess tax deficiencies recognized from stock-based compensation increased our tax rate by $0.1 million and our effective tax rate by 0.7% as compared to the tax rate without such deficiencies. The amount and value of stock-based compensation issued relative to our earnings in a particular period will also affect the magnitude of the impact of stock-based compensation on our effective tax rate. These tax effects are dependent on our stock price and employee stock option exercises, which we do not control, and a decline in our stock price could significantly increase our effective tax rate and adversely affect our results of operations.

If the market opportunities for our products are smaller than we believe they are, our revenues may be adversely affected and our business may suffer.

Our projections regarding (i) the size of the oxygen therapy and NIV markets, both in the United States and internationally, (ii) the size and percentage of the long-term oxygen therapy market and NIV market that is subject to competitive bidding in the United States, (iii) the number of oxygen therapy and NIV patients, (iv) the number of patients requiring ambulatory and stationary oxygen, (v) the number of patients who rely on the delivery model, (vi) the percentage of the long-term oxygen therapy and NIV markets serviced by Medicare, Medicare Advantage, and other third party-payors, (vii) the size of the retail long-term oxygen therapy market and how the opportunity may change as portable oxygen concentrator penetration increases, (viii) the share of portable oxygen concentrators as a percentage of the total oxygen therapy spend, and (ix) the size of the early-stage COPD market and the interest and clinical benefit of NIV technology to this patient population are based on estimates that we believe are reliable. These estimates may prove to be incorrect, new data or studies may change the estimated incidence or prevalence of patients requiring long-term oxygen therapy or NIV therapy, or the type of long-term oxygen therapy patients. The number of patients in the United States and internationally may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products, or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business.

An adverse outcome of a sales and use tax audit could have a material adverse effect on our results of operations and financial condition.

The California State Board of Equalization conducted a sales and use tax audit of our operations in California in 2008. As a result of the audit, the California State Board of Equalization confirmed that our sales are not subject to California sales and use tax. We believe that our sales in three states may be subject to sales and use tax, but in other states they should be exempt from sales and use tax. There can be no assurance, however, that other states may agree with our position and we may be subject to an audit that may not be resolved in our favor. Such an audit could be expensive and time-consuming and result in substantial management distraction. If the matter were to be resolved in a manner adverse to us, it could have a material adverse effect on our results of operations and financial condition.

Changes in accounting principles, or interpretations thereof, could have a significant effect on our financial condition and results of operations.

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, referred to as U.S. GAAP. These principles are subject to interpretation by the Securities and Exchange Commission (SEC) and various bodies formed to interpret and create appropriate accounting principles. A change in these principles can have a significant effect on our reported results and may even retroactively affect previously reported transactions. Additionally, the adoption of new or revised accounting principles may require that we make significant changes to our systems, processes and controls.

For example, the U.S.-based Financial Accounting Standards Board, referred to as FASB, is currently working together with the International Accounting Standards Board, referred to as IASB, on several projects to further align accounting principles and facilitate more comparable financial reporting between companies who are required to follow U.S. GAAP under SEC regulations and those who are required to follow International Financial Reporting Standards outside of the United States. These efforts by the FASB and IASB may result in different accounting principles under U.S. GAAP that may result in materially different financial results for us in areas including, but not limited to, principles for recognizing revenue and lease accounting. Additionally, significant changes to U.S. GAAP resulting from the FASB's and IASB's efforts may require that we change how we process, analyze and report financial information and that we change financial reporting controls.

It is not clear if or when these potential changes in accounting principles may become effective, whether we have the proper systems and controls in place to accommodate such changes and the impact that any such changes may have on our financial condition and results of operations.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

Utilization of our net operating losses and tax credit carryforwards may be subject to annual limitations arising from ownership change limitations imposed by the Internal Revenue Code and similar state provisions. Such annual limitations could result in the expiration of our net operating losses and tax credit carryforwards before their utilization.

Changes in tax laws or tax rulings could materially affect our financial condition, results of operations, and cash flows.

The income and non-income tax regimes we are subject to or operate under are unsettled and may be subject to significant change. Changes in tax law or tax rulings, or changes in interpretations of existing law, could adversely affect our financial condition and results of operations. For example, changes to the U.S. tax laws enacted in December 2017 had a significant impact on our deferred tax assets, income tax provision and effective tax rate for the year ended December 31, 2017. In addition, many countries in Europe, as well as a number of other countries and organizations, have recently proposed or recommended changes to existing tax laws or have enacted new laws that could significantly increase our tax obligations in many countries where we do business or require us to change the manner in which we operate our business.

Risks related to the regulatory environment

We are subject to extensive federal and state regulation, and if we fail to comply with applicable regulations, we could suffer severe criminal or civil sanctions and be required to make significant changes to our operations that could adversely affect our business, financial condition and results of operations.

The federal government and all states in which we currently operate regulate various aspects of our business. In particular, our operations are subject to state laws governing, among other things, distribution of medical equipment and certain types of home health activities, and we are required to obtain and maintain licenses in many states to act as a durable medical equipment supplier. Certain of our employees are subject to state laws and regulations governing the professional practices of respiratory therapy.

As a healthcare provider participating in governmental healthcare programs, we are subject to laws directed at preventing fraud and abuse, which subject our marketing, billing, documentation and other practices to strict government scrutiny. To ensure compliance with Medicare, Medicaid and other regulations, government agencies or their contractors often conduct routine audits and request customer records and other documents to support our claims submitted for payment of services rendered. Government agencies or their contractors also periodically open investigations and obtain information from healthcare providers. Violations of federal and state regulations can result in severe criminal, civil and administrative fines, penalties and sanctions, including debarment, suspension or exclusion from Medicare, Medicaid and other government reimbursement programs, any of which would have a material adverse effect on our business.

Changes in healthcare laws and regulations and new interpretations of existing laws and regulations may affect permissible activities, the relative costs associated with doing business, and reimbursement amounts paid by federal, state and other third-party payors. There have been and will continue to be regulatory initiatives affecting our business and we cannot predict the extent to which future legislation and regulatory changes could have a material adverse effect on our business.

We are subject to significant regulation by numerous government agencies, including the U.S. Food and Drug Administration, or FDA. We cannot market or commercially distribute our products without obtaining and maintaining necessary regulatory clearances or approvals.

Our products are medical devices subject to extensive regulation in the United States and in the foreign markets where we distribute our products. The FDA and other U.S. and foreign governmental agencies regulate, among other things, with respect to medical devices:

- design, development and manufacturing;
- testing, labeling, content and language of instructions for use and storage;
- clinical trials;
- product safety;
- marketing, sales and distribution;
- pre-market clearance and approval;
- record keeping;
- advertising and promotion;
- recalls and field safety corrective actions;
- post-market surveillance, including reporting of deaths or serious injuries and malfunctions that, if they were to recur, could lead to death or serious injury;
- post-market approval studies; and
- product import and export.

Before we can market or sell a medical device in the United States, we must obtain either clearance from the FDA under Section 510(k) of the Federal Food, Drug, and Cosmetic Act, or the FDCA, or approval of a pre-market approval application from the FDA, unless an exemption applies. In the 510(k) clearance process, the FDA must determine that a proposed device is “substantially equivalent” to a device legally on the market, known as a “predicate” device, with respect to intended use, technology and safety and effectiveness, in order to clear the proposed device for marketing.

Our commercial products have received 510(k) clearance by the FDA. If the FDA requires us to go through a lengthier, more rigorous examination for future products or modifications to existing products than we had expected, our product introductions or modifications could be delayed or canceled, which could cause our sales to decline. In addition, the FDA may determine that future products will require the more costly, lengthy and uncertain pre-market approval process. Although we do not currently market any devices under a pre-market approval, the FDA may demand that we obtain a pre-market approval prior to marketing certain future products. In addition, if the FDA disagrees with our determination that a product we currently market is subject to an exemption from pre-market review, the FDA may require us to submit a 510(k) or pre-market approval application in order to continue marketing the product. Further, even with respect to those future products where a pre-market approval is not required, we cannot assure you that we will be able to obtain the 510(k) clearances with respect to those products or do so in a timely fashion.

The FDA can delay, limit or deny clearance or approval of a device for many reasons, including:

- we may not be able to demonstrate to the FDA’s satisfaction that our products are safe and effective for their intended uses;
- the data from our pre-clinical studies and clinical trials may be insufficient to support clearance or approval, where required; and
- the manufacturing process or facilities we use may not meet applicable Quality System Regulations.

Medical devices may only be promoted and sold for the indications for which they are approved or cleared. In addition, even if the FDA has approved or cleared a product, it can take action affecting such product approvals or clearances if serious safety or other problems develop in the marketplace. Delays in obtaining clearances or approvals could adversely affect our ability to introduce new products or modifications to our existing products in a timely manner, which would delay or prevent commercial sales of our products. Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could affect the perceived safety and performance of our products and dissuade our customers from using our products.

If we modify our FDA cleared devices, we may need to seek additional clearances or approvals, which, if not granted, would prevent us from selling our modified products.

Any modification we make to our products that could significantly affect their safety or effectiveness, or would constitute a major change in intended use, manufacture, design, materials, labeling, or technology requires the submission and clearance of a new 510(k) pre-market notification or, possibly, pre-market approval. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review and disagree with any manufacturer's decision. The FDA may not agree with our decisions regarding whether new clearances or approvals are necessary. We have modified some of our 510(k) cleared products and have determined that in certain instances new 510(k) clearances or pre-market approval are not required. If the FDA disagrees with our determination and requires us to submit new 510(k) notifications or pre-market approval for modifications to our previously cleared products for which we have concluded that new clearances or approvals are unnecessary, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties.

If we fail to comply with FDA or state regulatory requirements, we can be subject to enforcement action.

Even after we have obtained regulatory clearance or approval to market a product, we have ongoing responsibilities under FDA regulations. The FDA and state authorities have broad enforcement powers. Our failure to comply with applicable regulatory requirements could result in enforcement action by the FDA or state agencies, which may include any of the following sanctions:

- adverse publicity, warning letters, fines, injunctions, consent decrees and civil penalties;
- recalls, termination of distribution, or seizure of our products;
- operating restrictions or partial suspension or total shutdown of production;
- delays in the introduction of products into the market;
- refusal to grant our requests for future 510(k) clearances or approvals of new products, new intended uses, or modifications to exiting products;
- withdrawals or suspensions of current 510(k) clearances or approvals, resulting in prohibitions on sales of our products; and
- criminal prosecution.

Any of these sanctions could result in higher than anticipated costs or lower than anticipated sales and have a material adverse effect on our reputation, business, results of operations and financial condition.

A recall of our products, either voluntarily or at the direction of the FDA or another governmental authority, or the discovery of serious safety issues with our products that leads to corrective actions, could have a significant adverse effect on us.

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design, labeling or manufacture of a product or in the event that a product poses an unacceptable risk to health. Manufacturers may also, under their own initiative, recall a product if any material deficiency in a device is found or withdraw a product to improve device performance or for other reasons. Similar regulatory agencies in other countries have similar authority to recall devices because of material deficiencies or defects in design or manufacture that could endanger health. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of an unacceptable risk to health, component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Any recall would divert management attention and financial resources, could cause the price of our stock to decline and expose us to product liability or other claims and harm our reputation with customers. A recall involving our Inogen concentrators could be particularly harmful to our business, financial condition and results of operations.

We are required to timely report to the FDA any incident in which our product may have caused or contributed to a death or serious injury or in which our product malfunctioned and, if the malfunction were to recur, would likely cause or contribute to death or serious injury. Repeated product malfunctions may result in a voluntary or involuntary product recall. Depending on the corrective action we take to redress a product's deficiencies or defects, the FDA may require, or we may decide, that we will need to obtain new approvals or clearances for the device before we may market or distribute the corrected device. Seeking such approvals or clearances may delay our ability to replace the recalled devices in a timely manner. Moreover, if we do not adequately address problems associated with our devices, we may face additional regulatory enforcement action, including adverse publicity, FDA warning letters, product seizure, injunctions, administrative penalties, or civil or criminal fines. We may also be required to bear other costs or take other actions that may have a negative impact on our sales as well as face significant adverse publicity or regulatory consequences, which could harm our business, including our ability to market our products in the future.

Any adverse event involving our products, whether in the United States or abroad, could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and results of operations.

If we, our contract manufacturer, or our component manufacturers fail to comply with the FDA's Quality System Regulation, our manufacturing operations could be interrupted, and our product sales and operating results could suffer.

We, our contract manufacturer, and our component manufacturers are required to comply with the FDA's Quality System Regulation, or QSR, which covers the procedures and documentation of the design, calibration, testing, production, control, quality assurance, labeling, packaging, storage and shipping of our devices. The FDA audits compliance with the QSR through periodic announced and unannounced inspections of manufacturing and other facilities. We and our component manufacturers have been, and anticipate in the future being, subject to such inspections. Although we believe our manufacturing facilities and those of our component manufacturers are in compliance with the QSR, we cannot provide assurance that any future inspection will not result in adverse findings. If we fail to implement timely and appropriate corrective actions that are acceptable to the FDA or if our other manufacturing facilities or those of any of our component manufacturers, contract manufacturers, or suppliers are found to be in violation of applicable laws and regulations, or we or our manufacturers or suppliers fail to take prompt and satisfactory corrective action in response to an adverse inspection, the FDA could take enforcement action, including any of the following sanctions:

- adverse publicity, untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- customer notifications or repair, replacement, refunds, recall, detention or seizure of our products;
- operating restrictions or partial suspension or total shutdown of production;
- refusing or delaying our requests for 510(k) clearance or pre-market approval of new products or modified products;
- withdrawing 510(k) clearances or pre-market approvals that have already been granted;
- refusal to grant export approval for our products; or
- criminal prosecution.

Any of these sanctions could adversely affect our business, financial condition and results of operations.

Outside the United States, our products and operations are also often required to comply with standards set by industrial standards bodies, such as the International Organization for Standardization, or ISO. Foreign regulatory bodies may evaluate our products or the testing that our products undergo against these standards. The specific standards, types of evaluation and scope of review differ among foreign regulatory bodies. If we fail to adequately comply with any of these standards, a foreign regulatory body may take adverse actions similar to those within the power of the FDA. Any such action may harm our reputation and could have an adverse effect on our business, results of operations and financial condition.

The primary regulatory body in Europe is the European Commission, which includes most of the major countries in Europe. The European Commission has adopted numerous directives and standards regulating the design, manufacture, clinical trial, labeling and adverse event reporting for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be commercially distributed throughout Europe. The method of assessing conformity varies depending on the class of the product, but normally involves a combination of self-assessment by the manufacturer and a third-party assessment by a "Notified Body." An assessment by a Notified Body of one country within the European Union is required in order for a manufacturer to commercially distribute the product throughout the European Union.

If we fail to obtain and maintain regulatory approval in foreign jurisdictions, our market opportunities will be limited.

Approximately 20.2% and 22.2% of our total revenue was from sales outside of the United States for the three months ended September 30, 2019 and September 30, 2018, respectively, and 21.5% and 21.6% for the nine months ended September 30, 2019 and September 30, 2018, respectively. We sell our products in 46 countries outside of the United States through our wholly owned subsidiary, distributors or directly to large "house" accounts. In order to market our products in the European Union or other foreign jurisdictions, we must obtain and maintain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies from country to country and can involve additional product testing. The time required to obtain approval abroad may be longer than the time required to obtain FDA clearance. The foreign regulatory approval process includes many of the risks associated with obtaining FDA clearance and we may not obtain foreign regulatory approvals on a timely basis, if at all. FDA clearance does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries. However, the failure to obtain clearance or approval in one jurisdiction may have a negative impact on our ability to obtain clearance or approval elsewhere. If we do not obtain or maintain necessary approvals to commercialize our products in markets outside the United States, we may be required to discontinue sales in those countries which would negatively affect our overall market penetration, revenues, results of operations and financial condition.

We are subject to burdensome and complex billing and record-keeping requirements in order to substantiate our claims for payment under federal, state and commercial healthcare reimbursement programs, and our failure to comply with existing requirements, or changes in those requirements or interpretations thereof, could adversely affect our business, financial condition and results of operations.

We are subject to burdensome and complex billing and record-keeping requirements in order to substantiate our claims for payment under federal, state and commercial healthcare reimbursement programs. Our records also are subject to routine and other reviews by third-party payors, which can result in delays in payments or refunds of paid claims. We could experience a significant increase in pre-payment reviews of our claims by the Durable Medical Equipment Medicare Administrative Contractors, which could cause substantial delays in the collection of our Medicare accounts receivable as well as related amounts due under supplemental insurance plans.

Current law provides for a significant expansion of the government's auditing and oversight of suppliers who care for patients covered by various government healthcare programs. Examples of this expansion include audit programs being implemented by the Durable Medical Equipment Medicare Administrative Contractors, the Zone Program Integrity Contractors, the Recovery Audit Contractors, and the Comprehensive Error Rate Testing contractors, operating under the direction of CMS, and the various state Medicaid Fraud Control Units.

We have been informed by these auditors that healthcare providers and suppliers of certain durable medical equipment product categories are expected to experience further increased scrutiny from these audit programs. When a government auditor ascribes a high billing error rate to one or more of our locations, it generally results in protracted pre-payment claims review, payment delays, refunds and other payments to the government and/or our need to request more documentation from providers than has historically been required. It may also result in additional audit activity in other company locations in that state or Durable Medical Equipment Medicare Administrative Contractors jurisdiction. We cannot currently predict the adverse impact that these audits, methodologies and interpretations might have on our business, financial condition or results of operations, but such impact could be material.

We may be subject to fines, penalties or injunctions if we are determined to be promoting the use of our products for unapproved or "off-label" uses, resulting in damage to our reputation and business.

Our promotional materials and training methods must comply with the FDA and other applicable laws and regulations, including the prohibition of the promotion of a medical device for a use that has not been cleared or approved by the FDA. Physicians may use our products off-label, as the FDA does not restrict or regulate a physician's choice of treatment within the practice of medicine. If the FDA determines that our promotional materials or training constitutes promotion of an off-label use that is either false or misleading, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, which could have an adverse effect on our reputation and results of operations.

Failure to comply with the Federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, the Health Information Technology for Economic and Clinical Health Act, or HITECH Act, and implementing regulations could result in significant penalties.

Numerous federal and state laws and regulations, including HIPAA and the HITECH Act, govern the collection, dissemination, security, use and confidentiality of patient-identifiable health information. HIPAA and the HITECH Act require us to comply with standards for the use and disclosure of protected health information within our company and with third parties. The Privacy Standards and Security Standards under HIPAA establish a set of basic national privacy and security standards for the protection of individually identifiable health information by health plans, healthcare clearinghouses and certain healthcare providers, referred to as covered entities, and the business associates with whom such covered entities contract for services. Notably, whereas HIPAA previously directly regulated only these covered entities, the HITECH Act, which was signed into law as part of the stimulus package in February 2009, makes certain of HIPAA's privacy and security standards also directly applicable to covered entities' business associates. As a result, both covered entities and business associates are now subject to significant civil and criminal penalties for failure to comply with Privacy Standards and Security Standards.

HIPAA requires healthcare providers like us to develop and maintain policies and procedures with respect to protected health information that is used or disclosed, including the adoption of administrative, physical and technical safeguards to protect such information from unauthorized disclosure. The HITECH Act expands the notification requirement for breaches of patient-identifiable health information, restricts certain disclosures and sales of patient-identifiable health information and provides a tiered system for civil monetary penalties for HIPAA violations. The HITECH Act also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney fees and costs associated with pursuing federal civil actions. Additionally, certain states have adopted comparable privacy and security laws and regulations, some of which may be more stringent than HIPAA.

If we are determined to be out of compliance with existing or new laws and regulations related to patient health information, we could be subject to criminal or civil sanctions. New health information standards, whether implemented pursuant to HIPAA, the HITECH Act, congressional action or otherwise, could have a significant effect on the manner in which we handle healthcare related data and communicate with payors, and the cost of complying with these standards could be significant.

The 2013 final HITECH omnibus rule modifies the breach reporting standard in a manner that will likely make more data security incidents qualify as reportable breaches. Any liability from a failure to comply with the requirements of HIPAA or the HITECH Act could adversely affect our results of operations and financial condition. The costs of complying with privacy and security related legal and regulatory requirements are burdensome and could have a material adverse effect on our results of operations.

Regulations requiring the use of "standard transactions" for healthcare services issued under HIPAA may negatively affect our profitability and cash flows.

Pursuant to HIPAA, final regulations have been implemented to improve the efficiency and effectiveness of the healthcare system by facilitating the electronic exchange of information in certain financial and administrative transactions while protecting the privacy and security of the information exchanged.

The HIPAA transaction standards are complex, and subject to differences in interpretation by third-party payors. For instance, some third-party payors may interpret the standards to require us to provide certain types of information, including demographic information not usually provided to us by physicians. As a result of inconsistent application of transaction standards by third-party payors or our inability to obtain certain billing information not usually provided to us by physicians, we could face increased costs and complexity, a temporary disruption in accounts receivable and ongoing reductions in reimbursements and net revenue. In addition, requirements for additional standard transactions, such as claims attachments or use of a national provider identifier, could prove technically difficult, time-consuming or expensive to implement, all of which could harm our business.

If we fail to comply with state and federal fraud and abuse laws, including anti-kickback, Stark, false claims and anti-inducement laws, we could face substantial penalties and our business, results of operations and financial condition could be adversely affected.

The Federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering, or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid, or other federal healthcare programs. Although there are a number of statutory exceptions and regulatory safe harbors protecting certain common activities from prosecution, the exceptions and safe harbors are drawn narrowly, and any remuneration to or from a prescriber or purchaser of healthcare products or services may be subject to scrutiny if it does not qualify for an exception or safe harbor. Our practices may not in all cases meet all of the criteria for safe harbor protection from anti-kickback liability. Failure to meet all requirements of a safe harbor is not determinative of a kickback issue but could subject the practice to increased scrutiny by the government.

The "Stark Law" prohibits a physician from referring Medicare or Medicaid patients to an entity providing "designated health services," which includes durable medical equipment, if the physician or immediate family member of the physician, has an ownership or investment interest in or compensation arrangement with such entity that does not comply with the requirements of a Stark exception. Violation of the Stark Law could result in denial of payment, disgorgement of reimbursements received under a non-compliant arrangement, civil penalties, and exclusion from Medicare, Medicaid or other governmental programs. Although we believe that we have structured our provider arrangements to comply with current Stark Law requirements, these arrangements may not expressly meet the requirements for applicable exceptions from the law.

Federal false claims laws prohibit any person from knowingly presenting or causing to be presented a false claim for payment to the federal government, or knowingly making or causing to be made a false statement to get a false claim paid. The majority of states also have statutes or regulations similar to the federal anti-kickback and self-referral laws and false claims laws, which apply to items or services, reimbursed under Medicaid and other state programs, or, in several states, apply regardless of payor. These false claims statutes allow any person to bring suit in the name of the government alleging false and fraudulent claims presented to or paid by the government (or other violations of the statutes) and to share in any amounts paid by the entity to the government in fines or settlement. Such suits, known as *qui tam* actions, have increased significantly in the healthcare industry in recent years. Sanctions under these federal and state laws may include civil monetary penalties, exclusion of a manufacturer's products from reimbursement under government programs, criminal fines and imprisonment. In addition, the recently enacted Patient Protection and Affordable Care Act, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the Patient Protection and Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the false claims statutes. Because of the breadth of these laws and the narrowness of the safe harbors and exceptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. Such a challenge, regardless of the outcome, could have a material adverse effect on our business, business relationships, reputation, financial condition and results of operations.

The Patient Protection and Affordable Care Act also imposes annual reporting and disclosure requirements on device and drug manufacturers for "transfers of value" made or distributed to licensed physicians and teaching hospitals. Device and drug manufacturers are also required to report and disclose annually any investment interests held by physicians and their immediate family members during the preceding calendar year. Failure to submit required information may result in civil monetary penalties of up to an aggregate of $0.17 million per year (and up to an aggregate of $1.128 million per year for "knowing failures"), for all payments, transfers of value or ownership or investment interests not reported in an annual submission.

In addition, there has been a recent trend of increased federal and state regulation of payments made to physicians. Certain states, mandate implementation of compliance programs and/or the tracking and reporting of gifts, compensation and other remuneration to physicians. The shifting compliance environment and the need to build and maintain robust and expandable systems to comply with different compliance and/or reporting requirements in multiple jurisdictions increase the possibility that a healthcare company many violate one or more of the requirements.

The Federal Civil Monetary Penalties Law prohibits the offering or giving of remuneration to a Medicare or Medicaid beneficiary that the person knows or should know is likely to influence the beneficiary's selection of a particular supplier of items or services reimbursable by a Federal or state governmental healthcare program. We sometimes offer customers various discounts and other financial incentives in connection with the sales of our products. While it is our intent to comply with all applicable laws, the government may find that our marketing activities violate the Civil Monetary Penalties Law. If we are found to be in non-compliance, we could be subject to civil money penalties of up to $0.02 million for each wrongful act, assessment of three times the amount claimed for each item or service and exclusion from the federal or state healthcare programs.

On February 3, 2017, the Department of Justice (DOJ) published a final rule that applies an inflation adjustment to civil monetary penalty (CMP) amounts, as mandated by the Bipartisan Budget Act of 2015. The maximum CMP for False Claims Act violations is $0.02 million for civil penalties assessed after August 1, 2016 and whose violations occurred after November 2, 2015.

The Bipartisan Budget Act of 2018 increases the CMP and criminal fines and sentences for various fraud and abuse violations under the Medicare and Medicaid programs for violations committed after February 9, 2018. The new maximum CMP for a False Claims Act violation is $0.02 million.

The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. If our operations are found to be in violation of any of the laws described above or any other government regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restricting of our operations. Any penalties, damages, fines, curtailment or restructuring or our operations could harm our ability to operate our business and our results of operations. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state fraud laws may prove costly.

Foreign governments tend to impose strict price controls, which may adversely affect our future profitability.

We sell our products in 46 countries outside the United States through our wholly owned subsidiary, distributors or directly to large “house” accounts. In some foreign countries, particularly in the European Union, the pricing of medical devices is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to supply data that compares the cost-effectiveness of our products versus other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, it may not be profitable to sell our products in certain foreign countries, which would negatively affect the long-term growth of our business.

Our business activities involve the use of hazardous materials, which require compliance with environmental and occupational safety laws regulating the use of such materials. If we violate these laws, we could be subject to significant fines, liabilities or other adverse consequences.

Our research and development programs as well as our manufacturing operations involve the controlled use of hazardous materials. Accordingly, we are subject to international, federal, state and local laws governing the use, handling and disposal of these materials. Although we believe that our safety procedures for handling and disposing of these materials comply in all material respects with the standards prescribed by state and federal regulations of each country in which we conduct business, we cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of an accident or failure to comply with environmental laws, we could be held liable for resulting damages, and any such liability could exceed our insurance coverage and adversely affect our financial condition and results of operations.

New regulatory requirements under Proposition 65 could adversely affect our business.

We are subject to California’s Proposition 65, or Prop 65, which requires a specific warning on any product that contains a substance listed by the State of California as having been found to cause cancer or birth defects, unless the level of such substance in the product is below a safe harbor level. Prop 65 required that all businesses must be in compliance by August 30, 2018 with new regulations that require modifications to product warnings and for businesses to coordinate with upstream vendors or downstream customers for the 800+ regulated chemicals in consumer products and assess whether new occupational exposure warnings need to be posited in California facilities. We have taken steps to add warning labels to our products packaged in California and manufactured after August 30, 2018. Although we cannot predict the ultimate impact of these new requirements, they could reduce overall consumption of our products or leave consumers with the perception (whether or not valid) that our products do not meet their health and wellness needs, all of which could adversely affect our business, financial condition andresults of operations.

Risks related to our intellectual property

If we are unable to secure and maintain patent or other intellectual property protection for the intellectual property used in our products, we will lose a significant competitive advantage, which may adversely affect our future profitability.

Our commercial success depends, in part, on obtaining, defending, and maintaining patent and other intellectual property protection for the technologies used in our products. The patent positions of medical device companies, including ours, can be highly uncertain and involve complex and evolving legal and factual questions. Furthermore, we might in the future opt to license intellectual property from other parties. If we, or the other parties from whom we would license intellectual property, fail to obtain, defend, and maintain adequate patent or other intellectual property protection for intellectual property used in our products, or if any protection is reduced or eliminated, others could use the intellectual property used in our products, resulting in harm to our competitive business position. In addition, patent and other intellectual property protection may not:

- prevent our competitors from duplicating our products;
- prevent our competitors from gaining access to our proprietary information and technology;
- prevent our competitors or other parties from suing us for alleged infringement; or
- permit us to gain or maintain a competitive advantage.

Any of our patents may be challenged, invalidated, circumvented or rendered unenforceable. We cannot provide assurance that we will be successful should one or more of our patents be challenged for any reason. If our patent claims are rendered invalid or unenforceable, or narrowed in scope, the patent coverage afforded our products could be impaired, which could make our products less competitive.

As of September 30, 2019, we have nineteen pending patent applications and seven pending international patent application, forty-six issued patents relating to the design and construction of our oxygen concentrators, our intelligent delivery technology and on the nasal interface used in the non-invasive ventilator. We cannot specify which of these patents individually or as a group will permit us to gain or maintain a competitive advantage. Patents may be subject to reexamination, *inter partes* review, post-grant review, and derivation proceedings in the U.S. Patent and Trademark Office or comparable proceedings in other patent offices worldwide. Foreign patents may be subject to opposition or comparable proceedings in the corresponding foreign patent offices. Any of these proceedings could result in loss of the patent or denial of the patent application, or loss or reduction in the scope of one or more of the claims of the patent or patent application. Changes in either patent laws or in interpretations of patent laws may also diminish the value of our intellectual property or narrow the scope of our protection. Interference, reexamination, *inter partes* review, defense, opposition and derivation proceedings may be costly and time consuming, and we, or the other parties from whom we might potentially license intellectual property, may be unsuccessful in defending against such proceedings. Thus, any patents that we own or might license may provide limited or no protection against competitors. In addition, our pending patent applications and those we may file in the future may have claims narrowed during prosecution or may not result in patents being issued. Even if any of our pending or future applications are issued, they may not provide us with any competitive advantage or adequate protection from allegations of infringement, whether valid or frivolous, which may result in the incurrence of material defense costs. Our patents and patent applications are directed to particular aspects of our products. Other parties may develop and obtain patent protection for more effective technologies, designs or methods for oxygen therapy or non-invasive ventilation therapy. If these developments were to occur, it would likely have an adverse effect on our sales. Our ability to develop additional patentable technology is also uncertain.

Non-payment or delay in payment of patent fees or annuities, whether intentional or unintentional, may also result in the loss of patents or patent rights important to our business. Many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. In addition, many countries limit the enforceability of patents against other parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of the patent. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States, particularly in the field of medical products and procedures.

Our products could infringe or appear to infringe the intellectual property rights of others, which may lead to patent and other intellectual property litigation that could itself be costly, could result in the payment of substantial damages or royalties, prevent us from using technology that is essential to our products, and/or force us to discontinue selling our products.

The medical device industry in general has been characterized by extensive litigation and administrative proceedings regarding patents and other intellectual property rights. Our competitors hold a significant number of patents relating to respiratory therapy devices and products. Third parties have in the past asserted and may in the future assert that we are employing their proprietary technology without authorization. For example, Separation Design Group IP Holdings, LLC (SDGIP) filed a lawsuit against us on October 23, 2015 in the United States District Court for the Central District of California. SDGIP alleged that we willfully infringed U.S. Patent Nos. 8,894,751 and 9,199,055, both of which are titled “Ultra Rapid Cycle Portable Oxygen Concentrator.” SDGIP also alleged misappropriation of trade secrets and breach of contract stemming from a meeting in September 2010. SDGIP sought to recover damages (including compensatory and treble damages), costs and expenses (including attorneys’ fees), pre-judgment and post-judgment interest, and other relief that the Court deem proper. SDGIP also sought a permanent injunction against us. CAIRE, Inc. (CAIRE) filed a lawsuit against us in the United States District Court for the Northern District of Georgia on September 12, 2016. CAIRE alleged that we infringed U.S. Patent No. 6,949,133, entitled “Portable Oxygen Concentrator.” While we settled our lawsuit with SDGIP in October 2017 and with CAIRE in December 2017, if we fail in defending against lawsuits or claims brought against us in the future, we could be subject to substantial monetary damages and injunctive relief, and we cannot predict the outcome of any lawsuit. For example, in connection with our recent acquisition of New Aera, a competitor or New Aera indicated that it believes New Aera has infringed its intellectual property rights and that it was considering filing a patent infringement lawsuit with respect to certain New Aera technology we acquired through the acquisition. An adverse determination or protracted defense costs of such lawsuits could have a material effect on our business and operating results.

From time to time, we have also commenced litigation to enforce our intellectual property rights. For example, we previously pursued litigation against Inova Labs, Inc. (a subsidiary of ResMed Corp.) for infringement of two of our patents seeking damages, injunctive relief, costs, and attorneys’ fees. While we settled our lawsuit with Inova Labs in June 2016, an adverse decision in any other legal action could limit our ability to assert our intellectual property rights, limit the value of our technology or otherwise negatively affect our business, financial condition and results of operations.

Monitoring unauthorized use of our intellectual property is difficult and costly. Unauthorized use of our intellectual property may have occurred or may occur in the future. Although we have taken steps to minimize the risk of this occurring, any such failure to identify unauthorized use and otherwise adequately protect our intellectual property would adversely affect our business. Moreover, if we are required to commence litigation, whether as a plaintiff or defendant as has occurred with Inova Labs, SDGIP, and CAIRE, not only will this be time-consuming, but we will also be forced to incur significant costs and divert our attention and efforts of our employees, which could, in turn, result in lower revenue and higher expenses.

We cannot provide assurance that our products or methods do not infringe or appear to not infringe the patents or other intellectual property rights of third parties and if our business is successful, the possibility may increase that others will assert infringement claims against us whether valid or frivolous.

Determining whether a product infringes a patent involves complex legal and factual issues, defense costs and the outcome of a patent litigation action are often uncertain. We have not conducted an extensive search of patents issued or assigned to other parties, including our competitors, and no assurance can be given that patents containing claims covering or appearing to cover our products, parts of our products, technology or methods do not exist, have not been filed or could not be filed or issued. Because of the number of patents issued and patent applications filed in our technical areas, our competitors or other parties may assert that our products and the methods we employ in the use of our products are covered by U.S. or foreign patents held by them. In addition, because patent applications can take many years to issue and because publication schedules for pending applications may vary by jurisdiction and some patent applications may not be published in the U.S., there may be applications now pending of which we are unaware and which may result in issued patents that our current or future products infringe or appear to infringe. Also, because the claims of published patent applications can change between publication and patent grant, there may be published patent applications that may ultimately issue with claims that we infringe. There could also be existing patents that one or more of our products or parts may infringe and of which we are unaware. As the number of competitors in the market for oxygen products and the number of patents issued in this area grows, the possibility of patent infringement claims against us increases. In certain situations, we may determine that it is in our best interests to voluntarily challenge a party's patents in litigation or other proceedings, including declaratory judgment actions, patent reexaminations, or *inter partes* reviews. As a result, we may become involved in unwanted protracted litigation that could be costly, result in diversion of management's attention, require us to pay damages and/or licensing royalties and force us to discontinue selling our products.

Infringement and other intellectual property claims and proceedings brought against us, whether successful or not, could result in substantial costs and harm to our reputation. Such claims and proceedings can also distract and divert management and key personnel from other tasks important to the success of the business. We cannot be certain that we will successfully defend against allegations of infringement of patents or other intellectual property rights. In the event that we become subject to a patent infringement or other intellectual property related lawsuit and if the asserted patents or other intellectual property were upheld as valid and enforceable and we were found to infringe the asserted patents or other intellectual property, or violate the terms of a license to which we are a party, we could be required to do one or more of the following:

- cease selling or using any of our products that incorporate the asserted intellectual property, which would adversely affect our revenue;
- pay damages for past use of the asserted intellectual property, which may be substantial;
- obtain a license from the holder of the asserted intellectual property, which license may not be available on reasonable royalty terms, if at all, and which could reduce profitability; and
- redesign or rename, in the case of trademark claims, our products to avoid infringing the intellectual property rights of third parties, which may not be possible and could be costly and time-consuming if it is possible to do so.

If we are unable to prevent unauthorized use or disclosure of trade secrets, unpatented know-how and other proprietary information, our ability to compete will be harmed.

We rely on a combination of trade secrets, copyrights, trademarks, confidentiality agreements and other contractual provisions and technical security measures to protect certain aspects of our technology, especially where we do not believe that patent protection is appropriate or obtainable. We require our employees and consultants to execute confidentiality agreements in connection with their employment or consulting relationships with us. We also require our employees and consultants to disclose and assign to us all inventions conceived during the term of their employment or engagement while using our property or that relate to our business. We also require our corporate partners, outside scientific collaborators and sponsored researchers, advisors and others with access to our confidential information to sign confidentiality agreements. We also have taken precautions to initiate reasonable safeguards to protect our information technology systems. However, these measures may not be adequate to safeguard our proprietary intellectual property and conflicts may, nonetheless, arise regarding ownership of inventions. Such conflicts may lead to the loss or impairment of our intellectual property or to expensive litigation to defend our rights against competitors who may be better funded and have superior resources. Our employees, consultants, contractors, outside clinical collaborators and other advisors may unintentionally or willfully disclose our confidential information to competitors. In addition, confidentiality agreements may be unenforceable or may not provide an adequate remedy in the event of unauthorized disclosure. Enforcing a claim that a third-party illegally obtained and is using our trade secrets is expensive and time-consuming, and the outcome is unpredictable. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary, and in such cases we could not assert any trade secret rights against such party. As a result, other parties may be able to use our proprietary technology or information, and our ability to compete in the market would be harmed.

"Inogen," "Inogen One," "Inogen One G2," "Inogen One G3," "G4," "G5," "Oxygenation," "Live Life in Moments, not Minutes," "Never Run Out of Oxygen," "Oxygen Therapy on Your Terms," "Oxygen.Anytime.Anywhere," "Reclaim Your Independence," "Intelligent Delivery Technology," "Inogen At Home," the Inogen design, "TIDAL ASSIST," "TAV," and "SIDEKICK" are registered trademarks with the United States Patent and Trademark Office of Inogen, Inc. We own pending applications for "MOMENTUM TRANSFER" and "SONIC BLADE" with the United States Patent and Trademark Office. We own trademark registrations for the mark "Inogen" in Australia, Canada, South Korea, Mexico, Europe (European Union registration), India, Israel, Japan, New Zealand, Norway, Turkey, and Singapore, and Switzerland. We own pending applications for the mark "Inogen" in Argentina, Brazil, Chile, China, Colombia, Ecuador, Iceland, Kuwait, Malaysia, Paraguay, Peru, South Africa, and Uruguay. We own a trademark registration for the mark "イノジェン" in Japan. We own trademark applications for the marks "印诺真" and "艾诺根" in China. We own trademark registrations for the mark "Inogen One" in Australia, Canada, China, South Korea, Mexico, and Europe (European Union registration). We own a trademark registration for the mark "Satellite Conserver" in Canada. We own a trademark registration for the mark "Inogen At Home" in Europe (European Union Registration). We own trademark registrations for the mark "G4" in Europe (European Union registration) and the United Kingdom. We own trademark applications for the mark "G5" in Europe (European Union Registration) and the United Kingdom. We own trademark applications for the Inogen design in Bolivia and China. Other service marks, trademarks, and trade names referred to in this Quarterly Report on Form 10-Q are the property of their respective owners.

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

Some of our employees and consultants, including employees who joined us following our acquisition of New Aera, were previously employed by or contracted with other medical device companies focused on the development of oxygen therapy and non-invasive ventilation products, including our competitors. We may be subject to claims that these employees or agents have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in defending against these claims, litigation could result in substantial costs, damage to our reputation and be a distraction to management.

Risks related to being a public company

We will incur increased costs as a result of operating as a public company and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, especially now that we are no longer an "emerging growth company," we will continue to incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act of 2002 and rules enforced by the Public Companies Oversight Board (PCAOB) subsequently implemented by the SEC and the NASDAQ Global Select Market impose numerous requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Also, the Securities Exchange Act of 1934, as amended, or the Exchange Act, requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. Our management and other personnel will need to devote a substantial amount of time to compliance with these laws and regulations. These requirements have increased and will continue to increase our legal, accounting, external audit and financial compliance costs and have made and will continue to make some activities more time consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to incur substantial costs to maintain the same or similar coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or our board committees or as executive officers.

Overall, we estimate that our incremental costs resulting from operating as a public company, including compliance with these rules and regulations, may be between $1.5 million and $3.0 million per year. However, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies and public accounting firms are subject to PCAOB compliance audits. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

The Sarbanes-Oxley Act requires, among other things, that we assess and document the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, Section 404(a) of the Sarbanes-Oxley Act, or Section 404(a), requires us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting. Section 404(b) of Sarbanes-Oxley Act, or Section 404(b), also requires our independent registered public accounting firm to attest to the effectiveness of our internal control over financial reporting. Now that we are no longer an "emerging growth company," our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, and the cost of our compliance with Section 404(b) is higher. Our compliance with applicable provisions of Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements.

Furthermore, investor perceptions of our company may suffer if deficiencies are found, and this could cause a decline in the market price of our stock. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated operating results and harm our reputation. If we are unable to implement these requirements effectively or efficiently, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal controls from our independent registered public accounting firm.

Failure to maintain effective internal controls could cause our investors to lose confidence in us and adversely affect the market price of our common stock. If our internal controls are not effective, we may not be able to accurately report our financial results or prevent fraud.

Section 404 of the Sarbanes-Oxley Act, or Section 404, requires that we maintain internal control over financial reporting that meets applicable standards. We may err in the design, operation or documentation of our controls, and all internal control systems, no matter how well designed and operated, can provide only reasonable assurance that the objectives of the control system are met. Because there are inherent limitations in all control systems, there can be no absolute assurance that all control issues have been or will be detected. If we are unable, or are perceived as unable, to produce reliable financial reports due to internal control deficiencies, investors could lose confidence in our reported financial information and operating results, which could result in a negative market reaction.

We are required to disclose significant changes made in our internal controls and procedures on a quarterly basis. Now that we are no longer an "emerging growth company," our independent registered public accounting firm is also required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404. Our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Our remediation efforts may not enable us to avoid a material weakness in the future. Additionally, to comply with the requirements of being a public company, we may need to undertake various actions, such as implementing new internal controls and procedures and hiring accounting or internal audit staff, which may adversely affect our results of operations and financial condition.

Although prior material weaknesses have been remediated, we cannot assure you that our internal controls will continue to operate properly or that our financial statements will be free from error. There may be undetected material weaknesses in our internal control over financial reporting, as a result of which we may not detect financial statement errors on a timely basis. Moreover, in the future we may implement new offerings and engage in business transactions, such as acquisitions, reorganizations or implementation of new information systems that could require us to develop and implement new controls and could negatively affect our internal control over financial reporting and result in material weaknesses.

If we identify new material weaknesses in our internal control over financial reporting, if we are unable to comply with the requirements of Section 404 in a timely manner, if we are unable to assert that our internal controls over financial reporting are effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, we may be late with the filing of our periodic reports, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock could be negatively affected. As a result of such failures, we could also become subject to investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, and become subject to litigation from investors and stockholders, which could harm our reputation, financial condition or divert financial and management resources from our core business.

Risks related to our common stock

We expect that our stock price will fluctuate significantly, you may have difficulty selling your shares, and you could lose all or part of your investment.

Our stock is currently traded on NASDAQ, but we can provide no assurance that we will be able to maintain an active trading market on NASDAQ or any other exchange in the future. If an active trading market does not develop, you may have difficulty selling any of our shares of common stock that you buy. In addition, the trading price of our common stock may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

- actual or anticipated quarterly variation in our results of operations or the results of our competitors;
- announcements of secondary offerings;
- announcements by us or our competitors of new commercial products, significant contracts, commercial relationships or capital commitments;
- issuance of new or changed securities analysts' reports or recommendations for our stock;
- developments or disputes concerning our intellectual property or other proprietary rights;
- commencement of, or our involvement in, litigation;
- market conditions in the oxygen therapy or NIV markets;
- reimbursement or legislative changes in the oxygen therapy or NIV markets;
- failure to complete significant sales;
- manufacturing disruptions that could occur if we were unable to successfully expand our production in our current or an alternative facility;
- any future sales of our common stock or other securities;
- any major change to the composition of our board of directors or management;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- the other factors described in this "Risk Factors" section; and
- general economic conditions and slow or negative growth of our markets.

The stock market in general and market prices for the securities of technology-based companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock.

Stockholder litigation has been filed against us in the past, and a class action securities lawsuit against us is currently pending, as discussed in the "Legal Proceedings" section of this Quarterly Report on Form 10-Q. While we are continuing to defend such actions vigorously, the defense of such actions can be costly, divert the time and attention of our management and harm our operating results, and any judgment against us or any future stockholder litigation could result in substantial costs.

If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will rely in part on the research and reports that equity research analysts publish about us and our business. We will not have any control of the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Future sales of shares could cause our stock price to decline.

Our stock price could decline as a result of sales of a large number of shares of our common stock or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

As of September 30, 2019, one holder of approximately 3.5 million shares, or approximately 16.1%, of our outstanding shares, has rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We have also registered the offer and sale of all shares of common stock that we may issue under our equity compensation plans.

In addition, in the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, and employee arrangements or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

Our directors, executive officers and principal stockholders will continue to have substantial control over us and could limit your ability to influence the outcome of key transactions, including changes of control.

As of September 30, 2019, our executive officers, directors and stockholders who owned more than 5% of our outstanding common stock and their respective affiliates beneficially owned or controlled approximately 61.1% of the outstanding shares of our common stock. Accordingly, these executive officers, directors and stockholders who owned more than 5% of our outstanding common stock and their respective affiliates, acting as a group, have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 10,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be affected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the board of directors, or the Chief Executive Officer;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- establish that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered three-year terms;
- provide that our directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- specify that no stockholder is permitted to cumulate votes at any election of directors; and
- require a super-majority of votes to amend certain of the above-mentioned provisions.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date and currently intend to retain our future earnings to fund the development and growth of our business. In addition, we may become subject to covenants under future debt arrangements that place restrictions on our ability to pay dividends. As a result, capital appreciation, if any, of our common stock is expected to be your sole source of gain for the foreseeable future.

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

Unregistered Sales of Equity Securities

None.

Issuer Purchases of Equity Securities

We did not repurchase any shares of our common stock during the three months or nine months ended September 30, 2019 and September 30, 2018.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit Number	Description	Incorporated by Reference From Form	Incorporated by Reference From Exhibit Number	Date Filed
2.1	Agreement and Plan of Merger dated August 6, 2019, by and among Inogen, Inc., Move Merger Sub, Inc., New Aera, Inc. and Gregory J. Kapust, as the entitled holders' agent	Form 8-K	2.1	8/7/19
10.1	Lease Agreement, dated August 29, 2019, by and between the Company and TCG Industrial Shiloh LLC	Filed herewith		
10.2	Lease Agreement Amendment No. 1, dated November 1, 2019, by and between the Company and TCG Industrial Shiloh LLC	Filed herewith		
31.1	Certification Pursuant to Exchange Act Rules 13a - 14(a) and 15d - 14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer	Filed herewith		
31.2	Certification Pursuant to Exchange Act Rules 13a - 14(a) and 15d - 14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer	Filed herewith		
32.1(1)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Executive Officer			
32.2(1)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer			
101.INS	XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.			
101.SCH	XBRL Taxonomy Extension Schema Document			
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document			
101.LAB	XBRL Taxonomy Extension Label Linkbase Document			
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document			
101.DEF	XBRL Taxonomy Extension Definition Document			
104	The cover page of this Quarterly Report on Form 10-Q, formatted in inline XBRL.			

(1) The Certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Inogen, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

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.

INOGEN, INC.

Dated: November 5, 2019

By: /s/ Scott Wilkinson
Scott Wilkinson
Chief Executive Officer
President
Director
(Principal Executive Officer)

Dated: November 5, 2019

By: /s/ Alison Bauerlein
Alison Bauerlein
Chief Financial Officer
Executive Vice President, Finance
Secretary and Treasurer
(Principal Financial and Accounting Officer)

LEASE AGREEMENT

by and between

TCG INDUSTRIAL SHILOH LLC,
a Delaware limited liability company,

as Landlord

and

INOGEN, INC.,
a Delaware corporation,

as Tenant

600 Shiloh Road
Plano, Texas 75074

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List of Exhibits

LEASE AGREEMENT

ARTICLE I

BASIC PROVISIONS AND CERTAIN DEFINITIONS

1.1 **Definitions**. The following list sets out certain defined terms and certain financial and other information pertaining to this Lease Agreement (this "Lease"):

(a) "Landlord": TCG Industrial Shiloh LLC, a Delaware limited liability company

(b) Landlord's notice address:

c/o Trident Capital Group
Attn: Peter Walter
40 Grove Street, Suite 250
Wellesley, Massachusetts 02110

(c) "Tenant": Inogen, Inc., a Delaware corporation

(d) Tenant's notice address:
Inogen, Inc.
326 Bollay Drive
Goleta, CA 93117
Attn: Scott Wilkinson, President & Ali Bauerlein, CFO

(e) "Guarantor": None.

(f) "Premises":

(i) The "Initial Premises" is that portion of the Building containing approximately 53,603 square feet of leasable area, as described or shown on Exhibit A attached to this Lease and commonly known as 600 Shiloh Road, Plano, Texas 75074.

(ii) The "Must Take Space" is that portion of the Building containing approximately 100,494 square feet of leasable area, as described or shown on Exhibit A attached to this Lease and commonly known as 600 Shiloh Road, Plano, Texas 75074

(iii) Any statement of square footage set forth in this Lease or that may have been used in calculating Base Rent, Tenant's Proportionate Share and/or Operating Costs is an approximation which Landlord and Tenant agree is reasonable, and the Base Rent and Tenant's Proportionate Share based thereon are not subject to revision whether or not the actual square footage is more or less.

(iv) Prior to the Must Take Date (hereinafter defined), the term "Premises" includes only the Initial Premises. On the Must Take Date, the Premises are automatically expanded to include the Must Take Space.

(g) "Building": 600 Shiloh Road, Plano, Texas 75074, containing approximately 154,097 square feet of leasable area.

(h) "Project": Landlord's property located in the City of Plano, County of Collin, State of Texas, consisting of approximately 321,238 square feet of leasable area, which property is described or shown on Exhibit B attached to this Lease. With regard to Exhibit B, the parties agree that Exhibit B is attached solely for the purpose of locating the Building and the Premises within the Project and that no representation, warranty, or covenant is to be implied by any other information shown on Exhibit B (i.e., any indication as to existing or future buildings, access, tenants or prospective tenants, etc., is subject to change at any time).

(i) "Tenant's Proportionate Share": Tenant's Proportionate Share of the Project shall be a fraction, the numerator of which is the total floor area (all of which is deemed "leasable") in the Premises and the denominator of which is the total leasable floor area of all buildings in the Project at the time when the respective charge was incurred. Tenant's Proportionate Share of the Building shall be a fraction with the same said numerator, but the denominator of which shall be the total leasable floor area of the Building at the time when the respective charge was incurred. As of the date of this Lease: (a) the total floor area of the Premises shall be as provided for in

Section 1.1(e); (b) the total leasable floor area of all buildings in the Project shall be as provided for in Section 1.1(g); (c) prior to the Must Take Date, the Tenant's Proportionate Share of the Project shall be 16.69%, and, following the Must Take Date, the Tenant's Proportionate Share of the Project shall be 47.97%, subject to adjustment as provided below, and (d) prior to the Must Take Date, the Tenant's Proportionate Share of the Building shall be 34.79%, and, following the Must Take Date, the Tenant's Proportionate Share of the Building shall be 100.00%, subject to adjustment as provided below. At such time, if ever, any space is added to or subtracted from the Premises and/or the Building or any of the buildings in the Project, or if buildings are added to or removed from the Project, the Tenant's Proportionate Share shall be adjusted accordingly. Landlord's system for measurement of total leasable floor area shall be as determined by Landlord.

(j) "Permitted Use": as defined in Section 5.1 of this Lease.

(k) "Lease Term": Commencing on the 120th day following Landlord's delivery of possession of the Initial Premises to Tenant (the "Commencement Date") and continuing until 5:00 p.m. on the last day of the 132nd full calendar month following the Commencement Date (the "Expiration Date"). At the request of Landlord, Tenant shall execute and deliver to Landlord on or after the Commencement Date a completed certificate in substantially the form attached hereto as Exhibit F (the "Commencement Date Certificate"). If the Commencement Date does not occur on the first day of a calendar month, then for purposes of Rent payments, "month 1" shall commence on the Commencement Date and shall end at the conclusion of the last calendar day of the following calendar month (for example, if the Commencement Date is February 10th, then "month 1" in the Rent chart would begin on February 10th and would end upon the conclusion of business on March 31st) and, in such event the Rent for "month 1" shall be pro-rated based on the actual number of days in such "month 1"; the balance of any Base Rent abatement (or free rent) for "month 1", if any, shall be credited to the first calendar month in which Tenant is actually required to pay Base Rent (for example, if Tenant is entitled to five (5) months of Base Rent abatement and the Commencement Date occurs on February 10th, then a Base Rent abatement equal to nine (9) days shall be credited for the month of July). The "Must Take Date" is January 1, 2021; provided, Tenant may elect to occupy the Must Take Space any time on or after July 1, 2020 by providing Landlord at least ninety (90) days prior written notice, and the date that is thirty (30) days following the date set forth in such notice shall be the Must Take Date.

(l) "Option Period": Landlord hereby grants to Tenant two (2) options to extend the term of this Lease for five (5) years each, each commencing when the prior term expires, as more particularly set forth in and in accordance with the terms of Exhibit G attached hereto.

(m) "Base Rent": Base Rent shall be the sum of the amounts set forth below and shall be paid as follows during the respective months of the Lease Term:

Initial Premises:

Months of Lease Term	**Base Rent/Month**
1 – 12	$39,085.52*
13 – 18	$40,062.66
19 – 30	$41,064.23
31 – 42	$42,090.83
43 – 54	$43,143.10
55 – 66	$44,221.68
67 – 78	$45,327.22
79 – 90	$46,460.40
91 – 102	$47,621.91
103 – 114	$48,821.46
115 – 126	$50,032.77
127 – 132	$51,283.59

*Base Rent for the Initial Premises for the period commencing on the Commencement Date and ending six (6) months thereafter will be conditionally abated in accordance with Section 30.16.

Must Take Space:

Months of Lease Term	**Base Rent/Month**
1 – 12	N/A+
Must Take Date – 18	$75,108.80+**
19 – 30	$76,986.52
31 – 42	$78,911.18
43 – 54	$80,883.96
55 – 66	$82,906.06
67 – 78	$84,978.71
79 – 90	$87,103.18
91 – 102	$89,280.76
103 – 114	$91,512.78
115 – 126	$93,800.60
127 – 132	$96,145.61

+Base Rent for the Must Take Space shall commence on the Must Take Date (subject to adjustment as provided in Section 1.1(k)).

**Base Rent for the Must Take Space for the period commencing on the Must Take Date and ending six (6) months thereafter will be conditionally abated in accordance with Section 30.16.

(n) Estimated Monthly Payment. The following table is provided as an estimate of Tenant's initial monthly payment broken down into its components and this table does not reflect any taxes, if applicable, that apply to such payments. Tenant acknowledges that the estimates contained in this table do not supersede the specific provisions contained elsewhere in this Lease and may be adjusted annually or more often by Landlord as provided for in Article IX below.

Base Rent	$39,085.52
Estimate for Initial Operating Costs (Section 7.4)	$2,054.78
Estimate for Initial Real Estate Charges (Article VI)	$6,923.72
Estimate for Initial Insurance Expenses (Article VI)	$402.02
ESTIMATED TOTAL INITIAL MONTHLY PAYMENT	**$48,466.04**

(o) "Prepaid Rent": $48,466.04, being the Base Rent plus an estimate of Tenant's obligations for Operating Costs, Real Estate Charges and Insurance Expenses for the first full month of the Lease Term plus a prorated amount for any partial month between the Commencement Date and the first day of such first full month, if the Commencement Date is not the first day of a calendar month, such Prepaid Rent being due and payable not later than five (5) business days following mutual execution and delivery of this Lease.

(p) "Security Deposit": $170,800.35, such Security Deposit being due and payable within five (5) business days of mutual execution and delivery of this Lease and being subject to the applicable provisions of Section 23.8 and Article XXVII of this Lease.

(q) "Rent": as defined in Section 9.1 of this Lease.

1.2 **Address for Rent Payments** All amounts payable by Tenant to Landlord shall, until further notice from Landlord, be paid to Landlord pursuant to the following instructions:

If by ACH or Wire Transfer:

Account Name:
Financial Institution:
ACH Routing Number:
Wire Routing Number:
Account Number:

ARTICLE II

GRANTING CLAUSE

2.1 **Grant and Acceptance**. Landlord leases the Premises to Tenant and Tenant accepts the Premises from Landlord for the Lease Term, upon and subject to the terms and conditions set forth in this Lease.

ARTICLE III

DELIVERY OF PREMISES; RELOCATION OF PREMISES

3.1 **Acceptance of Premises**. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS LEASE, THE PREMISES ARE LEASED "AS IS", WITH TENANT ACCEPTING ALL DEFECTS, IF ANY; AND LANDLORD MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE PREMISES (WITHOUT LIMITATION, LANDLORD MAKES NO WARRANTY AS TO THE HABITABILITY, FITNESS OR SUITABILITY OF THE PREMISES FOR A PARTICULAR PURPOSE, NOR AS TO COMPLIANCE WITH ANY LAWS, RULES OR REGULATIONS, NOR AS TO THE ABSENCE OF ANY TOXIC OR OTHERWISE HAZARDOUS SUBSTANCES). Notwithstanding any provision of this Lease to the contrary, Landlord represents and warrants that Landlord is the fee title owner of the Premises and has the right to lease the Premises on the terms and conditions set forth in this Lease. This Section 3.1 is subject to any contrary requirements under applicable law; however, in this regard, Tenant acknowledges that it has been given the opportunity to inspect the Premises and to have qualified experts inspect the Premises prior to the execution of this Lease. Notwithstanding the foregoing, Landlord warrants (but does not represent) that as of the Commencement Date (i) the electrical, mechanical, plumbing, and HVAC systems serving the Premises as of the date of this Lease shall be in good operating condition and repair, other than to the extent of any damage or failure caused by Tenant or Tenant Parties or any portion thereof affected by the Initial Alterations; however, if any portion of the HVAC system must be replaced pursuant to the foregoing, the provisions of Section 11.2 shall apply; and (ii) the Premises, Building and Common Areas are in compliance with applicable laws, including without limitation The Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101 et seq., and the regulations issued pursuant thereto, subject to the provisions of Section 10.5(b).

3.2 **Delay in Delivery**. If this Lease is executed before the Initial Premises or the Must Take Space become vacant, or if any present tenant or occupant of the Initial Premises or Must Take Space holds over, and Landlord has not provided possession of the Initial Premises prior to October 1, 2019, Landlord shall not be deemed to be in default under this Lease; and in such event, Tenant agrees to accept possession of the Initial Premises or the Must Take Space (as applicable) at such time as Landlord is able to turn over possession of the same to Tenant. Notwithstanding the foregoing provisions of this Section 3.2, if the delivery of possession does not occur on or before October 1, 2019 for any reason other than force majeure or the act or omission of any Tenant Party, then Tenant may offset from its Base Rent obligations first accruing following the Commencement Date, an amount equal to $13,000 per month.

3.3 **Early Possession.** If available, Tenant may occupy the Initial Premises as of September 1, 2019 (the "Early Possession Date"), even though the Early Possession Date is prior to the Commencement Date of the Lease, for the purpose of constructing the Initial Alterations (as defined in Exhibit H) and installing Tenant's furniture, fixtures, equipment, and voice and data cabling ("Early Possession"). The obligation to pay Base Rent and Tenant's Proportionate Share of Shared Expenses shall be abated for the period from the Early Possession Date to the Commencement Date. All other terms of this Lease, however, including, but not limited to, the obligation to carry the insurance required by this Lease, shall be in effect during the Early Possession period. Such Early Possession shall not change the Expiration Date of the Lease Term.

ARTICLE IV

BASE RENT

4.1 **Base Rent**. Tenant shall pay to Landlord Base Rent in monthly installments in the amount(s) specified in Section 1.1(l) of this Lease. The first such monthly installment shall be due and payable not later than five (5) business days after the date of mutual execution and delivery of this Lease (as stated in Section 1.1(o) of this Lease), and subsequent installments shall be due and payable on or before the first day of each calendar month during the Lease Term.

ARTICLE V

PER MITTED USE; TENANT'S FINANCIAL STATEMENTS

5.1 **Permitted Use of Premises**. The Premises shall be used only for general office, customer contact center and warehousing, including research and development and light assembly, and any legal use incidental thereto. Tenant's use of the Premises is further subject to Article X of this Lease and to all other provisions hereof. Notwithstanding anything to the contrary in this Lease, in no event shall any portion of the Premises be used for any marijuana or marijuana related business (including, but not limited to, the cultivation, manufacture, processing, storage or sale of cannabis or cannabis-related products). Tenant acknowledges that the specification of a "permitted use" means only that Landlord has no objection to the specified use and does not include any representation or warranty by Landlord as to whether or not such specified use complies with applicable laws and/or requires special governmental permits. In this regard, Tenant acknowledges that Section 1.1(j) of this Lease is subject to Sections 3.1 and 10.5 of this Lease.

5.2 **Tenant Financial Statements**. Tenant shall, within ten (10) days after a request from Landlord, deliver to Landlord such financial statements of Tenant as are reasonably required by Landlord, including, but not limited to, financial statements for the past three years, but not more frequently than once per lease year (except in connection with a direct or indirect proposed sale of the Premises or financing or refinancing with respect to the Premises, in which case such limitation shall not apply). Tenant represents and warrants to Landlord that all such financial statements provided in connection with this Lease including, without limitation, any that have been provided prior to the date of this Lease, are true, complete and correct as of the date thereof. Tenant further agrees to cooperate with any request by Landlord for Tenant's written permission or other cooperation in connection with Landlord's obtaining a credit report or similar information regarding Tenant from third-party sources. Landlord anticipates that its request for the additional information prescribed in this Section 5.2 will be limited either to a potential sale or financing of the Building or of all or a portion of the Project or to Landlord's concern as to the continuing financial ability of Tenant to perform its obligations under this Lease. Tenant acknowledges and agrees that any financial statements submitted by Tenant to Landlord at any time in connection with this Lease are being relied upon by Landlord in entering into this Lease and extending any credit to Tenant and, to the extent that such financial statements, or any financial statements provided by Tenant to landlord subsequent to the execution of this Lease, are materially false or incorrect, it shall be deemed a Tenant default, and Landlord, upon or after discovery of such, may terminate this Lease or pursue any other applicable default remedies set forth in this Lease. Further, Landlord specifically reserves all rights it may have to object to a discharge or reorganization by Tenant in any bankruptcy proceeding filed by or against Tenant based upon such materially false or incorrect financial statements. Notwithstanding the forgoing, this Section 5.2 will apply if, and only if, Tenant ceases to be a publicly traded corporation.

5.3 **Confidentiality**. Landlord shall use good faith efforts to keep confidential all non-public financial statements supplied by Tenant; provided, however, that Landlord has the right to reveal such information to mortgagees, prospective purchasers and prospective mortgagees (and their respective agents) and to Landlord's managers, officers, personnel, affiliates, partners, directors, advisors, accountants, attorneys, members, and consultants, Landlord's successors and assigns, and as may be required by law, including, without limitation, securities regulations, or by legal process; and, provided further, that Landlord and Landlord's affiliates have the right to include, disclose, or otherwise publicize Tenant's name as one of Landlord's or Landlord's affiliates' tenants in any of Landlord's marketing materials, press releases, presentations, or other disclosures. The following materials and information are not considered "non-public financial statements" for purposes of this Lease and will not be subject to the restrictions set for in the preceding sentence: (i) information which is or becomes generally available to the public other than as a result of a wrongful disclosure by Landlord; (ii) information which reasonably can be demonstrated to be known to Landlord prior to its disclosure by Tenant hereunder; (iii) information which becomes available to Landlord on a non-confidential basis from sources other than Tenant; and (iv) information which Landlord may be compelled to disclose by court order or applicable law.

ARTICLE VI

TENANT'S RESPONSIBILITY FOR TAXES, OTHER REAL ESTATE CHARGES AND INSURANCE EXPENSES

6.1 **Personal Property**. Tenant shall be liable for all taxes and assessments of any kind or nature levied against personal property and trade fixtures placed by Tenant in the Premises. If any such taxes are levied against Landlord or Landlord's property and if Landlord elects to pay the same or if the assessed value of Landlord's property is increased by inclusion of personal property and trade fixtures placed by Tenant in the Premises and Landlord elects to pay the taxes based on such increase, Tenant shall pay to Landlord upon demand that part of such taxes for which Tenant is liable under this Section 6.1.

6.2 **Real Estate Charges and Insurance Expenses**. Tenant shall also be liable for Tenant's Proportionate Share of all Real Estate Charges (as defined below) and Insurance Expenses (as defined below) related to the Project or Landlord's ownership of the Project. All payments for which Tenant is liable pursuant to this Article VI shall be considered for all purposes to be Additional Rent (as defined inSection 9.1 below) under this Lease and shall be payable as provided for under Article IX. "Real Estate Charges" shall include ad valorem taxes, general and special assessments, improvement bond or bonds, levy or tax, parking surcharges, any tax or excise on rents, any franchise or gross margins or receipt tax, any tax or charge for governmental services (such as street maintenance or fire protection), any tax, exaction or other charge imposed in connection with the ownership, operation, leasing or use of the Project, any tax or charge which replaces or is in addition to any of such above-described Real Estate Charges, any tax or charge which is implemented after the date of this Lease and is reasonably determined by Landlord to have been assessed in lieu of the whole or part of any of such above-described Real Estate Charges, and any fees paid by Landlord to consultants, attorneys and other professionals who monitor, negotiate and/or contest any or all above-described Real Estate Charges; provided, however, that Real Estate Charges shall not be deemed to include any capital stock, estate, inheritance or general income tax or any CPACE assessments (Commercial Property Assessed Clean Energy). Real Estate Charges shall expressly include (a) the franchise tax set forth in V.T.C.A. Tax Code Section 171.0001 et seq., as the same may be amended or recodified from time to time, and (b) any new taxes levied against Landlord and/or the Project in lieu of or in substitution of any ad valorem taxes on the Project or otherwise as a result of property tax reform in the State of Texas. "Insurance Expenses" shall include all premiums, deductibles and other expenses incurred by Landlord for liability (including umbrella) insurance, property insurance and business interruption insurance (including, without limitation and to the extent deemed appropriate by Landlord, environmental coverage, pollution coverage, mold coverage, terrorism coverage and whatever other special coverages and/or endorsements that Landlord, in Landlord's reasonable discretion, may from time to time consider appropriate in connection with Landlord's ownership, management or operation of the Project). Landlord shall have the right to reasonably reduce or terminate any such insurance or coverage at any time, provided that Landlord shall maintain commercially reasonably insurance consistent with best practices.

6.3 **Separate Assessments**. Landlord may, if Landlord deems it appropriate to do so, attempt to obtain separate assessments for Tenant's obligations pursuant to Section 6.1 and, with respect to Section 6.2, for such of the Real Estate Charges as are readily susceptible of separate assessment; and if Landlord does attempt to so obtain separate assessments, Tenant shall cooperate with Landlord's efforts. To the extent of a separate assessment, Tenant agrees to pay such assessment before it becomes delinquent and to keep the Premises free and clear from any liens or attachments; moreover, as to all periods of time during the Lease Term, this covenant of Tenant shall survive the termination of this Lease.

6.4 **Right to Contest**. Tenant agrees that, as between Tenant and Landlord, Landlord has the sole and absolute right to contest taxes levied against the Premises and the Project (other than taxes levied directly against Tenant's personal property within the Premises). Accordingly, Tenant, to the maximum extent permitted by law, irrevocably waives any and all rights that Tenant may have to receive from Landlord a copy of notices received by Landlord regarding the appraisal or reappraisal, for tax purposes, of all or any portion of the Premises or the Project. Additionally, Tenant, to the maximum extent permitted by law, hereby assigns to Landlord any and all rights of Tenant to protest or appeal any governmental appraisal or reappraisal of the value of all or any portion of the Premises or the Project. To the maximum extent permitted by law, Tenant agrees that it will not protest or appeal any such appraisal or reappraisal before a governmental taxing authority without the express written authorization of Landlord. TENANT HEREBY WAIVES ALL RIGHTS TO PROTEST THE APPRAISED VALUE OF THE PROJECT OR TO APPEAL THE SAME AND ALL RIGHTS TO RECEIVE NOTICES OF REAPPRAISALS AS SET FORTH IN SECTIONS 41.413 AND 42.015 OF THE TEXAS TAX CODE.

6.5 **Adjustment of Prorated Amounts**. At such time as Landlord has reason to believe that at some time within the immediately succeeding twelve (12) month period Tenant will owe Landlord any amounts pursuant to one or more of the preceding sections of this Article VI, Landlord may direct that Tenant prepay monthly a pro rata portion of the prospective future payment as provided for in Article IX which amount may be adjusted by Landlord from time to time. In the event Landlord determines that the total of the monthly payments pursuant to this Section 6.5 for any appropriate period is not equal to the total of payments required from Tenant for either Real Estate Charges or Insurance Expenses, or both, pursuant to previous sections in this Article VI, then Tenant shall pay to Landlord any deficiency or Landlord shall refund, credit to Tenant or offset against the next due and owing payments from Tenant any overpayment, as the case may be, as provided for in Article IX. Real Estate Charges for tax years commencing prior to or extending beyond the Lease Term shall be prorated to coincide with the corresponding Commencement Date or expiration date of this Lease. If the Building is not separately assessed, Real Estate Charges allocated to the Building shall be an equitable proportion of the Real Estate Charges for all of the land and improvements included within the tax parcel assessed.

ARTICLE VII

COMMON AREA

7.1 **Definition**. The term "Common Area" is defined for all purposes of this Lease as that part of the Project intended for the common use of all tenants and their employees and other invitees, including among other facilities (as such may be applicable to the Project), parking areas, private streets and alleys, landscaping, curbs, sidewalks, lighting facilities and the like, as they may exist from time to time, but excluding (i) space in buildings (now or hereafter existing) designated for rental for commercial purposes, as the same may exist from time to time, (ii) streets and alleys maintained by a public authority, (iii) areas within the Project which may from time to time not be owned by Landlord (unless subject to a cross-access agreement benefiting the area which includes the Premises), and (iv) areas leased to any other tenant or otherwise restricted by Landlord. In addition, although the roof(s) of the building(s) in the Project are not literally part of the Common Area, they will be deemed to be so included solely for purposes of (A) Landlord's ability to prescribe rules and regulations regarding same, and (B) Tenant's obligations to pay Operating Costs with respect thereto. Landlord reserves the right to change from time to time the dimensions, size and location of the Common Area, as well as the dimensions, identities, locations, number, size and types of any buildings, signs or other improvements in the Project, including, without limitation, driveways, entrances, parking spaces, parking areas, loading areas, ingress, egress, direction of traffic, walkways and landscape areas; provided, however, that no such changes will materially and adversely impair the access to the Premises or the number of parking spaces serving the Building. For example, and without limiting the generality of the immediately preceding sentence, Landlord may from time to time substitute for any parking area other areas reasonably accessible to the tenants of the Project. Landlord retains the right to construct additional buildings and other improvements within the Common Area, provided that such additions and/or improvements do not materially interfere with or diminish Tenant's rights under this Lease.

7.2 **Use of Common Area**. Tenant and its employees and invitees, and when duly authorized pursuant to the provisions of this Lease, its subtenants and licensees, shall have the nonexclusive right to use the Common Area (expressly excluding roofs of buildings in the Project) as constituted from time to time, such use to be in common with Landlord, other tenants in the Project and other persons permitted by Landlord to use the same, and subject to such reasonable rules and regulations governing use as Landlord may from time to time prescribe. For example, and without limiting the generality of Landlord's ability to establish rules and regulations governing all aspects of the Common Area, Tenant agrees as follows:

(a) If Landlord designates specific parking areas for Tenant and Tenant's employees, then Tenant shall comply with Landlord's designation and shall institute procedures to ensure that its employees also comply. In the event Tenant or its employees fail to park their cars in designated parking areas as aforesaid, after written notice to Tenant and an opportunity to cure, then Landlord at its option may charge Tenant Fifty Dollars ($50.00) per day per car parked in any area other than those designated, as and for liquidated damages, and Tenant shall pay such charges in accordance with Additional Rent pursuant to Section 9.2 of this Lease. Tenant also authorizes Landlord to cause any car which is not parked in the designated parking areas to be towed from the Project.

(b) Tenant shall not take any action which would unreasonably interfere with the rights of other Project tenants or their invitees to use the Common Area.

(c) Landlord may temporarily close any part of the Common Area for such periods of time as may be necessary to make repairs or alterations or during construction or to prevent the public from obtaining prescriptive rights; provided, Landlord will use commercially reasonable efforts to minimize interference with Tenant's use of or access to the Premises in connection with the exercise of such rights.

(d) Subject to Tenant's rights as set forth in Section 7.2(e) below, the use of the roof of the Building is hereby reserved to Landlord for any and all purposes and in all respects in its reasonable discretion. Subject to Tenant's rights as set forth in Section 7.2(e) below, Landlord shall have the right to use, possess, lease, convey interests in, alter, construct on, or otherwise manage the roof in its reasonable discretion, provided the same does not materially or unreasonably interfere with Tenant's use of the Premises for the Permitted Use or Tenant's parking rights. Furthermore, Landlord shall have the exclusive rights to use, possess, lease, convey interests in, alter, transfer, construct on, or otherwise manage the portions of the Project other than the Premises and the parking areas provided the same does not materially and unreasonably interfere with Tenant's use of the Premises for the Permitted Use or Tenant's parking rights. Without limitation of the foregoing, Landlord shall have the right to enter into one or more antenna, tower, communication, solar panel or similar leases or licenses with one or more third parties pursuant to which Landlord shall lease or license space on the roof of the Building or other portions of the Project other than the Premises and the parking areas for antenna, tower, communication, solar panel or other rights and uses (each an "Ancillary Lease"). Tenant agrees that (i) any tenant or licensee under any Ancillary Lease and their respective agents, employees, contractors, representatives and invitees shall have the right to (a) access the areas on and about the Project (other than the Premises), including, without limitation, the parking areas, on a temporary basis for purposes of performing any installations, maintenance, repairs and replacements of any improvements, provided such access does not materially or unreasonably interfere with Tenant's use of the Premises for the Permitted Use or Tenant's parking rights, (b) access and enter upon the roof of the Building and other areas of the Project other than the Premises and the parking areas of the Project and (c) perform any and all installation, maintenance, repair or replacement of any antennae, towers, panels, communication installations and related fixtures or appurtenances (collectively, the "Ancillary Rights") and (ii) Landlord shall be permitted to enter into any and all agreements (including, without limitation, easement agreements) with respect to the Project as Landlord deems necessary or advisable in connection with any Ancillary Lease and the Ancillary Rights. In no event shall Tenant or any of its employees, affiliates agents, subtenants, concessionaires, contractors, consultants, visitors or invitees of any kind, access or go upon the roof of the Building or cause or permit any penetration of such roof without the express prior written consent of Landlord which consent shall not be unreasonably conditioned, delayed or withheld, and subject to a license agreement in form satisfactory to Landlord, each in Landlord's reasonable discretion. If Tenant demonstrates to Landlord's satisfaction (in Landlord's reasonable discretion) both an actual need to use the roof and adequate procedures and safeguards to assure that no damage is done to the roof(s) (such as proper reattachment and sealing in connection with HVAC repair or replacement), all roof warranties are preserved in full, and also agrees to execute a license agreement in form satisfactory to Landlord (in Landlord's sole and absolute discretion), then Landlord may grant Tenant access to the roof(s) solely for such purpose, all in Landlord's sole and absolute discretion.

(e) Provided that Tenant complies with the terms of this Section 7.2(e), Tenant may, at its risk and expense, install a satellite dish and related wiring (collectively, the "Satellite Dish") on the roof of the Building at a location approved by Landlord, which shall not be unreasonably withheld, conditioned or delayed. Before installing the Satellite Dish, Tenant shall submit to Landlord for its reasonable approval plans and specifications which (1) specify in detail the design, location, size, and frequency of the Satellite Dish and (2) are sufficiently detailed to allow for the installation of the Satellite Dish in a good and workmanlike manner and in accordance with all laws. If Landlord approves of such plans, Tenant shall install (in a good and workmanlike manner), maintain and use the Satellite Dish in accordance with all laws and shall obtain all permits required for the installation and operation thereof; copies of all such permits must be submitted to Landlord before Tenant begins to install the Satellite Dish. Tenant shall thereafter maintain all permits necessary for the maintenance and operation of the Satellite Dish while it is on the Building and operate and maintain the Satellite Dish in such a manner so as not to unreasonably interfere with any other satellite, antennae, or other transmission facility on the Building's roof. Landlord may require that Tenant screen the Satellite Dish with a parapet wall or other screening device acceptable to Landlord. Tenant shall maintain the Satellite Dish and the screening therefor in good repair and condition. Tenant may only use the Satellite Dish in connection with Tenant's business. Tenant shall not allow any third party (other than a Permitted Transferee or approved assignee or subtenant of the Premises) to use such equipment, whether by sublease, license, occupancy agreement or otherwise. Tenant shall, at its risk and expense, remove the Satellite Dish, within five days after the occurrence of any of the following events: (A) the termination of Tenant's right to possess the Premises; (B) the termination of the Lease; (C) the expiration of the Lease Term; or (D) Tenant's vacating the Premises. If Tenant fails to do so, Landlord may remove the Satellite Dish and store or dispose of it in any manner Landlord deems appropriate without liability to Tenant; Tenant shall reimburse Landlord for all costs incurred by Landlord in connection therewith within ten days after Landlord's request therefor. Tenant shall repair any damage to the Building caused by or relating to the Satellite Dish, including that which is caused by its installation, maintenance, use, or removal. All work relating to the Satellite Dish shall, at Tenant's expense, be coordinated with Landlord's roofing contractor so as not to affect any warranty for the Building's roof.

7.3 **Maintenance of Common Area**. Landlord shall be responsible for the operation, management and maintenance of the Common Area, the manner of maintenance and the expenditures therefore (which shall be included in Operating Costs) to be in the reasonable discretion of Landlord, but to be generally in keeping with similar first- class flex /research and development properties within the same geographical area as the Project. Without limiting the generality of the immediately preceding sentence, Tenant acknowledges that **LANDLORD MAKES NO REPRESENTATION, COVENANT OR WARRANTY REGARDING WHETHER OR NOT LANDLORD WILL PROVIDE SECURITY SERVICES, OR IF SO, WHAT FORM OF SECURITY SERVICES WILL BE PROVIDED**.

7.4 **Operating Costs; Tenant's Payment of Operating Costs**.

(a) In addition to the Rent and other charges prescribed in this Lease, Tenant shall pay to Landlord, as Additional Rent required pursuant to this Lease, Tenant's Proportionate Share of the actual cost of Landlord's management, operation and maintenance of the Common Area, as well as other shared costs of any kind which may be incurred by Landlord in its discretion in connection with the operation, cleaning, security, maintenance, ownership, management, and repair of the Building and the Project (collectively, the "Operating Costs"), all calculations, determinations, allocations, and decisions shall be made in accordance with GAAP, consistently applied, including, without limitation, all costs of the following: lighting, painting, cleaning, policing, inspecting, and repairing Common Area elements; trash removal (except as paid directly by Tenant or otherwise administered pursuant to Section 10.4 of this Lease); insect and pest treatments and eradication (whether in the Common Area or for the Building or the Project); security (if and to the extent Landlord elects to provide security); roof repairs and maintenance; environmental protection improvements or devices and health and safety improvements and devices which may be required by applicable laws enacted or first enforced after the Commencement Date (including the maintenance, and repair of same); environmental monitoring programs and devices; wages and salaries of all employees, agents, consultants and others engaged in operation, cleaning maintenance, repair, replacement and security of the Project but not above the title of Project manager; charges and assessments paid by Landlord pursuant to any owner's association, reciprocal easement, covenants or comparable document affecting the Building or the Project; any fees which Landlord pays for the management or asset management of the Project (not to exceed three percent (3%) of the Base Rent); utilities; snow and ice removal; the foregoing notwithstanding, monthly amortization of only those capital expenses or capital improvements made (i) to effect a net reduction or prevent a net increase in Operating Costs after considering the cost of any such amortization or (ii) to comply with laws promulgated or made applicable to the Project following the date of this Lease (such amortization to be calculated over the useful life of such improvement (as determined by Landlord in accordance with generally accepted accounting principles, consistently applied ("GAAP")) at a rate of interest actual or imputed, at Landlord's option, that Landlord would reasonably be required to pay to finance the cost of the item, applied on the unamortized balance (the "Permitted Capital Costs"); the cost of resurfacing and restriping parking areas and roadways; any other item stated in this Lease to be an Operating Cost, and the cost of any insurance for which Landlord is not reimbursed pursuant to Section 6.2. In addition, although the roof(s), canopies, sewer and water lines servicing the Project, fire-protection systems and devices, if any (such as sprinkler systems, if any), foundations and exterior surfaces of the building(s) in the Project are not literally part of the Common Area, Landlord and Tenant agree that all non-capital costs (other than Permitted Capital Costs) incurred by Landlord with respect to all Building sewer (including septic systems, if applicable) and water lines and other equipment (including maintenance, and repair of same), fire-protection equipment and devices (including maintenance, and repair of same), exterior painting and for roof and canopy maintenance, repair and replacement shall be included as Operating Costs pursuant to this Section 7.4, to the extent not specifically allocated to Tenant under this Lease nor to another tenant pursuant to its lease. The charges contemplated in this Section 7.4, however, shall not include any expenses paid or reimbursed by Tenant pursuant to Article VI of this Lease. Operating Costs shall expressly exclude: (i) costs of alterations of tenant spaces (including all tenant improvements to such spaces); (ii) costs of capital improvements, capital repairs or capital replacements except for Permitted Capital Costs; (iii) depreciation, interest and principal payments on mortgages, and other debt costs, if any; (iv) real estate brokers' leasing commissions or compensation and advertising and other broker marketing expenses; (v) costs of other services or work performed for the singular benefit of another tenant or occupant (other than for Common Area); (vi) legal, space planning, construction, and other expenses incurred in procuring tenants for the Building or renewing or amending leases with existing tenants or occupants of the Building (other than Tenant); (vii) costs of advertising and public relations and promotional costs and attorneys' fees associated with the leasing of the Building; (viii) any expense for which Landlord actually receives reimbursement from insurance, condemnation awards, other tenants, (other than through the payment of additional rent under such tenants' leases) or any other source; (ix) costs incurred in connection with the sale, financing, refinancing, mortgaging, or other change of ownership of the Building; (x) Real Estate Charges or Insurance Expenses, which are passed through to Tenant separately; (xi) costs, fines, interest, penalties, legal fees or costs of litigation incurred due to the late payments of utility bills and other costs incurred by Landlord's failure to make such payments when due unless caused by Tenant's failure to pay on time; (xii) any attorneys' fees incurred by Landlord in connection with any lease or proposed lease at the Project; (xiii) reserves of any kind; (xiv) costs arising from Landlord's charitable or political contributions; (xv) wages, salaries, benefits, or other costs of employees above the grade of building manager; and (xvi) any costs necessitated by or resulting from the gross negligence or willful misconduct of Landlord, or its agents, contractors, or employees.

(b) Tenant shall make payment to Landlord for Tenant's Proportionate Share of Operating Costs based upon the estimated annual cost of Operating Costs, payable in advance at the same time each month as Base Rent is payable, but subject to adjustment after the end of the year on the basis of the actual costs for such year as provided for under Article IX. With regard to the charges contemplated in this Section 7.4, Tenant further agrees that unless within two (2) years after Landlord's delivery to Tenant of the annual statement related to any such charges ("Reconciliation Statement"), Tenant delivers to Landlord a written assertion of one or more specific errors or a written request for further detail regarding a specific charge, then the assessment and/or statement shall be deemed correct in all respects. In addition, Tenant further agrees that if it so asserts error or requests further information within such period, Tenant will nevertheless pay all amounts charged by Landlord pending a resolution thereof.

(c) Tenant shall have the right within two (2) years following its receipt of the Reconciliation Statement of the actual amount of Operating Costs for the prior calendar year to provide Landlord with written notice ("Tenant's Notice") that Tenant desires to audit such of Landlord's books of account and records as pertain to and contain information concerning Operating Costs for the applicable calendar year in order to verify the accuracy of the amounts thereof. Tenant shall have the right to inspect within Dallas County, at reasonable times and in a reasonable manner consistent with standard auditing guidelines, during the 90 day period following Tenant's receipt of requested information, which request shall be within 30 days following Landlord's receipt of the Tenant's Notice, to audit such books of account and records. Tenant agrees that any information obtained during an inspection by Tenant of Landlord's books of account and records shall be kept in confidence by Tenant and its agents and employees and shall not be disclosed to any other parties, except to Tenant's attorneys, accountants and other consultants or as may be required during litigation. Any parties retained by Tenant to inspect Landlord's books of account and records shall (i) be a CPA, (ii) be a nationally, regionally or locally recognized accounting or operating expense audit firm and have experience with auditing operating expenses or common area maintenance expenses for industrial properties and (iii) such accounting or audit firm may be compensated on a contingency fee or commission basis. If Tenant does not timely provide Landlord with Tenant's Notice, or if Tenant timely provides Tenant's Notice and thereafter Tenant does not dispute any item or items included in the determination of the Operating Costs for a particular calendar year by delivering a written notice to Landlord generally describing in reasonable detail the basis of such dispute within 90 days after Tenant's receipt of all requested relevant information, Tenant shall be deemed to have approved such statement. If Landlord and Tenant determine that Operating Costs for the year in question were less than stated by more than five percent (5%), Landlord, within thirty (30) days after its receipt of paid invoices therefor from Tenant, shall reimburse Tenant for the reasonable amounts paid by Tenant or to be paid by Tenant to third parties in connection with such audit by Tenant provided that such fees shall not exceed $5,000.00 per year audited. In the event the results of the audit (taking into account, if applicable, the results of any additional review caused by Landlord) reveal that Tenant has overpaid obligations for a preceding period , the amount of such overpayment shall be credited against Tenant's subsequent installment of Base Rent, Real Estate Charges or other payments due to Landlord under the Lease, except if the Lease has terminated or expired, then Landlord shall pay such amount to Tenant within thirty (30) days of completion of such audit. In the event that such results show that Tenant has underpaid its obligations for a preceding period, the amount of such underpayment shall be paid by Tenant to Landlord within thirty (30) days of completion of such audit.

ARTICLE VIII

RULES AND REGULATIONS; PARKING

8.1 **Rules and Regulations**. During the Lease Term and subject to the rules and regulations for the Project attached hereto as Exhibit D, as reasonably modified by Landlord from time to time (the "Rules"), Tenant shall be entitled to use the Common Area parking lot of the Project. Landlord shall apply the Rules and Regulations in a non-discriminatory manner among all tenants in the Project. In the event of a conflict between the Rules and this Lease, this Lease shall prevail.

8.2 **Parking**. Tenant shall have the exclusive right to use all 420 parking spaces serving the Building. Tenant's parking rights are the personal rights of Tenant, and Tenant shall not transfer, assign or otherwise convey its parking rights separate and apart from this Lease. In addition to the parking spaces serving the Building, Tenant shall have the non-exclusive right to use up to one hundred twenty (120) spaces, subject to availability (as determined by Landlord in its sole discretion) but in no event less than thirty (30) parking spaces in the parking lot serving the building located at 640 Shiloh Road, Plano, Texas (the “640 Building”); provided, in no event shall Tenant have the right to use any of the parking spaces located in the first three rows of parking spaces closest to the 640 Building. Tenant shall have access to these thirty (30) parking spaces for the full term of this Lease and any extension thereof. Landlord shall not be responsible for enforcing Tenant's parking rights against any third parties.

ARTICLE IX

PROVISIONS APPLICABLE TO ALL RENTS

9.1 **Rent**. For purposes of this Lease, the term "Rent," "Rents," "Rental" or "Rentals" shall be deemed to include Base Rent (Sections 1.1(l)) and 4.1 of this Lease), Tenant's required payments for Real Estate Charges and Insurance Expenses (Article VI of this Lease), Operating Costs (Section 7.4 of this Lease) and Additional Rent. Landlord and Tenant agree that each provision of this Lease for determining Rent adequately and sufficiently describes to Tenant the method by which such Rent is to be computed. Any and all sums of money or charges to be paid by Tenant pursuant to the provisions of this Lease other than Base Rent are hereby designated as and included in the term "Additional Rent." A failure to pay Additional Rent shall be treated in all events as the failure to pay Rent. Landlord and Tenant agree that each provision of this Lease for determining charges, amounts, and Additional Rent payments by Tenant is commercially reasonable, and as to each such charge or amount, constitutes a "method by which the charge is to be computed" for purposes of Section 93.012 (Assessment of Charges) of the Texas Property Code, as such section now exists or as it may be hereafter amended or succeeded.

9.2 **Payment of Rent**. Except as otherwise set forth in Section 1.1(m) and Section 30.16 of this Lease, Rent shall accrue from the Commencement Date and shall be payable to Landlord at Landlord's address specified in Section 1.2 of this Lease, or at any other address which Landlord may subsequently designate in a written notice to Tenant.

9.3 **Tenant's Proportionate Share**. Tenant shall pay to Landlord Tenant's Proportionate Share of the Operating Costs, Real Estate Charges and Insurance Expenses (collectively, the "Shared Expenses") as set forth above. Further, Tenant shall during each calendar year pay to Landlord an estimate of Tenant's Proportionate Share of the Shared Expenses as hereinafter set forth. Beginning on the Commencement Date, Tenant shall pay to Landlord each month on the first day of the month an amount equal to one-twelfth (1/12) of Tenant's Proportionate Share of the Shared Expenses for the calendar year in question as reasonably estimated by Landlord, with an adjustment to be made between the parties at a later date as hereinafter provided. If the Commencement Date is not the first day of a calendar month, Tenant shall pay a prorated portion of Tenant's Proportionate Share of the Shared Expenses for such partial month on the Commencement Date. Furthermore, Landlord may from time to time (but not more often than twice annually) furnish Tenant with notice of a re-estimation of the amount of Tenant's Proportionate Share and Tenant shall commence paying its re-estimated Tenant's Proportionate Share on the first day of the month following receipt of said notice. As soon as practicable following the end of any calendar year, Landlord shall submit to Tenant a statement setting forth the exact amount of Tenant's Proportionate Share of the Shared Expenses for the calendar year just completed and the difference, if any, between Tenant's Proportionate Share of the actual Shared Expenses for the calendar year just completed and the estimated amount of Tenant's Proportionate Share of the Shared Expenses which were paid for such year. Such statement shall also set forth the amount of the estimated Shared Expenses reimbursement for the new calendar year computed in accordance with the foregoing provisions. To the extent that Tenant's Proportionate Share of the actual Shared Expenses for the period covered by such statement is higher than the estimated payments which Tenant previously paid during the calendar year just completed, Tenant shall pay to Landlord the difference within thirty (30) days following receipt of said statement from Landlord. To the extent that Tenant's Proportionate Share of the actual Shared Expenses for the period covered by the applicable statement is less than the estimated payments which Tenant previously paid during the calendar year just completed, Landlord shall at its option either refund said amount to Tenant within thirty (30) days or credit the difference against Tenant's next payment of Shared Expenses. In addition, with respect to the monthly reimbursement, until Tenant receives such statement, Tenant's monthly reimbursement for the new calendar year shall continue to be paid at the then current rate, but Tenant shall commence payment to Landlord of the monthly installments of reimbursement on the basis of the statement beginning on the first day of the month not less than thirty (30) days following the month in which Tenant receives such statement.

9.4 **Survival of Proportionate Share**. Tenant's obligation with respect to Tenant's Proportionate Share of the Shared Expenses shall survive the expiration or early termination of this Lease and Landlord shall have the right to retain the Security Deposit (if any), or so much thereof as it deems necessary, to secure payment of Tenant's Proportionate Share of the actual Shared Expenses for the portion of the final calendar year of the Lease during which Tenant was obligated to pay such expenses. If Tenant occupies the Premises for less than a full calendar year during the first or last calendar years of the Lease Term, Tenant's Proportionate Share for such partial year shall be calculated by proportionately reducing the Shared Expenses to reflect the number of months in such year during which Tenant occupied the Premises. Tenant shall pay Tenant's Proportionate Share within fifteen (15) days following receipt of notice thereof.

9.5 **Due Dates for Rent; Late Charge**. The parties agree that each monthly installment of Base Rent and Tenant's monthly payments for the Shared Expenses are payable on or before the first day of each calendar month. Any such payment of Rent which is not received on or before the first day of a particular calendar month shall be deemed past-due. The parties further agree that each annual adjustment payment from Tenant (such as the payments prescribed in Sections 6.5, 7.4 and 9.3) is payable within thirty (30) days after receipt of Landlord's written statement requesting such payment from Tenant; and any such prescribed payment which is not so received shall be deemed past-due. All Rent shall be due and payable in advance, without demand, offset or deduction of any nature except as may be provided for in this Lease. In the event any Rent which is payable pursuant to this Lease is not actually received by Landlord within five (5) days after its due date for any reason whatsoever (including, but not limited to, a failure in the United States mails), or if any Rent payment is by check which is returned for insufficient funds, then in addition to the past due amount, Tenant shall pay to Landlord a late charge in an amount equal to five percent (5%) of the Rent then due, in order to compensate Landlord for its administrative and other overhead expenses. Any such late charge shall be payable as Additional Rent under this Lease and shall be payable immediately on demand. If any Rent is paid by check which is returned for insufficient funds, Tenant shall immediately make the required payment to Landlord in the form of a cashier's check or money order; moreover, Tenant shall also pay Landlord the amounts specified above in this Section 9.4, plus an additional fee of $100.00 to compensate Landlord for its expense and effort in connection with the dishonored check. Notwithstanding the foregoing, the late charge referenced above shall not be charged with respect to the first occurrence (but not any subsequent occurrence) during any 12-month period that Tenant fails to make payment when due, until five days after Landlord delivers written notice of such delinquency to Tenant.

ARTICLE X

USE AND CARE OF PREMISES

10.1 **Term of Use**. Tenant shall commence business operations in the Premises on or immediately after the Commencement Date.

10.2 **Permitted Use**. The Premises may be used only for the purpose or purposes specified inSection 5.1 above, and for no other purpose.

10.3 **Certain Prohibited Uses**. Tenant shall not conduct or give notice of any fire, auction (public or private), "going-out-of-business," "lost-our-lease," "moving," bankruptcy or similar sale at or on the Premises. Tenant shall not permit any objectionable noises, odors, vibrations, dust, gas, exhaust or smoke to emanate from the Premises (or from any facility or equipment servicing the Premises); nor, except as otherwise expressly provided in this Lease, place or permit any radio or television antenna, satellite dish, loudspeaker or amplifier on the roof or exterior walls or outside the Premises or where the same can be seen or heard from outside the Premises; nor place any antenna, equipment, awning or other projection on the exterior of the Premises or Building; nor take any other action which would constitute a nuisance or would unreasonably interfere with, disturb or endanger Landlord or other tenants of the Project or occupants or owners of adjacent or nearby properties, or unreasonably interfere with their use of their respective premises; nor permit any unlawful or immoral practice to be carried on or committed on the Premises; nor do or permit anything which would void Tenant's or Landlord's insurance, increase the cost of insurance or cause the disallowance of sprinkler credits. If Tenant causes any increase in the cost of insurance on the Premises or the Project, then Tenant shall pay to Landlord the amount of such increase as Additional Rent.

10.4 **Care of Premises by Tenant**. Tenant shall take good care of the Premises and shall operate in the Premises in a safe, careful and proper manner; shall not commit or suffer waste in or about the Premises, nor to any facility or equipment for which Tenant is responsible pursuant to Section 11.2 of this Lease; shall not cause damage or permit any trucks or vehicles visiting the Premises to cause any damage to the Premises or any other portion of the Building (and, if any such damage should occur, shall immediately repair same or, if Landlord so elects, reimburse Landlord for Landlord's cost in repairing same); and shall keep the Premises free of insects, rodents, vermin and other pests. Tenant shall keep the Premises secure, Tenant hereby acknowledging that security is Tenant's responsibility and that Tenant is not relying on any representation or warranty by Landlord in this regard. Tenant shall not overload the floors in the Premises, nor deface or injure the Premises. Tenant shall keep the Premises and all loading areas adjacent to the Premises neat, clean and free from dirt and rubbish at all times. Tenant shall store all trash and garbage within the Premises, or in a trash dumpster or similar container approved by Landlord in Landlord's reasonable discretion; and if Landlord is not arranging for trash pick-up as part of the services for which Tenant pays pursuant to Section 7.4 above, then Tenant shall arrange for the regular pick-up of such trash and garbage at Tenant's expense. Receiving and delivery of goods and merchandise and removal of garbage and trash shall be made only in the manner and areas prescribed by Landlord. Outside storage, including, without limitation, storage of containers, trailers, trucks and other vehicles, is prohibited without Landlord's prior written consent which may be withheld in Landlord's reasonable discretion.

10.5 **Tenant's Compliance with Law**. Tenant shall procure at its sole expense any permits and licenses required for the transaction of business in the Premises and shall otherwise comply with all applicable federal, state, county and municipal laws, ordinances, governmental regulations and all recorded easements, covenants and restrictions. In addition, if the nature of Tenant's business makes it advisable for Tenant to take any extra precautions (for example, in the case of equipment requiring special safety training for employees, Tenant's compliance with all required educational programs and procedures), Tenant shall take all such extra precautions. Without limiting the generality of the foregoing Tenant further agrees as follows:

(a) Tenant shall not commence business operations in the Premises without having first obtained any and all permits or approvals necessary for the lawful operation of Tenant's business in the Premises from the appropriate governmental authority;

(b) The following will govern Landlord’s and Tenant’s obligations with respect to Governmental Requirements (hereinafter defined):

(i) If any federal, state or local laws, ordinances, orders, rules, regulations or requirements (including the federal Americans with Disabilities Act of 1990 ("ADA"), as the same may have been or may be amended from time to time, and all federal, state, county and municipal laws, ordinances, codes and regulations which relate in any way to the matters regulated by the ADA (collectively, the "ADA-based Laws")) (collectively, "Governmental Requirements") in existence as of the date of this Lease require an alteration or modification of the Premises (a "Code Modification") and such Code Modification (1) is not made necessary as a result of the specific use being made by Tenant of the Premises (as distinguished from an alteration or improvement which would be required to be made by the owner of any industrial building comparable to the Building irrespective of the use thereof by any particular occupant), and (2) is not made necessary as a result of any alteration of the Premises by Tenant, such Code Modification shall be performed by Landlord, at Landlord's sole cost and expense.

(ii) If, as a result of one or more Governmental Requirements that are not in existence as of the date of this Lease, it is necessary from time to time during the Lease Term, to perform a Code Modification to the Building or the Project that (1) is not made necessary as a result of the specific use being made by Tenant of the Premises (as distinguished from an alteration or improvement which would be required to be made by the owner of any industrial building comparable to the Building irrespective of the use thereof by any particular occupant), and (2) is not made necessary as a result of any alteration of the Premises by Tenant, such Code Modification shall be performed by Landlord and cost thereof shall be included in Operating Costs.

(iii) If, as a result of one or more Governmental Requirements, it is necessary from time to time during the Lease Term to perform a Code Modification to the Building or the Project that is made necessary as a result of the specific use being made by Tenant of the Premises or as a result of any alteration of the Premises by Tenant, such Code Modification shall be the sole and exclusive responsibility of Tenant in all respects; provided, however, that Tenant shall have the right to retract its request to perform a proposed alteration in the event that the performance of such alteration would trigger the requirement for a Code Modifications.

(c) Tenant shall be responsible for compliance with all federal, state, county and municipal laws and regulations relating to health and safety, including without limitation the federal Occupational Safety and Health Act of 1970 ("OSHA"), as the same may have been or may be amended from time to time, and any and all other federal, state, county and municipal laws, ordinances, codes and regulations which relate in any way to the matters regulated by OSHA; and

(d) At Landlord's request, Tenant shall deliver to Landlord copies of all necessary permits and licenses and proof of Tenant's compliance with all such laws, ordinances, governmental regulations and extra precautions. Any use or occupancy of the Premises by or on behalf of Tenant prior to the Commencement Date shall be subject to each and every obligation of Tenant under this Lease.

ARTICLE XI

MAINTENANCE AND REPAIR OF PREMISES

11.1 **Maintenance by Landlord**. Landlord shall at Landlord's expense (subject to Section 7.4 above) keep the foundation, the structural elements of all exterior walls and the roof of the Premises in good repair, reasonable wear and tear excepted. As used in this Lease, the term "exterior walls" shall specifically exclude: plate glass; windows, doors and other exterior openings; dock bumpers, dock plates or levelers; office entries or store fronts; window and door frames, closure devices, locks and hardware; interior lighting, heating, air-conditioning, plumbing and other electrical, mechanical and electromotive installation equipment and fixtures; signs, placards, or other advertising media of any type; and interior painting or other treatment of interior walls, all of which are to be maintained, repaired and replaced by Tenant or at Tenant's sole cost, provided, however, that Landlord will be responsible for performing adequate preventative maintenance on the HVAC (as defined below) for the Premises, subject to the provisions of Article XVIII, Article XIX, and Article XXIII of this Lease. Landlord, however, shall not be required to make any repairs or replacements occasioned by (a) the failure of Tenant to perform its obligations under this Lease or (b) the act or negligence of Tenant, its agents, employees, subtenants, licensees and concessionaires (including, but not limited to, roof leaks resulting from Tenant's installation, replacement or maintenance of air-conditioning equipment or any other roof penetration or placement), provided that if Landlord, in its sole discretion, determines to make such repairs or replacements, Landlord shall have no liability to Tenant for any loss or damage which may result to its stock or business by reason of such repairs or replacements and Tenant shall pay to Landlord upon demand, as Additional Rent hereunder, the cost of such repairs or replacements plus a one-time charge in an amount equal to ten percent (10%) of the cost of any such repair or replacement required to be made by Tenant which Tenant, after notice and an opportunity to cure, failed to complete, in order to compensate Landlord for its administrative and other overhead expenses. If the Premises should become in need of repairs required to be made by Landlord hereunder, Tenant shall give immediate written notice thereof to Landlord, and Landlord shall have a reasonable time after receipt by Landlord of such written notice in which to make such repairs. Tenant waives the right to make repairs at Landlord's expense under any applicable Laws. Notwithstanding the foregoing provisions of thisSection 11.1, if, during the Lease Term, Landlord’s roofing consultant recommends that Landlord replace the roof membrane, Landlord will perform such work and replace such roof at Landlord’s sole cost and expense and shall not include the cost thereof in Operating Costs. Landlord shall keep the Premises and all parking areas, driveways, sidewalks, landscape areas, service-ways and loading areas adjacent to the Premises neat, clean and free from dirt, rubbish, ice or snow at all times. Landlord shall maintain and keep in good working order, condition and repair, during the term of this Lease, as the same may be extended, all structural portions of the Building/Project, including the foundation, roof, exterior walls, stairwells, columns, and beams (collectively, “Building Structure”) and the mechanical, electrical, life safety, plumbing, and sprinkler systems that do not exclusively serve the Premises (collectively, “Building Systems”). In addition, Landlord shall maintain and keep in good working order, condition and repair (including snow/ice removal) all Common Areas during the term, as the same may be extended.

11.2 **Maintenance by Tenant**. Tenant shall keep the Premises in good, clean and habitable condition and shall at its sole cost and expense make all needed repairs and replacements, including replacement of cracked or broken glass, except for repairs and replacements required to be made by Landlord under the provisions of Section 11.1, Article XVIII and Article XIX. Without limiting the coverage of the previous sentence, it is understood that Tenant's responsibilities therein include all items which are expressly excluded from Landlord's responsibility in Section 11.1 above, as well as the maintenance, repair and replacement of all of the following facilities and equipment, to the extent exclusively servicing the Premises: interior lighting, fire-protection sprinkler systems, plumbing, exhaust systems, and other electrical, mechanical and electromotive installation, equipment and fixtures. In addition, Tenant's responsibilities shall also include all maintenance, repairs and replacements of ducts, conduits, pipes and wiring, and any sewer stoppage located in, under and above the Premises, regardless of when or how the defect or other cause for repair or replacement occurred or became apparent. Tenant shall give Landlord prompt written notice of any leaks or water damage and any need for repair or replacement as contemplated in this Section 11.2, especially if such repair or replacement is necessary for maintaining health and safety (such as the fire-protection sprinkler system). If any maintenance, repairs or replacements required to be made by Tenant hereunder are not made within ten days after written notice delivered to Tenant by Landlord (or less than ten days, in the case of a situation which by its nature requires an immediate response or a response within less than ten days), Landlord may at its option perform such maintenance, repairs or replacements without liability to Tenant for any loss or damage which may result to its stock or business by reason of such maintenance, repairs or replacements; and Tenant shall pay to Landlord upon demand, as Additional Rent hereunder, the cost of such repairs plus a one-time charge in an amount equal to ten percent (10%) of the cost of any such maintenance, repair or replacement, in order to compensate Landlord for its administrative and other overhead expenses. At the expiration or earlier termination of this Lease, Tenant shall surrender the Premises broom-clean and in good condition, free of debris and of Tenant's personal property and equipment excepting reasonable wear and tear and losses required to be restored by Landlord in Section 11.1, Article XVIII and Article XIX of this Lease, and in accordance with the Move-Out Standards set forth inExhibit C to this Lease; and without limiting the generality of the foregoing, Tenant agrees that it shall repair all damage which may be caused to the Premises by the removal of Tenant's property; moreover, Tenant shall remove all of Tenant's signage and repair all damage caused by the installation, operation or removal of same. Any of Tenant's property not removed by Tenant from the Premises on or before the expiration of this Lease shall be deemed abandoned and Landlord may dispose of or remove such property, at its sole election, without any liability whatsoever to Tenant for damages therefor. Notwithstanding the foregoing provisions of this Section 11.2 and subject to the provisions of Section 11.3, to the extent Tenant requests that Landlord replace a HVAC unit serving the Premises and Landlord's HVAC Contractor agrees that such unit must be replaced (except to the extent replacement is necessitated by Tenant's negligence or willful misconduct, in which case Tenant shall be responsible for all costs), Landlord shall pay the cost of such replacement, it being understood and agreed that the cost of said improvement or replacement shall be amortized over a term of fifteen (15) years, beginning on the first day of the calendar month after the calendar month in which the replacement occurs, which amortization shall be based upon equal payments of principal and interest over said fifteen (15) year term, and interest shall be at a rate equal to eight percent (8%) per annum. Throughout that portion of the Lease Term (as it may be extended) during which such amortization occurs, Tenant shall pay, as Additional Rent, simultaneously with its payment of each installment of Base Rent hereunder, beginning on the first day of the first calendar month after the replacement is installed, the amortized amount, including interest as specified above.

11.3 **HVAC Maintenance**. Landlord shall, at Tenant's expense, perform adequate preventive maintenance on the hot water, heating, ventilation and air-conditioning equipment ("HVAC") for the Premises pursuant to maintenance service contracts entered into by Landlord with a licensed or qualified HVAC contractor (the "HVAC Contractor"). Without limiting the generality of the immediately preceding sentence, the following maintenance shall be performed by Landlord or the HVAC Contractor at Tenant's expense: (a) the replacement of all filters in the HVAC system at least quarterly; (b) inspection of the entire heating, ventilation and air-conditioning equipment by the HVAC Contractor at least quarterly; and (c) cleaning and inspection of valves, belts, and safety controls by the HVAC Contractor at least quarterly. Landlord shall bill Tenant for the cost of each of the foregoing, which shall be paid within ten (10) days of receipt of Landlord's invoice as Additional Rent. Notwithstanding the foregoing provisions of this Section 11.3, Tenant shall be responsible for only the first $2,500.00 per annum in repair costs for each HVAC unit existing as of the Commencement Date (except to the extent repair or replacement is necessitated by Tenant's negligence or willful misconduct in which case Tenant shall be responsible for all costs), with the remaining cost of such repair or replacement being borne by Landlord; provided, if any HVAC unit is replaced with a new unit with a warranty during the Lease Term, the foregoing limitation shall not be applicable to such replaced HVAC unit, but the replacement costs shall be amortized as set forth in Section 11.2 above.

ARTICLE XII

ALTERATIONS

12.1 **Tenant's Construction**. Except as otherwise provided in this Section 12.1 and the Work Letter, Tenant shall not make any alterations, additions or improvements to the Premises ("Alterations") in excess of $50,000.00 at any one time without the prior written consent of Landlord, which shall not be unreasonably withheld, conditioned or delayed, except for the installation of unattached, movable trade fixtures which may be installed without drilling, cutting, or otherwise defacing the Premises. Whenever Tenant proposes to do any construction work within the Premises, Tenant shall first furnish to Landlord plans and specifications in such detail as Landlord may request covering all such work, together with an identification of the contractor(s) whom Tenant plans to employ for the work. In no event shall Tenant make any Alterations that affect the structure of the Building, the roof or the foundations, the HVAC, electrical, plumbing, life safety or other Building systems, the Common Areas or any other tenant. In no event shall Tenant puncture or penetrate, or cause the puncture or penetration of, the Building floor slab or any underlying vapor barrier without Landlord's prior written consent, and if such consent is given, Tenant shall be required to repair at its sole cost and expense any damage caused to the Building floor slab or underlying vapor barrier in accordance with the recommendations of Landlord. In no event shall any construction work be commenced within the Premises without Landlord's written confirmation that it has no objection to Tenant's plans and specifications and contractor(s). All such work shall be completed promptly, in a good and workmanlike manner and using only good grades of materials. Landlord may, at its election, monitor or engage a third party to monitor such work. Tenant shall reimburse Landlord for all reasonable third-party out-of-pocket expenses incurred by Landlord (including, without limitation, any construction management or similar fees and related costs payable by Landlord to a third party engaged by Landlord to monitor such work) in connection with Landlord's review of Tenant's plans and other submissions as requested by Landlord and for monitoring such construction in connection with Alterations not to exceed one percent (1%) of the hard costs. Notwithstanding the rights accorded to Landlord pursuant to the immediately preceding sentences, Tenant acknowledges and agrees that Landlord's permission for Tenant to commence construction or monitoring of such work shall in no way constitute any representation or warranty by Landlord as to the adequacy or sufficiency of such plans and specifications, the improvements to which they relate, the capabilities of such contractors or the compliance of any such work with any applicable laws, codes or other requirements; instead, any such permission or monitoring shall merely be the consent of Landlord as required hereunder. Without limiting the generality of the preceding sentences in this Section 12.1, Tenant acknowledges and agrees that any installation or replacement of Tenant's heating or air-conditioning equipment must be subject to such preceding sentences and must be effected strictly in accordance with Landlord's instructions regarding same. Notwithstanding the foregoing, Tenant shall not be required to obtain Landlord's consent for repainting, recarpeting, or other Alterations which are non-structural, do not require a permit, and cost less than $50,000.00 in any single instance or series of related alterations performed within a six-month period (provided that Tenant shall not perform any improvements, alterations or additions to the Premises in stages as a means to subvert this provision), in each case provided that (A) Tenant delivers to Landlord written notice thereof, a list of contractors and subcontractors to perform the work (and certificates of insurance for each such party) and plans and specifications therefor (if any) prior to commencing any such alterations, additions, or improvements (for informational purposes only so long as no consent is required by Landlord as required by this Lease), (B) the installation thereof does not involve any core drilling or the configuration or location of any exterior or interior walls of the Building, and (C) such alterations, additions and improvements will not affect (i) the Building's structure or the Building's systems, (ii) the provision of services to other Building tenants, or (iii) the appearance of the Common Areas or the exterior of the Building. Tenant shall not be required to remove any Alterations upon expiration or earlier termination of this Lease unless Landlord designates such for removal at the time of Landlord's written approval thereof.

12.2 **Quality of Construction Work by Tenant**. All construction work done by Tenant within the Premises shall be performed in a good and workmanlike manner, lien-free and in compliance with all governmental, legal, and insurance requirements, and in such manner as to minimize interference with other construction in progress and with the transaction of business in the Project. Without limiting the generality of the foregoing, Landlord shall have the right to require that such work be performed in accordance with rules and regulations which Landlord may from time to time reasonably prescribe. Tenant agrees to indemnify Landlord and hold Landlord harmless against any loss, liability or damage resulting from such work.

12.3 **Lien Waivers; Insurance; Plans**. In the event Tenant uses a general contractor or other third party to perform construction work within the Premises, Tenant shall, prior to the commencement of such work, identify its general contractor, all subcontractors and material suppliers and require, as a condition to the commencement of the subject work or supplying of materials and in further consideration for access to the Premises, said general contractor, all subcontractors and each other third party to, to the maximum extent permitted by applicable law, execute and deliver to Landlord a waiver and release of any and all claims against Landlord and liens against the Building and the Project to which such contractor, subcontractor, vendor or other third party might at any time be entitled to assert a statutory mechanic's lien claim or any common law claim in accordance with applicable law. The delivery of the applicable waiver and release of lien shall be a condition precedent to Tenant's ability to enter on and begin its construction work at the Premises and if applicable, to any reimbursement from Landlord for its construction work. Upon completion of the work, Tenant shall deliver to Landlord final lien waivers from all contractors and suppliers. Landlord may post at the Premises such notices of non-responsibility as may be provided for under applicable law. Tenant shall require any general contractor or other third party performing construction work for or on behalf of Tenant to provide to Landlord certificates of insurance for workers' compensation and other coverage in such amounts as Landlord may reasonably require to protect Landlord from liability for personal injury and property damage in connection with Tenant's construction. Tenant shall provide Landlord with as-built plans and specifications for all Alterations done by Tenant.

12.4 **Ownership of Alterations**. All Alterations and attached fixtures (including, without limitation, all floor coverings and all heating and air-conditioning equipment but excluding Tenant's unattached, readily movable furniture and office equipment) which may be made or installed by either party upon the Premises shall remain upon and be surrendered with the Premises and become the property of Landlord at the termination of this Lease, unless Landlord requests their removal at the time Landlord approves the installation thereof, in which event Tenant shall remove the same and restore the Premises to its original condition at Tenant's expense prior to expiration or earlier termination of this Lease.

12.5 **Renovation by Landlord**. In the event that Landlord elects to renovate all or any portion of the Project, Tenant will cooperate with such renovation, including Tenant's tolerating reasonable temporary inconveniences (including, without limitation, the temporary removal of Tenant's signs) in order to facilitate such renovation, as it may relate to the exterior of the Premises. Landlord will use commercially reasonable efforts to minimize interference with Tenant's use of or access to the Premises in connection with the exercise of its rights under this Section 12.5.

12.6 **Trade Fixtures**. Tenant may, without Landlord's consent, at Tenant's sole cost, and in compliance with all applicable laws and codes and with Landlord's requirements set forth in this Article XII, install shelves, racking and other trade fixtures in the ordinary course of its business, so long as such trade fixtures do not alter, overload or damage the Premises and may be removed without causing any damage to the Premises. At the end of the Lease Term all such trade fixtures shall be removed at Tenant's cost and the Premises restored to its original condition at Tenant's expense.

ARTICLE XIII

LANDLORD'S RIGHT OF ACCESS

13.1 **Right of Entry**. Landlord shall have the right to enter upon the Premises upon at least 24 hours' notice (unless in the event of an emergency, in which case prior notice is not required) for the purpose of inspecting the same, or of making repairs to the Premises, or of making repairs, alterations or additions to adjacent premises, or of showing the Premises to prospective purchasers or lenders, or to prospective tenants during the last year of the Lease Term as such term may have been extended, all without being deemed guilty of or liable for any breach of any covenant of quiet enjoyment or eviction of Tenant and without abatement of Rent. This Section 13.1, however, shall not be deemed to impose any obligation upon Landlord to enter the Premises, except if and to the extent that any such obligation may be specifically required pursuant to another express provision of this Lease. For each of the foregoing purposes, Landlord may at all times have and retain a key with which to unlock all of the doors in, upon and about the Premises, excluding Tenant's vaults and safes, and Landlord shall have the means which Landlord may deem proper to open said doors in an emergency in order to obtain entry to the Premises. Tenant shall cooperate with Landlord in connection with any and all showings of the Premises to prospective tenants during the last year of the Lease Term as such term may have been extended. Provided such actions are consistent with applicable law, any entry to the Premises obtained by Landlord by any of said means or otherwise shall not under any circumstances be construed or deemed to be a forcible or unlawful entry into, or a detainer of, the Premises, or an eviction of Tenant from the Premises or any portion thereof, or grounds for any abatement or reduction of Rent and Landlord shall not have any liability to Tenant for any damages or losses on account of any such entry by Landlord.

13.2 **"For Rent" Signs**. Tenant will permit Landlord to place and maintain "For Rent" or "For Lease" signs on the Premises during the last one hundred eighty (180) days of the Lease Term, it being understood that such signs shall in no way affect Tenant's obligations pursuant to Section 10.3, Section 14.1 or any other provision of this Lease.

ARTICLE XIV

SIGNS; EXTERIOR OF PREMISES

14.1 **Signs; Exterior**. Tenant shall not, without Landlord's prior written consent, which consent may be withheld in Landlord's commercially reasonable discretion, (a) make any changes to the exterior of the Premises, (b) install any exterior lighting, decorations, banners, placards, balloons, flags, awnings, canopies or the like, (c) erect or install any signs, lettering, decorations or advertising media of any type which can be viewed from the exterior of the Premises, or (d) install any window or door covering or treatment. All signs, lettering, placards, decorations and advertising media shall conform in all respects to any rules and regulations established by Landlord for the Building or Project from time to time in the exercise of its commercially reasonable discretion as well as all applicable laws, codes and regulations and any covenants affecting the Project or the Building, and shall be subject to Landlord's requirements as to construction, method of attachment, size, shape, height, lighting, color and general appearance. Any signs, window treatment, bars or other installations visible from outside the Premises shall be removed by Tenant at the end of the Lease Term, at Tenant's sole cost, and Tenant shall restore the Premises to its original condition. Provided that Tenant is not in default under this Lease beyond applicable notice and cure periods, Tenant shall, at its sole cost and expense and subject to this Section 14.1 and to receipt of any required approvals from any applicable governmental authority, and applicable law or matter of record, have the right to place exclusive Building-top signage upon the exterior of the Building in location(s) mutually agreed by Landlord and Tenant. In addition, Tenant, at its sole cost and expense, may install its name and logo on the monument sign serving the Project (the "Monument Sign"). Such signage shall be subject to Landlord's approval as to construction, method of attachment, size, shape, height, lighting, color, and general appearance, such approval to be in Landlord's reasonable discretion. Upon the expiration or earlier termination of this Lease, Tenant shall remove its signage from the Monument Sign and repair any damage to the Monument Sign resulting therefrom. Tenant is solely responsible for all costs incurred in connection with (x) the installation and maintenance of Tenant's signage on the Monument Sign and (y) the removal of its signage from the Monument Sign.

ARTICLE XV

UTILITIES

15.1 **Service to Premises**. Tenant shall contract with all utility providers to arrange service to the Premises and shall provide to Landlord and to such utility providers access to the electric lines, feeders, risers, wiring and any other facilities within or servicing the Premises. Tenant shall promptly pay all charges and maintenance costs for electricity, water, gas (but only if provided by Landlord), telephone service, sewerage service, sprinkler service and other utilities or services furnished to the Premises plus all applicable deposits, surcharges, taxes, penalties or other costs related to such services. Landlord may, if it so elects, furnish one or more such utility services to Tenant, and in such event Tenant shall purchase the use of such services as are tendered by Landlord, and shall pay on demand as Additional Rent under this Lease the rates established therefor by Landlord which shall not exceed the rates which would be charged for the same services furnished directly by the local public utility companies. Landlord may at any time, upon at least thirty (30) days prior notice to Tenant, discontinue furnishing any such service without obligation to Tenant other than to connect the Premises to the public utility, if any, furnishing such service. In addition, if certain utilities are furnished to the Premises in common with other premises, then Landlord shall make a good faith estimate as to the amount used by each tenant (including Tenant) and bill each tenant accordingly; however, at any time, Landlord may elect to install one or more sub-meters for one or more premises (which, if installed at the Premises, shall be at Tenant's expense), in which event Landlord will bill each tenant whose premises is sub-metered for the amount used according to that tenant's sub-meter. Any amounts which Landlord bills to Tenant under the terms of this Section 15.1 will be considered Additional Rent and will be due within thirty (30) days after the date upon which Landlord delivers such bill to Tenant.

15.2 **Interruption of Service**. Landlord shall not be liable for any interruption whatsoever in utility services, whether or not furnished by Landlord, nor for interruptions in utility services furnished by Landlord which are due to fire, accident, strike, acts of God or other causes beyond the control of Landlord or which are necessary or useful in connection with making any alterations, repairs or improvements. None of such interruptions shall constitute an actual or constructive eviction, in whole or in part, nor shall any such interruption entitle Tenant to any abatement or diminution of Rent. Without limiting the generality of the foregoing, Landlord shall in no way be liable or responsible for any loss, damage, or expense that Tenant may sustain or incur by reason of any failure, interference, disruption, or defect in the supply or character of the electric energy furnished to the Premises, or if the quantity or character of the electric energy supplied by any utility or service provider is no longer available or suitable for Tenant's requirement, and no such failure, defect, unavailability or unsuitability shall constitute an actual or constructive eviction, in whole or in part, or entitle Tenant to any abatement or diminution of Rent. Tenant hereby waives the provisions of any applicable existing or future law, ordinance or governmental regulation permitting the termination of this Lease due to an interruption, failure or inability to provide any services. Notwithstanding the provisions of Section 15.2 but subject to Articles XVIII and XIX, if any failure or interruption of Landlord's services required to be provided under this Lease, due to Landlord's negligence or intentional misconduct (a "Service Interruption"), renders the Premises (or a part of the Premises) untenantable or inaccessible, and the Premises (or the untenantable or inaccessible portion thereof) are not used by Tenant for more than three (3) consecutive business days (the "Eligibility Period"), then Base Rent abates proportionately commencing on the next day after the last day of the Eligibility Period and continuing for the period that the Premises or the applicable portion thereof are rendered untenantable or inaccessible and are not used by Tenant. In order to be eligible for an abatement under this Section 15.2, Tenant must, within three (3) days after the last day of the Eligibility Period, provide Landlord written notice (the "Service Interruption Notice") of (1) the date of occurrence of any failure or interruption of such services that continues for more than three (3) consecutive business days and (2) the date Tenant vacates the Premises or any part thereof (the Service Interruption Notice must specify the part of the Premises that Tenant is vacating if Tenant is not vacating all the Premises) due to a Service Interruption. Landlord will use commercially reasonable efforts to remedy any Service Interruption.

ARTICLE XVI

INSURANCE COVERAGES

16.1 **Insurance by Landlord**. Landlord shall procure and maintain throughout the Lease Term a policy or policies of insurance, at its sole cost and expense (but subject to Article VI above), causing the Project to be insured under special form of property coverage (sometimes referred to as "all-risk" coverage) and commercial general liability insurance (plus, as to either coverage, whatever endorsements or special coverages Landlord, in its sole and absolute discretion, may from time to time consider appropriate), to the extent necessary to comply with Landlord's obligations pursuant to other provisions of this Lease, and such other insurance (if any) that Landlord reasonably deems appropriate for the Project.

16.2 **Insurance by Tenant**. Tenant, at its sole cost and expense, shall procure and maintain throughout the Lease Term the following policies of insurance:

(a) property insurance causing Tenant's leasehold improvements and business personal property (sometimes also referred to as "fixtures and contents") in the Premises to be insured under the broadest available special form of property coverage, sometimes referred to as "all-risk" coverage (such as the form identified as CP 10 30, and any successor form, published by Insurance Services Office, Inc.), with provisions and/or endorsements assuring both mold coverage and terrorism coverage, such insurance coverage (i) to be in the full amount of the replacement cost of all insured property, (ii) to include coverage for the loss of business income, in an amount not less than 75% of Tenant's estimated gross annual income at the Premises, (iii) to contain no deductible or self-insured retention in excess of $10,000.00, and (iv) to contain no coinsurance penalty clause; and

(b) combination of commercial general liability and umbrella insurance insuring both Landlord and Tenant against all claims, demands or actions for bodily injury, property damage, personal and advertising injury, and medical payments arising out of or in connection with Tenant's use or occupancy of the Premises, or by the condition of the Premises, with a limit of not less than $5,000,000 per occurrence and aggregate (and no offset for occurrences on property other than the Premises), and with coverage for contractual liability; and

(c) worker's compensation insurance insuring against and satisfying Tenant's obligations and liabilities under the worker's compensation laws of the state where the Premises is located, together with employer's liability insurance in an amount not less than $1,000,000.00 each accident, $1,000,000.00 disease policy limit, and $1,000,000.00 disease each employee; the full limits of insurance are to apply per location; and

(d) pollution legal liability insurance applicable to bodily injury; property damage, including loss of use of damaged property or of property that has not been physically injured or destroyed; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims; all in connection with any loss arising from the insured premises in an amount not less than $5,000,000 each occurrence and aggregate, and if coverage is written on a claims-made basis, Tenant warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this Lease; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of five (5) years after the expiration of the Lease Term; and

(e) automobile liability insurance covering all owned, non-owned, and hired vehicles with a $1,000,000 per accident limit for bodily injury and property damage; and

(f) during any period when construction work is being done in or on the Premises, such additional insurance as Landlord may reasonably require pursuant to Article XII of this Lease.

If the operations of Tenant should change in a material manner from those conducted on the Commencement Date and in the opinion of Landlord or Landlord's insurance advisor, the amount or scope of such coverage is reasonably deemed inadequate at any time during the Lease Term, Tenant shall increase such coverage to such reasonable amounts or scope as Landlord or Landlord's advisor deems adequate. All insurance procured and maintained by Tenant shall be written by insurance companies satisfactory to Landlord which are permitted to do business in the state in which the Project is located with a general policyholder's rating of not less than A and a financial rating of not less than Class VIII, as rated in the most current edition of Best's Key Rating Guide. With the exception of the insurance prescribed in subsection (c) above, Landlord and Landlord's lender(s), ground lessor (if any) and property manager shall be named as additional insureds under all insurance maintained by Tenant, and Tenant shall obtain waivers of subrogation in favor of Landlord as its interests may appear, as specified in Section 17.3 below; moreover, Tenant shall notify Landlord at least thirty (30) days prior to cancellation of such insurance. Tenant shall provide Landlord with an original Certificate of Insurance demonstrating that the insurance required by this Lease was purchased and is in effect. Tenant shall also provide Landlord with a copy of the Additional Insured, Waiver of Subrogation and Primary and Noncontributory endorsements or such other policy language demonstrating that the insurance policies comply with this Lease. Neither the review nor the failure to review such certificates or any accompanying endorsements, shall constitute acceptance or waive, alter or diminish Landlord’s right under this Lease. Landlord shall be entitled to receive, and the named insured on the certificate shall be required to hold, the insurance coverage as specified in Section 16.2 above. If Tenant should fail to comply with the foregoing requirements relating to insurance, Landlord may obtain such insurance and Tenant shall pay to Landlord on demand as Additional Rent hereunder the premium cost thereof plus interest as provided in Section 23.2(a). Tenant hereby acknowledges and agrees that any such payment and interest shall be payable immediately on demand as Additional Rent and that the same are cumulative with, and do not supersede or reduce in any way, Landlord's rights as specified in Article XXIII of this Lease.

ARTICLE XVII

WAIVER OF LIABILITY; MUTUAL WAIVER OF SUBROGATION

17.1 **Non-Liability of Landlord**. Except to the extent of Landlord or its agents’ negligence, Landlord and Landlord's agents and employees shall not be liable to Tenant or to Tenant's employees, subtenants, concessionaires, agents, invitees, or visitors, or to any other person whomsoever, for any injury to person or damage to property caused by the Premises or other portions of the Project becoming out of repair, or by defect or failure of any structural element of the Premises or of any equipment, pipes or wiring, or broken glass, or by the backing up of drains, or by gas, water, steam, electricity or oil leaking, escaping or flowing into the Premises, nor shall Landlord be liable to Tenant, or to Tenant's employees, subtenants, concessionaires, agents, invitees, or visitors, or to any other person whomsoever, for any loss or damage that may be occasioned by or through the acts or omissions of other tenants of the Project or of any other persons whomsoever. unless same were caused by Landlord's gross negligence or intentional misconduct. Landlord shall not be held responsible in any way on account of any construction, repair or reconstruction (including widening) of any private or public roadways, walkways or utility lines. This Section 17.1 shall survive the expiration or earlier termination of this Lease.

17.2 **Indemnity by Tenant**. Landlord shall not be liable to Tenant or to Tenant's employees, agents, or visitors, or to any other person whomsoever, for any injury to person or damage to property on or about the Premises or the Project caused by the negligence or misconduct of Tenant, its employees, subtenants, licensees or concessionaires, or of any other person entering the Project under express or implied invitation of Tenant, or arising out of the use of the Premises by Tenant and the conduct of its business therein, or arising out of any breach or default by Tenant in the performance of its obligations under this Lease; and Tenant hereby agrees to indemnify Landlord and its partners, members, affiliates and subsidiaries, and all of their respective officers, trustees, directors, employees, stockholders, partners, representatives, servants, insurers, and agents and Landlord's designated property management company (collectively, the "Landlord Indemnitees") and hold each of the Landlord Indemnitees harmless from any loss, cost, expense, damage, or claim arising out of such damage or injury, BUT NOT TO THE EXTENT SUCH CLAIM IS A RESULT OF THE NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY LANDLORD INDEMNITEE. Tenant agrees to indemnify, defend, and hold harmless the Landlord Indemnitees from and against any and all losses, liabilities, damages, costs and expenses (including attorneys' fees and costs) resulting from claims by third parties for injuries to any person and damage to or theft or misappropriation or loss of property occurring in or about the Project and arising from the use and occupancy of the Premises or from any activity, work, or thing done, permitted or suffered by Tenant in or about the Premises or due to any other act or omission of Tenant, its subtenants, assignees, invitees, employees, contractors or agents. Landlord shall in no event be liable to Tenant or any other person for any consequential damages, special or punitive damages, or for loss of business, revenue, income or profits and Tenant hereby waives any and all claims for any such damages. Notwithstanding anything to the contrary contained in this Section 17.2, all property of Tenant and its contractors, employees, customers and invitees, kept or stored on the Premises, whether leased or owned by any such parties, shall be so kept or stored at the sole risk of Tenant and Tenant shall hold Landlord harmless from any claims arising out of damage to the same, including subrogation claims by Tenant's insurance carriers BUT NOT TO THE EXTENT SUCH CLAIM IS A RESULT OF THE NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY TENANT INDEMNITEE. Landlord or its agents shall not be liable for interference with light or other intangible rights. The furnishing by Tenant of the insurance required under this Lease shall not be deemed to limit Tenant's obligations under this Section 17.2. THE INDEMNITIES IN THIS PARAGRAPH SHALL BE ENFORCED EXCEPT TO THE EXTENT OF THE PERCENTAGE OF ANY CLAIMS THAT A FINAL JUDGMENT OF A COURT OF COMPETENT JURISDICTION ESTABLISHES, UNDER THE COMPARATIVE NEGLIGENCE PRINCIPLES OF THE STATE OF TEXAS, WAS THE PROXIMATE RESULT OF THE NEGLIGENCE OR WILLFUL MISCONDUCT OF LANDLORD, ITS AGENTS, CONTRACTORS, OR EMPLOYEES. This Section 17.2 shall survive the expiration or earlier termination of this Lease.

Landlord agrees to indemnify Tenant and Tenant's directors, employees, stockholders, partners, representatives, servants, insurers, and agents (collectively, the "Tenant Indemnitees") and hold each of the Tenant Indemnitees harmless from any loss, cost, expense, damage, or claim (including reasonable attorneys' fees) occurring in the Common Areas under the control of Landlord, BUT NOT TO THE EXTENT SUCH CLAIM IS A RESULT OF THE NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY TENANT INDEMNITEE. THE INDEMNITIES IN THIS PARAGRAPH SHALL BE ENFORCED EXCEPT TO THE EXTENT OF THE PERCENTAGE OF ANY CLAIMS THAT A FINAL JUDGMENT OF A COURT OF COMPETENT JURISDICTION ESTABLISHES, UNDER THE COMPARATIVE NEGLIGENCE PRINCIPLES OF THE STATE OF TEXAS, WAS THE PROXIMATE RESULT OF THE NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY TENANT INDEMNITEE. This Section 17.2 shall survive the expiration or earlier termination of this Lease.

17.3 **Waiver of Claims/Waiver of Subrogation**. Landlord and Tenant each hereby waive and release one another from any and all liability or responsibility to the other, or to any other party claiming through or under them by way of subrogation or otherwise, for any loss or damage to property caused by a casualty which is insurable under the special form of property coverage (sometimes referred to as "all-risk" coverage); provided, however, that this mutual waiver and release shall be applicable only with respect to a loss or damage occurring during the time when property insurance policies, which are readily available in the marketplace, contain a clause or permit an endorsement to the effect that any such release and waiver shall not adversely affect or impair the policy or the right of the insured party to receive proceeds under the policy; provided, further, that this release and waiver shall not be applicable to the portion of any damage which is not reimbursed by the damaged party's insurer because of the "deductible" in the damaged party's insurance coverage. THE RELEASE AND WAIVER CONTAINED IN THIS SECTION 17.3 APPLIES EVEN TO A LOSS WHICH IS ATTRIBUTABLE TO THE NEGLIGENCE OF THE PARTY HEREBY RELEASED (AND WITH RESPECT TO LANDLORD, ITS PROPERTY MANAGER(S) OR ANYONE ELSE FOR WHOM LANDLORD MAY BE RESPONSIBLE); HOWEVER, THIS RELEASE AND WAIVER SHALL NOT APPLY TO A PARTY'S WILLFUL WRONGDOING OR GROSS NEGLIGENCE. The release and waiver specified in this Section 17.3 is cumulative with any releases or exculpations which may be contained in other provisions of this Lease.

ARTICLE XVIII

DAMAGES BY CASUALTY

18.1 **Notice by Tenant**. Tenant shall give immediate written notice to Landlord of any damage caused to the Premises by fire or other casualty.

18.2 **Election by Landlord**. If the Premises shall be damaged or destroyed by fire or any other casualty insurable under special form (sometimes referred to as "all-risk") property insurance and Landlord does not elect to terminate this Lease as hereinafter provided, Landlord shall proceed with reasonable diligence to rebuild and repair the Premises. In the event (a) the Building is destroyed or substantially damaged by a casualty not covered by Landlord's insurance, (b) such Building is destroyed or rendered untenantable to an extent in excess of forty percent (40%) of the first floor area by a casualty covered by Landlord's insurance, (c) the holder of a mortgage, deed of trust or other lien on such building at the time of the casualty elects, pursuant to such mortgage, deed of trust or other lien, to require the use of all or part of Landlord's insurance proceeds in satisfaction of all or part of the indebtedness secured by the mortgage, deed of trust or other lien, or (d) the damage will require more than ninety (90) days to restore, then Landlord may elect in its sole and absolute discretion either to terminate this Lease or to proceed to rebuild and repair the Premises. Landlord shall give written notice to Tenant of such election within sixty (60) days after the occurrence of such casualty and if it elects to rebuild and repair, shall proceed to do so with reasonable diligence.

18.3 **Election by Tenant**. If (a) more than forty percent (40%) of the Premises is rendered untenantable by damage or destruction caused by fire or any other casualty and, in the reasonable opinion of Landlord, such damage cannot be repaired within six (6) months after the receipt of insurance proceeds and all applicable governmental permits (under a normal construction schedule not requiring the payment of overtime or premium), or (b) during the last year of the Term, more than fifty percent of the Premises is rendered untenantable by damage or destruction caused by fire or any other casualty and, in the reasonable opinion of Landlord, such damage cannot be repaired within ninety (90) days after the receipt of insurance proceeds and all applicable governmental permits (under a normal construction schedule not requiring the payment of overtime or premium), then Tenant may terminate this Lease by delivery of written notice to Landlord within thirty (30) days after the date on which such opinion is delivered to Tenant. Upon termination, Base Rent and Tenant's Proportionate Share of Shared Expenses shall be apportioned as of the date of the damage.

18.4 **Restoration**. Landlord's obligation to rebuild and repair under this Article XVIII shall in any event be limited to restoring one of the following (as may be applicable): (a) if this Lease does not include an attached exhibit describing Landlord's initial construction responsibility ("Landlord's Work"), restoring the Premises to substantially the condition in which the same existed prior to such casualty, exclusive of any alterations, additions, improvements, fixtures and equipment installed by Tenant; or (b) restoring Landlord's Work, as described in the applicable exhibit attached to this Lease (if such an exhibit is attached), to substantially the same condition in which the same existed prior to the casualty. Tenant agrees that promptly after completion of such work by Landlord, Tenant will proceed with reasonable diligence and at Tenant's sole cost and expense to restore, repair and replace all alterations, additions, improvements, fixtures, signs and equipment installed by Tenant (collectively, "Tenant's Work"), or, if an exhibit describing Tenant's Work is attached hereto, all items of Tenant's Work as described in such exhibit, as the case may be.

18.5 **Rent Abatement during Reconstruction**. Tenant agrees that during any period of reconstruction or repair of the Premises, it will continue the operation of its business within the Premises to the extent practicable. During the period from the occurrence of the casualty until Landlord's repairs are completed, the Rent shall be reduced to such extent as may be fair and reasonable under the circumstances, as reasonably determined by Landlord. In no event shall Tenant pay Base Rent or Additional Rent for the portion of the Premises damaged by such casualty until the Premises is fully restored.

18.6 **Waiver of Termination Rights**. Landlord and Tenant hereby waive the provisions of any present or future statutes relating to termination of leases when leased property is damaged or destroyed and agree that such an event shall be governed by the terms of this Lease. Accordingly, except as expressly provided herein, Tenant hereby waives any and all provisions of applicable law that provide alternative rights for the parties in the event of damage or destruction.

ARTICLE XIX

EMINENT DOMAIN

19.1 **Termination for Taking of Premises**. If more than thirty percent (30%) of the floor area of the Premises should be taken for any public or quasi-public use under any governmental law, ordinance or regulation or by right of eminent domain or by private purchase in lieu thereof, this Lease shall terminate and the rent shall be abated during the unexpired portion of this Lease, effective on the date physical possession is taken by the condemning authority.

19.2 **Adjustment for Partial Taking**. If less than thirty percent (30%) of the floor area of the Premises should be taken as aforesaid, this Lease shall not terminate; however, the Base Rent payable hereunder during the unexpired portion of this Lease shall be reduced in proportion to the area of the Premises taken, effective on the date physical possession is taken by the condemning authority, and Tenant's Proportionate Share shall be recalculated. Following such partial taking, Landlord shall, in each instance, to the extent of net proceeds received by Landlord from the condemnation award, make all necessary repairs or alterations to the remaining Premises or, if an exhibit describing Landlord's Work is attached to this Lease, all necessary repairs within the scope of Landlord's Work as described in such exhibit, as the case may be, to cause the remaining portions of the Premises to be an architectural whole.

19.3 **Taking Outside Premises.** If any part of the Project outside the Premises should be taken as aforesaid, this Lease shall not terminate, nor shall the rent payable hereunder be reduced. Notwithstanding the foregoing, Tenant may terminate this Lease for a taking outside the Premises if: (i) twenty percent (20%) or more of the parking spaces serving the Building have been lost (unless replacement parking is promptly provided by Landlord); or (ii) reasonable access over the Common Areas to and from the Premises and an adjacent public street or highway has been materially impaired.

19.4 **Condemnation Awards**. All compensation awarded for any taking (or the proceeds of private sale in lieu thereof) of the Premises or any part of the Project outside the Premises shall be the sole property of Landlord, and Tenant hereby assigns its interest in any such award to Landlord; provided, however, Landlord shall have no interest in any award made to Tenant for Tenant's moving and relocation expenses or for the loss of Tenant's fixtures and other tangible personal property if a separate award for such items is made to Tenant, as long as such separate award does not reduce the amount of the award that would otherwise be awarded to Landlord.

ARTICLE XX

ASSIGNMENT AND SUBLETTING

20.1 **Prohibition**. Tenant shall not assign or in any manner transfer this Lease or any estate or interest therein, or sublet the Premises or any part thereof or grant any license, concession or other right of occupancy of any portion of the Premises without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned, or delayed in connection with any assignment of this Lease or subletting of the Premises. In this regard, Tenant further acknowledges and agrees that Landlord's acceptance of Rent from an assignee or subtenant shall not be deemed to constitute Landlord's consent to such assignment or sublease (in fact, Tenant acknowledges that the Rent payment process is such that Landlord will not likely even be aware of the party from whom Rent are received). In determining whether or not to grant its consent to a proposed assignment or subletting, Landlord may take into consideration factors such as the existing uses in the Project, existing use restrictions affecting the Project, the creditworthiness, credit history, reputation and net worth of the proposed transferee, environmental risk, the effect that the operations of such proposed transferee will have on other tenants, whether or not the proposed transferee is a governmental agency or instrumentality thereof, any limitations imposed by the Internal Revenue Code and the regulations promulgated thereunder relating to real estate investment trusts; and any or all other reasonable objective or subjective factors typically taken into account for similar subleases. It shall not be unreasonable for Landlord to withhold its consent to any proposed assignment or sublease if (i) the proposed assignee's or sublessee's anticipated use of the Premises involves the generation, storage, use, treatment or disposal of Hazardous Materials that are materially different than authorized hereunder for Tenant in type, quantity, or use; (ii) the proposed assignee or sublessee has been required by any prior landlord, lender, or governmental authority to take remedial action in connection with Hazardous Materials contaminating a property if the contamination resulted from such assignee's or sublessee's actions or use of the property in question; or (iii) the proposed assignee or sublessee is subject to an enforcement order issued by any governmental authority in connection with the use, storage, management, treatment or disposal of Hazardous Materials. In addition, Landlord shall also be entitled to charge Tenant a $750.00 fee for processing Tenant's request, plus any attorneys' fees and costs incurred by Landlord (not to exceed $1,500.00), regardless of whether or not Landlord grants its consent. Consent by Landlord to one or more assignments or sublettings shall not operate as a waiver of Landlord's rights as to any subsequent assignments and sublettings.

20.2 **Change in Ownership**. If Tenant is a corporation, partnership or other entity and if at any time during the Lease Term the person or persons who own, directly or indirectly, a majority of either the outstanding voting rights or the outstanding ownership interests of Tenant at the time of the execution of this Lease cease to own a majority of such voting rights, ownership interests or control (except as a result of transfers by devise or descent), the loss of a majority of such voting rights, ownership interests or control shall be deemed to be an assignment of this Lease by Tenant and, therefore, subject in all respects to the provisions of Section 20.1 above. The previous sentence shall not apply, however, if at the time of the execution of this Lease, Tenant is a corporation and the outstanding voting shares of capital stock of Tenant are listed on a recognized United States national securities exchange.

Notwithstanding the foregoing, provided no event of monetary default or any material default beyond the expiration of any applicable notice or cure period is then ongoing, upon at least fifteen (15) days' prior written notice to Landlord, Tenant may, without Landlord's prior written consent, and without any obligation to pay Landlord any of the fees or costs, assign this Lease (a) to an entity "controlled by" or "commonly controlled with" Tenant or (b) to an entity into which Tenant is merged or consolidated or to an entity to which substantially all of Tenant's assets are transferred (each, a " Permitted Transfer") provided that such proposed transferee shall have a Tangible Net Worth (as defined below) at least equal to Tenant's as of the date prior to the transfer, as evidenced to Landlord's reasonable satisfaction prior to the date of such Permitted Transfer. Furthermore, the transfer shall be for a bona fide business purpose which is not, directly or indirectly, for the purpose of transferring the leasehold estate created hereby in avoidance or contravention of the provisions of this Article. The term "controlled by" or "commonly controlled with" shall mean the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of such controlled person or entity. For illustrative purposes, the ownership, directly or indirectly, of at least fifty-one percent (51%) of the voting securities of, or possession of the right to vote, in the ordinary direction of its affairs, at least fifty-one percent (51%) of the voting interest in, any person or entity shall be presumed to constitute such control. The term "Tangible Net Worth" means the excess of total assets over total liabilities, in each case as determined in accordance with generally accepted accounting principles consistently applied ("GAAP"), excluding, however, from the determination of total assets all assets which would be classified as intangible assets under GAAP including goodwill, licenses, patents, trademarks, trade names, copyrights and franchises.

20.3 **Assumption by Assignee**. Any assignee or sublessee of an interest in and to this Lease shall be deemed, by acceptance of such assignment or sublease or by taking actual or constructive possession of all or any portion of the Premises, to have assumed all of the obligations set forth in or arising under this Lease. Such assumption shall be effective as of the earlier of the date of such assignment or sublease or the date on which the assignee or sublessee obtains possession of all or any portion of the Premises; however, with specific regard to any assignment, the assignee shall be responsible for all unsatisfied obligations of Tenant under this Lease, regardless of when such obligations arose and when such assumption became effective.

20.4 **Tenant Remains Liable; Excess Rent**. Notwithstanding any assignment or subletting, Tenant shall at all times remain fully responsible and liable for the payment of the Rent herein specified and for compliance with all of Tenant's other obligations under this Lease (even if future assignments and sublettings occur subsequent to the assignment or subletting by Tenant, and regardless of whether or not Landlord's approval has been obtained for such future assignments and sublettings). Moreover, in the event that the rental due and payable by a sublessee (or a combination of the rental payable under such sublease plus any bonus or other consideration therefor or incident thereto) exceeds the Rent payable under this Lease, or if with respect to a permitted assignment or sublease, permitted license or other transfer by Tenant permitted by Landlord, the consideration payable to Tenant by the assignee, sublessee, licensee or other transferee exceeds the rental payable under this Lease, then Tenant shall be bound and obligated to pay Landlord fifty percent (50%) of such excess rental and other excess consideration after Tenant has first recovered the costs reasonably incurred by Tenant with unaffiliated third parties in connection with such Transfer (i.e., "free rent", brokerage commissions, legal fees, demising and tenant finish work) within ten (10) days following receipt thereof by Tenant from such sublessee, assignee, licensee or other transferee, as the case may be. Finally, in the event of an assignment or subletting, it is understood and agreed that all rentals paid to Tenant by an assignee or sublessee shall be received by Tenant in trust for Landlord, to be forwarded immediately to Landlord without offset or reduction of any kind; and upon election by Landlord such rentals shall be paid directly to Landlord as specified in Article IV of this Lease (to be applied as a credit and offset to Tenant's rental obligation).

20.5 **No Encumbrances**. Tenant shall not mortgage, pledge or otherwise encumber its interest in this Lease or in the Premises.

20.6 **Transfer by Landlord**. In the event of the transfer and assignment by Landlord of its interest in this Lease and in the Building to a person expressly assuming Landlord's obligations under this Lease, Landlord shall thereby be released from any further obligations hereunder after the effective date of the transfer, and Tenant agrees to look solely to such successor-in-interest of the Landlord for performance of such obligations. In addition, as described more fully in Section 27.3 of this Lease, any Security Deposit given by Tenant to secure performance of Tenant's obligations hereunder may be assigned and transferred by Landlord to such successor-in-interest, and Landlord shall thereby be discharged of any further obligation relating thereto.

ARTICLE XXI

SUBORDINATION; ATTORNMENT; ESTOPPELS

21.1 **Subordination**. Tenant accepts this Lease subject and subordinate to any mortgage, deed of trust, ground lease or other lien presently existing or hereafter placed upon the Building or any portion of the Premises, and to any renewals and extensions thereof. Tenant agrees that any mortgagee or ground lessor shall have no duty, liability or obligation to perform any of the obligations of Landlord under this Lease and shall have the right at any time to subordinate its mortgage, deed of trust, ground lease or other lien to this Lease; provided, however, notwithstanding that this Lease may be (or may become) superior to a mortgage, deed of trust, ground lease or other lien, the mortgagee shall not be liable for prepaid rentals, security deposits and claims accruing during Landlord's ownership; and further provided that the provisions of a mortgage, deed of trust, ground lease or other lien relative to the rights of the mortgagee with respect to proceeds arising from an eminent domain taking (including a voluntary conveyance by Landlord) and provisions relative to proceeds arising from insurance payable by reason of damage to or destruction of the Premises shall be prior and superior to any contrary provisions contained in this Lease with respect to the payment or usage thereof. Landlord is hereby irrevocably vested with full power and authority to subordinate this Lease to any mortgage, deed of trust, ground lease or other lien hereafter placed upon the Premises. The foregoing agreements shall be effective without the execution of any further documents, provided, however, that Tenant hereby agrees that it will, within ten (10) business days following any request, execute such further instruments subordinating this Lease as Landlord or a mortgagee may request, including, without limitation, such mortgagee's standard form of subordination, non-disturbance and attornment agreement. Tenant shall recognize as its landlord and attorn to any person succeeding to Landlord under this Lease upon any foreclosure or deed in lieu of foreclosure by Landlord's mortgagee at the election of such mortgagee or successor-in-interest. Upon request of such mortgagee or successor-in-interest, Tenant shall execute and deliver an instrument or instruments confirming its attornment; provided, however, that any successor-in-interest will not be (i) bound by payment of rent for more than one month in advance (except as otherwise required under this Lease), (ii) bound by any amendment or modification to this Lease which was subject to approval by such mortgagee or successor-in-interest pursuant to such mortgagee's agreements with Landlord, if such amendment or modification to this Lease was in fact made without the consent of the mortgagee, (iii) liable for any security deposit not actually received by such mortgagee or successor-in-interest, or (iv) liable for or subject to claims or offsets accruing during Landlord's ownership or previous acts or omissions of Landlord.

Landlord shall use commercially reasonable efforts to obtain a commercially reasonable subordination, non-disturbance and attornment agreement from the current Landlord’s mortgagee, and Landlord shall use reasonable efforts to obtain a subordination, non-disturbance and attornment agreement from any future Landlord’s mortgagee, on such mortgagee’s standard form.; however, Landlord’s failure to obtain such agreement shall not constitute a default by Landlord hereunder or prohibit the mortgaging of the Building; and further provided that any costs associated with obtaining such subordination, non-disturbance and attornment agreement shall be paid by Tenant within 15 days after Landlord’s written request therefor. The subordination of Tenant’s rights hereunder to any future Landlord’s Mortgagee under Section 21.1 shall be conditioned upon such future Landlord’s mortgagee’s execution and delivery of a subordination, non-disturbance and attornment agreement on such mortgagee’s standard form.

21.2 **Notice to Holder**. At any time when the holder of an outstanding mortgage, deed of trust, ground lease or other lien covering Landlord's interest in the Premises has given Tenant written notice of its interest in this Lease, Tenant may not exercise any remedies for default by Landlord hereunder unless and until the holder of the indebtedness secured by such mortgage, deed of trust, ground lease or other lien shall have received written notice of such default and a reasonable time (not less than 30 days) shall thereafter have elapsed without the default having been cured.

21.3 **Estoppel Certificate**. Tenant agrees that it will within ten (10) business days following request by Landlord execute and deliver to Landlord a written statement (an "Estoppel Certificate") addressed to Landlord, (and/or parties designated by Landlord), which statement shall identify Tenant and this Lease, shall certify that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as so modified), shall confirm that Landlord is not in default as to any obligations of Landlord under this Lease (or if Landlord is in default, specifying any default), shall state the dates to which the rent and other changes have been paid in advance, if any, shall confirm Tenant's agreements contained above in this Article XXI, and shall contain such other information or confirmations as Landlord may reasonably require. If Tenant fails to do so within ten (10) business days after the delivery of a written request from Landlord to Tenant, then this shall be a default under the Lease and Landlord would have all rights and remedies accorded to Landlord pursuant to Article XXIII of this Lease. In addition, if Tenant fails to deliver an Estoppel Certificate as required herein, it shall be deemed that Landlord’s statement is correct with respect to the information therein contained.

ARTICLE XXII

ENVIRONMENTAL MATTERS/HAZARDOUS MATERIALS

22.1 **Compliance with Environmental Laws**. Tenant's operations in, on or at the Premises and any applicable portions of the Project —as well as all property, substances and other materials kept, stored, allowed to be brought within, or disposed of from the Premises—shall comply in all respects with all federal, state, and municipal laws, ordinances, codes and regulations relating to the protection of the environment and natural resources, now existing or hereafter enacted (collectively, the "Environmental Laws"), including without limitation the following: (i) the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 (often referred to as "CERCLA"), as amended by the Superfund Amendments and Reauthorization Act of 1986, presently in effect or hereafter amended, (ii) the federal Resource Conservation and Recovery Act of 1976, as amended by the Used Oil Recycling Act of 1980, the Solid Waste Disposal Act Amendments of 1980, and the Hazardous and Solid Waste Amendments of 1984, presently in effect or hereafter amended ("RCRA"), (iii) the federal Water Pollution Control Act of 1972 (often referred to as the " Clean Water Act"), presently in effect or hereafter amended, and (iv) any and all other federal, state, county, local, and municipal laws, statutes, ordinances, codes, rules, regulations, judgments, orders, governmental restrictions, guidance or requirements which relate in any way to the protection of the environment or the keeping, use or disposition of environmentally hazardous materials, substances or wastes, presently in effect or hereafter adopted or amended. All property kept, stored or allowed to be brought within, on or at the Premises or any applicable portions of the Project shall be at Tenant's sole risk. Tenant shall immediately notify Landlord in the event Tenant becomes aware of any actual or potential environmental hazard or any actual or alleged violation of one or more Environmental Laws.

22.2 **Definition of Hazardous Materials**. As used in this Lease, the term "Hazardous Materials" shall mean and include (a) any hazardous or toxic wastes, materials or substances, and other pollutants or contaminants, which are or become regulated by any Environmental Laws; (b) petroleum, petroleum by-products, gasoline, diesel fuel, crude oil or any fraction thereof; (c) asbestos and asbestos-containing material, in any form, whether friable or non-friable; (d) polychlorinated biphenyls; (e) radioactive materials; (f) lead and lead-containing materials; (g) pesticides; (h) any other material, waste or substance displaying toxic, reactive, ignitable or corrosive characteristics, as all such terms are used in their broadest sense, and are defined or become defined by any Environmental Law; or (i) any materials which cause or threaten to cause a nuisance upon or waste to any portion of the Project or any surrounding property; or pose or threaten to pose a hazard to the health and safety of persons or of natural resources.

22.3 **Tenant's Representations and Covenants**.

(a) Tenant hereby represents, warrants, and covenants to Landlord, its successors and assigns, the holder of any mortgage lien on the Building and the lessor under any ground lease affecting the Premises that Tenant has not and will not bring or permit to be brought upon the Premises or the Project any Hazardous Materials, except as specified below in this Section 22.3.

(b) Except as otherwise provided in this Section 22.3, without the express prior written consent of Landlord (which consent may be withheld in Landlord's sole and absolute discretion), Tenant or Tenant's agents, employees, contractors, subtenants, invitees or assignees (" Tenant's Parties") shall not cause or permit any Hazardous Material to be generated, brought onto, used, stored, created, treated, transported, released or disposed of in or about the Premises or the Project. Notwithstanding the foregoing, Tenant may use or store without first obtaining Landlord's consent products containing small quantities of Hazardous Materials (such as aerosol cans containing insecticides, toner for copiers, paints, household cleaners, office supplies, janitorial supplies, and the like) to the extent customary and necessary for the use of the Premises for general office and warehouse use purposes; provided that Tenant shall always use or store any such Hazardous Materials in a safe and lawful manner and never allow such Hazardous Materials to contaminate the Premises, Building and appurtenant land or the environment.

(c) In the event Landlord consents to Tenant's use or storage of Hazardous Materials on the Premises or such consent is not required, Tenant represents and warrants that it shall comply with all Environmental Laws applicable to Hazardous Materials including doing the following: (i) adhere to all reporting and inspection requirements imposed by Environmental Laws and provide Landlord copies of any such reports or agency inspections; (ii) prepare, obtain and provide Landlord copies of all necessary permits, registrations, business plans, and environmental notifications that need to be given to persons entering or occupying the Premises or neighboring properties, that are required for the presence, use or handling of Hazardous Materials on the Premises; (iii) enforce Hazardous Materials handling, management and disposal practices consistent with industry standards; (iv) surrender the Premises free from any Hazardous Materials arising from Tenant's generating, bringing, using, storing, creating, treating, management, releasing, or disposing of Hazardous Materials; and (v) properly close the facility with regard to Hazardous Materials, including as applicable, the removal of any equipment, structures or facilities involved in Tenant's use or management of Hazardous Materials, and the decontamination of any Building equipment, utilities, structures, floors, walls, ceilings, fixtures, piping, mechanical ducting, or other materials which have come into contact with Hazardous Materials, and if required under Environmental Laws, obtaining a closure certificate from the local administering agency prior to the Expiration Date or earlier termination of this Lease. Tenant shall be permitted to use and/or store only those Hazardous Materials that are necessary for Tenant's business and to the extent disclosed in a Hazardous Materials disclosure certificate (the "HazMat Certificate") substantially in the form attached hereto as Exhibit E and as expressly approved by Landlord in writing, which approval may be withheld in Landlord's sole and absolute discretion. Tenant covenants, represents and warrants to Landlord that the information in the HazMat Certificate, if any, is true and correct and accurately describes the nature and use(s) of Hazardous Materials which will be made and/or used on the Premises by Tenant. Tenant shall, commencing with the date which is one year from the Commencement Date and continuing every year thereafter, and at such other times as Landlord may request, deliver to Landlord an updated executed HazMat Certificate describing Tenant's then-present use of Hazardous Materials on the Premises, and any other reasonably necessary documents and information as requested by Landlord. Any usage and storage of Hazardous Materials by Tenant may only be to the extent of the quantities of Hazardous Materials as specified in the then-applicable HazMat Certificate as expressly approved by Landlord, which approval may be withheld in Landlord's reasonable discretion. In all events such usage and storage must at all times be in full compliance with any and all Environmental Laws (as interpreted by judicial and administrative decisions), decrees, directives, guidelines, permits or permit conditions, currently existing and as amended, enacted, issued or adopted in the future which are or become applicable to Tenant or all or any portion of the Premises and in compliance with the recommendations of Landlord's consultants. Tenant agrees that any changes to the type and/or quantities of Hazardous Materials specified in the most recent HazMat Certificate be implemented only with the prior written consent of Landlord, which consent may be given or withheld in Landlord's sole and absolute discretion.

(d) Without the express written consent of Landlord, which may be given or withheld in Landlord's sole and absolute discretion, Tenant shall not be entitled or permitted to (i) install any tanks under, on or about the Premises for storage of Hazardous Materials, (ii) store hazardous wastes on the Premises for more than ninety (90) days; "hazardous waste" has the meaning given it under RCRA and analogous state and local laws and regulations, (iii) dispose of any solid waste on the Premises or the Project, or (iv) install any Hazardous Material in the Premises in connection with performing any alterations of the Premises permitted by this Lease.

(e) Subject to the limitations on Landlord's access rights as set forth inSection 13.1 above, Landlord shall have the right, in Landlord's reasonable discretion, at all times during the Lease Term when Landlord reasonably believes that the Premises, the Building or the Project have become contaminated with Hazardous Materials or Tenant is otherwise in violation of this Lease to (i) inspect the Premises, (ii) conduct tests and investigations to determine whether Tenant is in compliance with the provisions of this Article XXII or to determine if Hazardous Materials are present in, on or about the Project, (iii) request lists of all Hazardous Materials used, stored or otherwise located on, under or about any portion of the Premises and/or the Common Areas, and (iv) require Tenant to complete a survey of its use, storage and handling of Hazardous Materials in the Premises, using a form and following procedures designated by Landlord, in Landlord's reasonable discretion (the "Survey"). Tenant shall reimburse Landlord for the cost of all such inspections, tests and investigations, and all costs associated with any Survey if the same determines that Tenant has violated the provisions of this Article XXII. Tenant shall cooperate in any tests, inspections or investigations conducted by or on behalf of Landlord. If as a result of an inspection, test or Survey Landlord determines, in Landlord's sole and absolute discretion, that Tenant should implement or perform safety, security, compliance, additional investigation, remedial or other mitigation measures, Tenant shall within thirty (30) days after written request by Landlord perform such measures, at Tenant's sole cost and expense. The aforementioned rights granted herein to Landlord and its representatives shall not create (a) a duty on Landlord's part to inspect, test, investigate, monitor or otherwise observe the Premises or the activities of Tenant with respect to Hazardous Materials, including, without limitation, Tenant's operation, use and any remediation relating thereto, or (b) liability on the part of Landlord and its representatives for Tenant's use, storage, disposal or remediation of Hazardous Materials, it being understood that Tenant shall be solely responsible for all liability in connection therewith.

(f) Tenant shall not conduct, or cause to be conducted, any excavation or subsurface work on the Premises or Project without Landlord's prior written consent, and if such consent is given, in strict compliance with Landlord's recommendations.

(g) Tenant shall not interfere with or obstruct, or cause interference with or obstruction of, any remedial or monitoring work being performed on the Premises, the Project or any surrounding area and shall not damage or destroy remedial or monitoring equipment installed on the Premises, the Project or any surrounding area.

22.4 **Reporting and Cleanup**. Tenant shall give to Landlord immediate verbal and follow-up written notice of (i) any actual or threatened spills of which Tenant is aware, releases, discharges, disposals, emissions, or migration of Hazardous Materials on, under or about any portion of the Premises or Project or in any Common Areas, or (ii) any inquiry, investigation, proceeding, claim, notice or order by any private or public person or entity regarding the presence of Hazardous Materials on, under or about any portion of the Premises or Project, including alleged violations of Environmental Laws by Tenant or Tenant's Parties, provided that Tenant has actual knowledge of such event(s). Tenant, at its sole cost and expense, covenants and warrants to promptly investigate, clean up, remove, restore and otherwise remediate (including, without limitation, preparation of any feasibility studies or reports and the performance of any and all closures) any spill, release, discharge, disposal, emission, or migration of Hazardous Materials arising from or related to the acts or omissions of Tenant or Tenant's Parties such that the affected portions of the Premises or Project and any adjacent property are returned to the condition existing prior to the appearance of such Hazardous Materials. Any such investigation, cleanup, removal, restoration and other remediation shall only be performed after Tenant has obtained Landlord's prior written consent, which consent shall not be unreasonably withheld, so long as such actions would not potentially have a material adverse long-term or short-term effect on any portion of the Project and do not impose on Landlord any long-term operation, monitoring or post-closure obligations. Notwithstanding the foregoing, Tenant shall be entitled to respond immediately to an emergency without first obtaining Landlord's prior written consent. Tenant, at its sole cost and expense, shall conduct and perform, or cause to be conducted and performed, all closures as required by any Environmental Laws or any agencies or other governmental authorities having jurisdiction thereof. If Tenant fails to promptly investigate, clean up, remove, restore, provide closure or otherwise so remediate, Landlord may, but without obligation to do so, take any and all steps necessary to rectify the same, and Tenant shall promptly reimburse Landlord, upon demand, for all actual costs and expenses to Landlord of performing investigation, cleanup, removal, restoration, closure and remediation work, together with interest thereon as provided in Section 23.2(a). All such work undertaken by Tenant, as required herein, shall be performed in such a manner as to enable Landlord to make full economic use of the Premises and other portions of the Project after the satisfactory completion of such work and without imposing on Landlord any long-term operation, monitoring or post-closure obligations.

22.5 **Environmental Indemnity**. In addition to Tenant's other indemnity obligations under this Lease, Tenant agrees to, and shall, protect, indemnify, defend (with counsel acceptable to Landlord) and hold harmless Landlord and Landlord Indemnitees from and against any and all losses, damages, liabilities, liens, suits, actions (including remedial or enforcement actions of any kind and administrative or judicial proceedings, orders or judgments), causes of action (whether in tort or contract, law or equity, or otherwise), demands, charges, assessments, fines, penalties of any kind, regulatory agency oversight costs, and costs and expenses (including, without limitation, attorneys', consultants' and experts' fees and court costs) which result from, relate to, or arise in any manner whatsoever, directly or indirectly, out of: (i) the use, presence, transportation, storage, treatment, management, release or disposal (on- or off-site) (collectively referred to hereafter as "Management") of Hazardous Materials in, on, under or about the Premises, the Building or the Project by Tenant and/or Tenant's Parties; (ii) any breach or violation of any Environmental Laws applicable to the Premises, the Building or the Project or of any of Tenant's obligations with respect to Article XXII of this Lease, by Tenant and/or Tenant's Parties; (iii) any required or necessary testing, sampling or other investigation, repair, cleanup, remediation, removal, restoration, and/or detoxification, and the preparation of any closure or other required plans, whether such actions are required or necessary during the Lease Term or after the termination of this Lease, which actions relate to or arise out of Management of Hazardous Materials in, on, under or about the Premises, the Building or the Project by Tenant and/or Tenant's Parties; (iv) the failure of Tenant or any of Tenant's Parties to maintain records as required by Environmental Laws concerning Management of Hazardous Materials at or from the Premises or the Project; (v) Tenant's failure to clean up and properly dispose of any Hazardous Materials which are spilled, released, dumped or otherwise deposited in, on, under or about the Premises or the Project by Tenant and/or Tenant's Parties; (vi) the diminution in value of any portion of the Premises due to the Management of Hazardous Materials by Tenant or Tenant's Parties in violation of the Lease; (viii) the loss of or restriction on the use of rentable or usable space due to the Management of Hazardous Materials by Tenant or Tenant's Parties in violation of the Lease; and (vii) any adverse impact of Landlord's marketing of any space within the Premises due to the Management of Hazardous Materials by Tenant or Tenant's Parties in violation of the Lease. This indemnification shall survive the expiration or termination of this Lease. Neither the written consent of Landlord to the presence, use or storage of Hazardous Materials in, on, under or about any portion of the Premises nor the strict compliance by Tenant with all Environmental Laws shall excuse Tenant from its obligations of indemnification pursuant hereto. Tenant shall not be relieved of its indemnification obligations under the provisions of this Section 22.5 due to Landlord's status as either an "owner" or "operator" under any Environmental Laws.

22.6 **Cleanup at End of Term**. Tenant's obligations and liabilities pursuant to the provisions of this Article XXII shall survive the expiration or earlier termination of this Lease. If it is determined by Landlord that the condition of all or any portion of the Project is not in compliance with the provisions of this Lease with respect to Hazardous Materials, including without limitation, all Environmental Laws, at the expiration or earlier termination of this Lease, then Landlord may require Tenant to hold over possession of the Premises until Tenant can surrender the Premises to Landlord in the condition in which the Premises existed as of the Commencement Date (except for reasonable wear and tear) and prior to the appearance of such Hazardous Materials, including without limitation, conducting or performing any closures as required by Environmental Laws. For purposes hereof, the term "reasonable wear and tear" shall not include any deterioration in the condition or diminution of the value of any portion of the Project in any manner whatsoever related to, directly or indirectly, Hazardous Materials. Any such holdover by Tenant will be with Landlord's consent, which may be withheld in Landlord's sole and absolute discretion, will not be terminable by Tenant in any event or circumstance, and will otherwise be subject to all the provisions of this Lease.

22.7 **Limit on Tenant's Liability**. Notwithstanding anything to the contrary contained in this Lease, Tenant shall not be liable pursuant to this Article XXII for contamination that existed at the Premises on the Commencement Date (unless caused by Tenant or Tenant's Parties prior thereto and not otherwise contributed to, disturbed, exacerbated or dispersed by Tenant or Tenant's Parties) or for contamination emanating from neighboring land not contributed to, disturbed, exacerbated or dispersed by Tenant or Tenant's Parties. If at any time during the Lease Term Tenant shall deliver a certification of a qualified environmental consultant certifying that Hazardous Materials are located in the Premises and such Hazardous Materials were either in the Premises before Tenant took possession or placed in the Premises by Landlord or Landlord's contractor after Tenant took possession, then Landlord shall, upon Tenant's request, at Landlord's sole cost and expense, remove or encapsulate such Hazardous Materials in compliance with laws relating to the removal and/or encapsulation thereof and restore any alterations previously performed in such portion of the Premises. Tenant shall cooperate with Landlord in order to permit Landlord to perform such work. Tenant, its contractors, employees, and agents shall not knowingly disturb or make friable any Hazardous Materials encountered by Tenant in the Premises.

ARTICLE XXIII

DEFAULT BY TENANT AND REMEDIES

23.1 **Events of Default**. The following events shall be deemed to be events of default (each, a "**default**") by Tenant under this Lease:

(a) Tenant shall fail to pay any installment of Rent or any other obligation under this Lease involving the payment of money and such failure shall continue for a period of five (5) business days after written notice thereof to Tenant; ***provided, however***, that if during the immediately preceding twelve (12) month period Landlord has already given Tenant a written notice of Tenant's failure to pay an installment of Rent, no notice shall be required for a Rent delinquency to become an event of default (i.e., the event of default will automatically occur on the sixth (6^{th}) day after the date upon which the Rent becomes due). In addition, if Tenant fails to pay any Rent when due more than two times during any twelve-month period, Landlord may, in its reasonable discretion, demand in writing that Tenant pay, and Tenant shall thereafter pay, all future Rent quarterly in advance and by cashier's check or certified funds.

(b) Tenant shall fail to comply with any provision, term, condition or covenant of this Lease, other than as described in subsection (a) above, and shall not cure such failure within thirty (30) days after written notice thereof to Tenant, or if such default cannot reasonably be cured within thirty (30) days then Tenant shall not be in default so long as it has commenced to cure within ten (10) days and is diligently prosecuting same and completes such cure within thirty (30) days after written notice thereof to Tenant.

(c) Tenant shall become insolvent, or shall make a transfer in fraud of creditors, or shall make an assignment for the benefit of creditors.

(d) Tenant 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 Tenant shall be adjudged bankrupt or insolvent in proceedings filed against Tenant.

(e) A receiver or trustee shall be appointed for the Premises or for all or substantially all of the assets of Tenant or an attachment or other judicial seizure shall have occurred for the Premises or all or substantially all of Tenant's assets on the Premises.

(f) Tenant shall abandon the Premises at any time prior to the last month of the Lease Term, subject to the provisions of Section 24.1 of this Lease.

(g) Tenant shall do or permit to be done anything which creates a lien upon the Premises or upon all or any part of the Project, which is not promptly removed within any applicable notice and cure period set forth in this Lease.

(h) Tenant shall fail to maintain insurance as required under Section 16.2 hereof or Tenant shall breach any of the representations, warranties or covenants set forth in Article XXII.

23.2 **Landlord's Remedies**. Upon the occurrence of any such events of default, then in addition to the remedies available to Landlord under the other provisions of this Lease and all applicable laws, Landlord shall also have the option to pursue any one or more of the following remedies without any notice or demand whatsoever. Landlord's election of any one remedy under this Section 23.2 shall in no way prejudice Landlord's right at any time thereafter to exercise any other remedy.

(a) Rent and Other Damages. Tenant shall be obligated pay to Landlord all unpaid Rent and to reimburse Landlord for the damages suffered by Landlord as a result of the event of default, plus interest on such amounts at the maximum contractual rate which could legally be charged in the event of a loan of such amounts to Tenant (but in no event to exceed 18% per annum), such interest to accrue continuously on any unpaid balance due to Landlord by Tenant during the period commencing with the Rent due date and terminating with the date on which Tenant makes full payment of all amounts owing to Landlord at the time of said payment; and Landlord may pursue a monetary recovery from Tenant.

(b) Tenant Liens. Landlord may take any one or more of the actions permissible at law to insure performance by Tenant of Tenant's covenants and obligations under this Lease. It is agreed that in the event of any default described in subsection (g) of Section 23.1 of this Lease, Landlord may pay or bond around such lien, whether or not contested by Tenant; and in such event Tenant agrees to reimburse Landlord on demand for all costs and expenses incurred in connection with any such action, with Tenant further agreeing that Landlord shall in no event be liable for any damages or claims resulting from such action.

(c) Landlord's Re-Entry Without Termination. Landlord may enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part of the Premises, by force, if necessary (except to the extent prohibited by the laws applicable to the Premises), without being liable for prosecution or any claim for damages for such action. Such expulsion and removal by Landlord cannot be deemed a termination or forfeiture of this Lease or acceptance of Tenant's surrender of the Premises unless Landlord expressly notifies Tenant in writing that Landlord is terminating or forfeiting this Lease or accepting Tenant's surrender of the Premises. If Landlord expels or removes Tenant and any other person from the Premises without terminating or forfeiting this Lease or accepting surrender of the Premises, Landlord shall attempt in good faith to relet the Premises; provided, however, that Landlord's obligations as to reletting activities shall be subject to Section 23.4 below. Until Landlord is able, through such efforts, to relet the Premises, Tenant must pay to Landlord, on or before the first day of each calendar month, in advance, the monthly Rent and other charges provided in this Lease. At such time, if any, as Landlord relets the Premises, Tenant must pay to Landlord on the twentieth (20th) day of each calendar month the difference between the monthly Rent and other charges provided in this Lease for such calendar month and the amount actually collected by Landlord for such month from the occupant to whom Landlord has relet the Premises. If it is necessary for Landlord to bring suit in order to collect any deficiency, Landlord has the right to allow such deficiencies to accumulate and to bring an action on several or all of the accrued deficiencies at one time. Any such suit cannot prejudice in any way the right of Landlord to bring a similar action for any subsequent deficiency or deficiencies.

(d) Landlord's Right to Terminate. Landlord may terminate this Lease by written notice to Tenant, in which event Landlord shall have the right to enter upon the Premises, and Tenant shall immediately surrender the Premises to Landlord; and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which Landlord may have for possession or arrearages in Rent (including any late charge or interest which may have accrued pursuant to Section 9.5 or any other provision of this Lease), enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, by force if necessary, without being liable for prosecution or any claim for damages therefor. Tenant hereby waives any statutory requirement of prior written notice for filing eviction or damage suits for nonpayment of rent. In addition, Tenant agrees to pay to Landlord on demand the amount of all loss and damage which Landlord may suffer by reason of any termination effected pursuant to this subsection (d), said loss and damage to be determined by either of the following alternative measures of damages:

(i) Until Landlord is able, through commercially reasonable efforts (i.e., subject to Section 23.4 of this Lease), to relet the Premises under terms reasonably satisfactory to Landlord, Tenant shall pay to Landlord on or before the first (1st) day of each calendar month, the monthly Rent and other charges provided in this Lease. If and after the Premises has been relet by Landlord, Tenant shall pay to Landlord on the twentieth (20th) day of each calendar month the difference between the monthly Rent and other charges provided in this Lease for such calendar month and that are actually collected by Landlord for such month. If it is necessary for Landlord to bring suit in order to collect any deficiency, Landlord shall have a right to allow such deficiencies to accumulate and to bring an action on several or all of the accrued deficiencies at one time. Any such suit shall not prejudice in any way the right of Landlord to bring a similar action for any subsequent deficiency or deficiencies. Any amount collected by Landlord from subsequent tenants for any calendar month in excess of the monthly Rent and other charges provided in this Lease, shall be credited to Tenant in reduction of Tenant's liability for any calendar month for which the amount collected by Landlord will be less than the monthly Rent and other charges provided in this Lease; but Tenant shall have no right to such excess other than the above-described credit.

(ii) When Landlord desires, Landlord may demand a final settlement. Upon demand for a final settlement, Landlord shall have a right to, and Tenant hereby agrees to pay, the difference between the total of all monthly Rent and other charges provided in this Lease for the remainder of the Lease Term and the reasonable rental value of the Premises for such period, such difference to be discounted to present value at a rate equal to the rate of interest which is allowed by laws of the state where the Premises is located when the parties to a contract have not agreed on any particular rate of interest (or, in the absence of such law, at the rate of twelve percent [12%] per annum).

(e) Landlord's Right to Perform. Except as specifically provided otherwise in this Lease, all covenants and agreements by Tenant under this Lease shall be performed by Tenant at Tenant's sole cost and expense and without any abatement or offset of Rent. In the event of any default by Tenant, Landlord may, without waiving or releasing Tenant from any of Tenant's obligations, make such payment or perform such other act as required to cure such default on behalf of Tenant. All sums so paid by Landlord and all necessary incidental costs incurred by Landlord in performing such other acts shall be payable by Tenant to Landlord within five (5) days after demand therefor as Additional Rent.

(f) Security Deposit. Landlord may apply Tenant's Security Deposit to the extent necessary to make good any rent arrearage, to pay the cost of remedying Tenant's default or to reimburse Landlord for expenditures made or damages suffered as a consequence of Tenant's default, without prejudice to any other remedies Landlord may have under this Lease. Following any such application of the Security Deposit, Tenant shall pay to Landlord on demand the amount so applied in order to restore the Security Deposit to its original amount.

(g) Rights and Remedies Cumulative. All rights, options and remedies of Landlord contained in this Section 23.2 and elsewhere in this Lease shall be construed and held to be cumulative, and no one of them shall be exclusive of the other, and Landlord shall have the right to pursue any one or all of such remedies or any other remedy or relief which may be provided by law or in equity, whether or not stated in this Lease. Nothing in this Section 23.2 shall be deemed to limit or otherwise affect Tenant's indemnification of Landlord pursuant to any provision of this Lease.

23.3 **Monthly Rent**. It is expressly agreed that in determining "the monthly Rent and other charges provided in this Lease," as that term is used throughout Section 23.2 above, the term "Rent" includes, without limitation, all payments prescribed in Section 9.1 of this Lease.

23.4 **Mitigation of Damages**.

(a) In the event of a default under this Lease, Landlord and Tenant shall each use commercially reasonable efforts to mitigate any damages resulting from a default of the other party under this Lease.

(b) Landlord's obligation to mitigate damages after a default by Tenant shall be satisfied in full if Landlord undertakes to lease the Premises to another tenant (a "Substitute Tenant") in accordance with the following criteria:

(i) Landlord shall have no obligation to solicit or entertain negotiations with any other prospective tenant for the Premises until Landlord obtains full and complete possession of the Premises including, without limitation, the final and unappealable legal right to relet the Premises free of any claim of Tenant.

(ii) Landlord shall not be obligated to offer the Premises to a Substitute Tenant when other premises in the Project suitable for that prospective tenant's use are (or soon will be) available.

(iii) Landlord shall not be obligated to lease the Premises to a Substitute Tenant for a rental less than the current fair market rental then prevailing for similar space, nor shall Landlord be obligated to enter into a new lease under other terms and conditions that are unacceptable to Landlord under Landlord's then current leasing policies for comparable space.

(iv) Landlord shall not be obligated to enter into a lease with any proposed tenant whose use would:

a. Disrupt the tenant mix or balance of the Project;

b. Violate any restriction, covenant, or requirement contained in the lease of another tenant of the Project;

c. Adversely affect the reputation of the Project; or

d. Be incompatible with the operation of the Project.

(v) Landlord shall not be obligated to enter into a lease with any proposed Substitute Tenant (a "Substitute Lease") which does not have, in Landlord's reasonable opinion, sufficient financial resources or operating experience to operate the Premises in a first-class manner.

(vi) Landlord shall not be required to expend any amount of money to alter, remodel, or otherwise make the Premises suitable for use by a proposed Substitute Tenant unless:

a. Tenant pays any such sum to Landlord in advance of Landlord's execution of a Substitute Lease with such Substitute Tenant (which payment shall not be in lieu of any damages or other sums to which Landlord may be entitled as a result of Tenant's default under this Lease); or

b. Landlord, in Landlord's sole and absolute discretion, determines that any such expenditure is financially justified in connection with entering into any such Substitute Lease.

(c) Upon compliance with the above criteria regarding the releasing of the Premises after a default by Tenant, Landlord shall be deemed to have fully satisfied Landlord's obligation to mitigate damages under this Lease and under any law or judicial ruling in effect on the date of this Lease or at the time of Tenant's default.

(d) Tenant's right to seek damages from Landlord as a result of a default by Landlord under this Lease shall be conditioned on Tenant taking all actions reasonably required, under the circumstances, to minimize any loss or damage to Tenant's property or business, or to any of Tenant's officers, employees, agents, invitees, or other third parties that may be caused by any such default of Landlord. None of the aforementioned Section 23.4 shall limit Tenant's rights under any applicable law or judicial ruling in effect on the date of this Lease or at the time of such alleged default.

23.5 **Landlord Expenses**. It is further agreed that, in addition to all payments required pursuant to Section 23.2 above, Tenant shall compensate Landlord for all expenses reasonably incurred by Landlord in repossession (including, among other expenses, any increase in insurance premiums caused by the vacancy of the Premises), all commercially reasonable expenses incurred by Landlord in reletting (including, among other expenses, repairs, remodeling, replacements, advertisements and brokerage fees), all commercially reasonable concessions granted to a new tenant upon reletting (including, among other concessions, renewal options), all actual losses incurred by Landlord as a direct or indirect result of Tenant's default (including, among other losses, any claims asserted by Landlord's mortgagee or by other tenants or potential tenants of the Project which result in any loss, cost or expense to Landlord) and a reasonable allowance for Landlord's administrative efforts, salaries and overhead attributable directly or indirectly to Tenant's default and Landlord's pursuing the rights and remedies provided herein and under applicable law.

23.6 **Injunctive Remedies**. Landlord may restrain or enjoin any breach or threatened breach of any covenant, duty or obligation of Tenant herein contained without the necessity of proving the inadequacy of any legal remedy or irreparable harm. The remedies of Landlord hereunder shall be deemed cumulative and not exclusive of each other.

23.7 **Attorney Fees and Costs**. In the event either party hereto initiates litigation to enforce the terms and provisions of this Lease, the non-prevailing party in such action shall reimburse the prevailing party for its reasonable attorney's fees, filing fees, and court costs.

23.8 **Use of Security Deposit**. Tenant acknowledges its obligation to deposit with Landlord the sum stated in Section 1.1(p) above, to be held by Landlord for the performance by Tenant of Tenant's covenants and obligations under this Lease. Upon the occurrence of any event of default by Tenant, Landlord may, from time to time, without prejudice to any other remedy provided herein or provided by law, use such funds to the extent necessary to make good any arrears of Rent and any other damage, injury, expense or liability caused to Landlord by such event of default; and in such event, Tenant shall pay to Landlord on demand the amount so applied in order to restore the Security Deposit to its original amount. Tenant specifically waives the provisions of any statute which would prevent Landlord from applying the Security Deposit in accordance with this Section 23.8.

23.9 **Remedies Not Exclusive**. No agreement to accept a surrender of the Premises and no act or omission by Landlord or Landlord's agent during the Lease Term shall constitute an acceptance or surrender of the Premises unless made in writing and signed by Landlord. No reentry or taking possession of the Premises by Landlord shall constitute an election by Landlord to terminate this Lease unless a written notice of such intention is given to Tenant. Pursuit of any of the above remedies shall not preclude pursuit of any other remedies prescribed in other sections of this Lease and any other remedies provided by law. Forbearance by Landlord to enforce one or more of the remedies herein provided upon an event of default shall not be deemed or construed to constitute a waiver of such default or any remedy therefor.

23.10 **Consequential Damages**. Except for any damages which Landlord may suffer because of Tenant's holding over in the Premises following the expiration of the Lease Term or Tenant's default under Article XXII (for which Landlord may recover consequential damages from Tenant), the liability of Tenant to Landlord for any monetary damages arising from any default by Tenant under the terms of this Lease shall be limited to Landlord's actual direct, but not consequential damages therefor. Nothing in this Section 23.10 shall affect or limit Landlord's rights to file legal actions to recover possession of the Premises, or for injunctive relief against Tenant, or any other non-monetary relief as provided in this Lease.

ARTICLE XXIV

[INTENTIONALLY DELETED]

ARTICLE XXV

HOLDING OVER

25.1 **Holdover**. Tenant is not permitted to hold over possession of the Premises after the expiration or earlier termination of the Lease Term without the express prior written consent of Landlord, which consent Landlord may withhold in its sole and absolute discretion. If Tenant holds over after the expiration or earlier termination of the Lease Term with or without the express written consent of Landlord, then, in addition to all other remedies available to Landlord at law or at equity or under this Lease, Tenant shall become a tenant at sufferance only, upon the terms and conditions set forth in this Lease so far as applicable (including Tenant's obligation to pay all Additional Rent under this Lease), but at a Base Rent equal to one hundred fifty percent (150%) of the Base Rent applicable to the Premises immediately prior to the date of such expiration or earlier termination. Any such holdover Rent shall be paid on a per month basis without reduction for partial months during the holdover. Acceptance by Landlord of Rent after such expiration or earlier termination shall not constitute consent to a hold over hereunder or result in an extension of this Lease. This Section 25.1 shall not be construed to create any express or implied right to holdover beyond the expiration of the Lease Term or any extension thereof. Tenant shall be liable, and shall pay to Landlord within ten (10) days after demand, for all losses incurred by Landlord as a result of such holdover, and shall indemnify, defend and hold Landlord and the Landlord Indemnitees harmless from and against all liabilities, damages, losses, claims, suits, costs and expenses (including reasonable attorneys' fees and costs) arising from or relating to any such holdover tenancy, including without limitation, any claim for damages made by a proposed succeeding tenant. Tenant's indemnification obligation hereunder shall survive the expiration or earlier termination of this Lease. The foregoing provisions of this Article XXV are in addition to, and do not affect, Landlord's right of re-entry or any other rights of Landlord hereunder or otherwise at law or in equity, including Landlord's right to enter upon the Premise without notice to Tenant, by use of a duplicate key, master key a locksmith's entry procedures or any other means not involving personal confrontation and to alter or change the door locks and/or other security devices on all entry doors of the Premises, thereby depriving Tenant access to the Premises.

ARTICLE XXVI

NOTICES

26.1 **Method and Addresses**. Wherever any notice is required or permitted under this Lease, such notice shall be in writing. Any notice or document required or permitted to be delivered under this Lease shall be deemed to be delivered when it is actually received by the designated addressee or, if earlier and regardless of whether actually received or not, when it is either (i) deposited in the United States mail, postage prepaid, certified mail, return receipt requested, or (ii) delivered to the custody of a reputable messenger service or overnight courier service, addressed to the applicable party to whom it is being delivered at the respective address for such party as is set out in Section 1.1 above (or for deliveries to Tenant, and at Landlord's option, to Tenant at the Premises), or at such other address as such applicable party may have theretofore specified to the delivering party by written notice.

26.2 **Multiple Parties**. If and when included within the term "Landlord" as used in this Lease there be more than one person, firm or corporation, all shall jointly arrange among themselves for their joint execution of such notice specifying some individual at some specific address for the receipt of notices and payments to the Landlord; if and when included within the term "Tenant" as used in this Lease there be more than one person, firm or corporation, all shall jointly arrange among themselves for their joint execution of such a notice specifying some individual at some specific address for the receipt of notices and payments to Tenant. All parties included within the terms "Landlord" and "Tenant," respectively, shall be bound by notices and payments given in accordance with the provisions of this Article to the same effect as if each had received such notice or payment. In addition, Tenant agrees that notices to Tenant may be given by Landlord's attorney, property manager or other agent.

ARTICLE XXVII

SECURITY DEPOSIT

27.1 **Comingling; Restoration**. The Security Deposit prescribed in Section 1.1(p) of this Lease shall be held by Landlord without liability for interest and as security for the performance by Tenant of Tenant's covenants and obligations under this Lease, it being expressly understood that the Security Deposit shall not be considered an advance payment of Rent or a measure of Landlord's damages in case of default by Tenant. Landlord may commingle the Security Deposit with Landlord's other funds. As prescribed in Section 23.8 of this Lease, Landlord may, without prejudice to any other remedy, use the Security Deposit to the extent necessary to make good any Rent delinquencies or to satisfy any other covenant or obligation of Tenant hereunder; and following any such application of the Security Deposit, Tenant shall pay to Landlord on demand the amount so applied in order to restore the Security Deposit to its original amount. No part of the Security Deposit shall be considered to be held in trust, to bear interest, or to be prepayment for any monies to be paid by Tenant under this Lease.

27.2 **Return of Deposit**. Subject to Section 9.4 above, within thirty (30) days after Tenant (i) has surrendered the Premises to Landlord (which, Landlord and Tenant agree, includes turning over to Landlord's representative all keys to the Premises), and (ii) has provided Landlord with a forwarding address, Landlord shall return to Tenant the portion of the Security Deposit remaining after deducting all damages, charges and other amounts permitted by the terms of this Lease and applicable law. Tenant acknowledges and agrees that if Tenant has breached this Lease before or during Tenant's surrendering the Premises to Landlord, then Landlord shall be entitled to deduct from the Security Deposit being returned to Tenant (if any) upon written notice to Tenant, all damages and losses that Landlord has suffered as a result of such breach of this Lease by Tenant.

27.3 **Assignment of Deposit**. If Landlord transfers its interest in the Premises during the term of this Lease, Landlord may assign the Security Deposit to the transferee; and upon such transfer and the transferee's acknowledgement of responsibility to Tenant for the Security Deposit (which acknowledgement will be deemed to have been effected if the transferee assumes the obligations of the Landlord under this Lease, i.e., even without a specific mention of the Security Deposit), Landlord shall thereafter have no further liability for the return of the Security Deposit.

ARTICLE XXVIII

COMMISSIONS

28.1 **Brokers**. Landlord shall pay to Agent a commission for negotiating this Lease, in accordance with a separate agreement between Landlord and Agent. Tenant hereby represents and warrants to Landlord that Tenant has not dealt with any broker or finder or real estate licensee in connection with this Lease other than Agent. Tenant shall protect, indemnify, defend and hold harmless Landlord from any and all damages, liabilities, losses, costs, or expenses (including, without limitation, reasonable attorneys' fees and costs) which Landlord may incur or sustain from a claim for a commission, broker's fee, finder's fee, or other similar compensation by any party other than Agent claiming by, through or under Tenant with respect to this Lease. As used herein, " Agent" means CBRE, Inc., whose principal office is located at 2001 McKinney Avenue, Suite 700, Dallas, Texas 75201.

ARTICLE XXIX

LAWS AND REGULATIONS

29.1 **OFAC**.

(a) **Certification**. Each of Landlord and Tenant certifies, represents, warrants and covenants that:

(i) It is not acting and will not act, directly or indirectly, for or on behalf of any person, group, entity, or nation named by any Executive Order or the United States Treasury Department as a terrorist, "Specially Designated National and Blocked Person", or other banned or blocked person, entity, nation or transaction pursuant to any law, order, rule, or regulation that is enforced or administered by the Office of Foreign Assets Control; and

(ii) It is not engaged in this transaction, directly or indirectly on behalf of, or instigating or facilitating this transaction, directly or indirectly on behalf of, any such person, group, entity or nation.

(b) **Indemnity**. Landlord and Tenant each hereby agrees to defend (with counsel reasonably acceptable to the other party), indemnify and hold harmless the other party and the respective Landlord Indemnitees and Tenant Indemnitees, as applicable, from and against any and all claims arising from or related to any such breach of the foregoing certifications, representations, warranties and covenants.

29.2 **Tenant's Compliance with Regulations**. Landlord and Tenant acknowledge that there are in effect federal, state, county and municipal laws, orders, rules, directives and regulations (collectively referred to hereinafter as the "Regulations"), and that additional Regulations may hereafter be enacted or go into effect, relating to or affecting the Premises or the Project. Regulations shall include all Environmental Laws. Tenant agrees that it will not cause or permit to be caused any act or practice, by negligence, omission or otherwise, that would violate any of said Regulations. In addition, and notwithstanding any other provisions of this Lease, Tenant shall have no claim against Landlord by reason of any changes Landlord may make to the Project or the Premises pursuant to said Regulations or any charges imposed upon Tenant, Tenant's customers or other invitees pursuant to same. Tenant shall, within ten (10) days after receipt of Landlord's written request, provide Landlord with copies of all documents and information evidencing Tenant's compliance with any Regulations and shall immediately notify Landlord in writing (with copies of any documents involved) upon receipt of any threatened or actual claim, notice, citation, warning, complaint or report pertaining to or involving failure by Tenant or the Premises to comply with any Regulations.

ARTICLE XXX

MISCELLANEOUS

30.1 **Relationship of Parties**. Nothing in this Lease shall be deemed or construed by the parties hereto, nor by any third party, as creating the relationship of principal and agent or of partnership or of joint venture between the parties hereto, it being understood and agreed that neither the method of computation of rent, nor any other provision contained herein, nor any acts of the parties hereto, shall be deemed to create any relationship between the parties hereto other than the relationship of landlord and tenant.

30.2 **No Offset; Independent Covenants**. Tenant shall not for any reason withhold or reduce Tenant's required payments of Rent and other charges provided in this Lease, it being agreed (i) that the obligations of Landlord under this Lease are independent of Tenant's obligations except as may be otherwise expressly provided in this Lease and (ii) that to the maximum extent permitted under applicable law, Tenant hereby waives all rights which it might otherwise have to withhold Rent. The immediately preceding sentence shall not be deemed to deny Tenant the ability of pursuing all rights granted it under this Lease or at law (with the exception of any right of Tenant to offset or withhold the payment of Rent, which right is hereby waived to the maximum extent permitted by applicable law); however, at the direction of Landlord, Tenant's claims in this regard shall be litigated in proceedings different from any litigation involving Rent claims or other claims by Landlord against Tenant (i.e., each party may proceed to a separate judgment without consolidation, counterclaim or offset as to the claims asserted by the other party).

30.3 **Limitation on Liability**. **THE LIABILITY OF LANDLORD TO TENANT FOR ANY DEFAULT BY LANDLORD UNDER THE TERMS OF THIS LEASE SHALL BE LIMITED SOLELY TO LANDLORD'S PROCEEDS IN THE PROJECT AND THE RENTS DERIVED THEREFROM, AND LANDLORD SHALL NOT BE PERSONALLY LIABLE FOR ANY DEFICIENCY, EXCEPT THAT LANDLORD SHALL, SUBJECT TO THE PROVISIONS OF SECTIONS 20.6 AND 27.3 OF THIS LEASE, REMAIN LIABLE TO ACCOUNT TO TENANT FOR ANY SECURITY DEPOSIT UNDER THIS LEASE. THIS SECTION 30.3 SHALL NOT BE DEEMED TO LIMIT OR DENY ANY REMEDIES WHICH TENANT MAY HAVE IN THE EVENT OF DEFAULT BY LANDLORD HEREUNDER WHICH DO NOT INVOLVE THE PERSONAL LIABILITY OF LANDLORD. NOTWITHSTANDING ANYTHING CONTAINED IN THIS LEASE TO THE CONTRARY, THE OBLIGATIONS OF LANDLORD UNDER THIS LEASE (INCLUDING AS TO ANY ACTUAL OR ALLEGED BREACH OR DEFAULT BY LANDLORD) DO NOT CONSTITUTE PERSONAL OBLIGATIONS OF THE INDIVIDUAL MEMBERS, MANAGERS, INVESTORS, PARTNERS, DIRECTORS, OFFICERS, OR SHAREHOLDERS OF LANDLORD OR**

LANDLORD'S MEMBERS, AFFILIATES, OR PARTNERS, AND TENANT SHALL NOT SEEK RECOURSE AGAINST THE INDIVIDUAL MEMBERS, MANAGERS, INVESTORS, PARTNERS, DIRECTORS, OFFICERS, OR SHAREHOLDERS OF LANDLORD OR LANDLORD'S MEMBERS, AFFILIATES OR PARTNERS OR ANY OTHER PERSONS OR ENTITIES HAVING ANY INTEREST IN LANDLORD, OR ANY OF THEIR PERSONAL ASSETS FOR SATISFACTION OF ANY LIABILITY WITH RESPECT TO THIS LEASE. IN ADDITION, IN CONSIDERATION OF THE BENEFITS ACCRUING HEREUNDER TO TENANT AND NOTWITHSTANDING ANYTHING CONTAINED IN THIS LEASE TO THE CONTRARY, TENANT HEREBY COVENANTS AND AGREES FOR ITSELF AND ALL OF ITS SUCCESSORS AND ASSIGNS THAT THE LIABILITY OF LANDLORD FOR ANY DEFAULT BY LANDLORD UNDER THE TERMS OF THIS LEASE SHALL BE LIMITED SOLELY TO THE LANDLORD'S INTEREST IN THE BUILDING AND NO OTHER ASSETS OF LANDLORD, AND LANDLORD SHALL NOT BE PERSONALLY LIABLE FOR ANY DEFICIENCY. The term "Landlord" as used in this Lease, so far as covenants or obligations on the part of the Landlord are concerned, shall be limited to mean and include only the owner or owners, at the time in question, of the fee title to, or a lessee's interest in a ground lease of, the Project. In the event of any transfer or conveyance of any such title or interest (other than a transfer for security purposes only), the transferor shall be automatically relieved of all covenants and obligations on the part of Landlord contained in this Lease accruing after the date of such transfer. Landlord and Landlord's transferees and assignees shall have the absolute right to transfer all or any portion of their respective title and interest in the Premises, the Building, and/or this Lease without the consent of Tenant, and such transfer or subsequent transfer shall not be deemed a violation on Landlord's part of any of the terms and conditions of this Lease.

30.4 **No Continuing Waiver**. One or more waivers of any covenant, term or condition of this Lease by either party shall not be construed as a waiver of a subsequent breach of the same covenant, term or condition. The consent or approval by either party to or of any act by the other party requiring such consent or approval shall not be deemed to waive or render unnecessary consent to or approval of any subsequent similar act. The receipt by Landlord of Rent or any other payment required to be made by Tenant, or any part thereof, shall not be a waiver of any other additional Rent or payment then due, nor shall such receipt, even with knowledge of the breach of any covenant or condition hereof, operate as or be deemed a waiver by Landlord of any of the provisions hereof, or of any of Landlord's rights, remedies, privileges or options hereunder.

30.5 **Force Majeure**. Whenever a period of time is herein prescribed for action to be taken by either party hereto, neither party shall be liable or responsible for, and there shall be excluded from the computation of any such period of time, any delays due to strikes, riots, acts of God, shortages of labor or materials, war, governmental laws, regulations or restrictions or any other causes of any kind whatsoever which are beyond its reasonable control.

30.6 **Landlord's Manager**. Tenant is hereby notified that Landlord may, from time to time, appoint a manager for the Project (each a "Landlord's Manager") to whom Landlord may delegate some or all of Landlord's obligations under this Lease. Upon appointment of a Landlord's Manager and notice to Tenant of the same; (a) Tenant shall be required and authorized to take direction from Landlord's Manager with respect to Tenant's obligations under this Lease and (b) any release or indemnification of Landlord under this Lease shall also apply to Landlord's Manager.

30.7 **Severability.** In the event that any provision or part of this Lease should be held to be invalid or unenforceable by a court of competent jurisdiction, such provision shall be reformed and enforced to the maximum extent permitted by law. If such provision cannot be reformed, then it shall be severed from this Lease and the validity and enforceability of the remaining provisions of this Lease shall not be affected thereby.

30.8 **Underlying Lease.** If this Lease is in fact a sublease, Tenant accepts this Lease subject to all of the terms and conditions of the underlying lease under which Landlord holds the Project or the Building as lessee. Tenant covenants that it will do no act or thing which would constitute a violation by Landlord of its obligation under such underlying lease; provided, however, that Tenant's agreement in this regard is premised on Landlord's assurances to the effect that the terms of this Lease do not violate such underlying lease.

30.9 **Governing Law; Venue**. The laws of the state where the Premises is located shall govern the interpretation, validity, performance and enforcement of this Lease. Except to the extent required otherwise by applicable law, the venue for any action relating to this Lease shall be brought solely and exclusively in the state and the county in which the Premises are located.

30.10 **Headings**. The captions and headings used herein are for convenience only and do not limit or amplify the provisions hereof.

30.11 **Number; Gender**. Whenever herein the singular number is used, the same shall include the plural, and words of any gender shall include each other gender.

30.12 **Inurement**. The terms, provisions and covenants contained in this Lease shall apply to, inure to the benefit of and be binding upon the parties hereto and their respective heirs, successors-in-interest and legal representatives except as otherwise herein expressly provided.

30.13 **Entire Agreement; Amendments**. This Lease contains the entire agreement between the parties, and no rights are created in favor of either party on account of any condition or event other than as specified or expressly contemplated in this Lease. No brochure, rendering, information or correspondence shall be deemed to be a part of this agreement unless specifically incorporated herein by reference. In addition, no agreement shall be effective to change, modify or terminate this Lease in whole or in part unless such is in writing and duly signed by the party against whom enforcement of such change, modification or termination is sought.

30.14 **No Reliance**. LANDLORD AND TENANT HEREBY ACKNOWLEDGE THAT THEY ARE NOT RELYING UPON ANY BROCHURE, RENDERING, OFFERING MATERIALS, INFORMATION, REPRESENTATION OR PROMISE OF THE OTHER, OR OF THE AGENT OR COOPERATING AGENT, EXCEPT AS MAY BE EXPRESSLY SET FORTH IN THIS LEASE.

30.15 **No Recording**. Neither this Lease nor any memorandum thereof shall be recorded by or on behalf of Tenant in any real property records or other public records without the prior written consent of Landlord, which may be withheld in Landlord's sole and absolute discretion.

30.16 **Inducement Recapture in Event of Breach**. Any agreement by Landlord for possession of the Premises by Tenant without the payment or with reduced payment of Rent or other charges or any agreement for the giving or paying by Landlord to or for Tenant of any cash or other bonus, inducement, incentive or consideration for Tenant's entering into this Lease including, but not limited to tenant improvement allowances and abated Rent, all of which concessions are hereinafter collectively referred to as "Inducement Provisions," are conditioned upon Tenant's full, timely and faithful performance of all of the terms, covenants, and conditions of this Lease to be performed or observed by Tenant. Upon the occurrence of an event of default by Tenant, which results in termination of this Lease by Landlord, any Rent, other charge, bonus, the unamortized portion of any inducement or consideration abated, given or paid by Landlord under such an Inducement Provision shall be due and payable by Tenant to Landlord and recoverable by Landlord as Additional Rent due under this Lease upon such termination.

30.17 **Quiet Enjoyment**. Upon payment by Tenant of the Rents herein provided, and upon the observance and performance of all terms, provisions, covenants and conditions on Tenant's part to be observed and performed, Tenant shall, subject to all of the terms, provisions, covenants and conditions of this Lease, peaceably and quietly hold and enjoy the Premises for the entire term of this Lease without hindrance or molestation from all persons claiming by, through or under Landlord.

30.18 **Landlord's Costs**. Except as otherwise set forth herein, Tenant shall reimburse Landlord on demand for all reasonable legal, engineering, and other professional or consulting services and expenses incurred by Landlord in connection with any requests by Tenant or any lender of Tenant for consent, waiver or approval of any kind.

30.19 **Exhibits Control**. This Lease consists of thirty articles and Exhibits A through I. With the exception of Article VII, in the event any provision of an exhibit or other attached page shall be inconsistent with a provision in the body of this Lease, the provision as set forth in the exhibit or other attached page shall be deemed to control

30.20 **No Offer**. The submission by Landlord of this instrument to Tenant for examination, negotiation or signature does not constitute an offer of, an option for, or a representation by Landlord regarding, a prospective lease. This Lease shall be effective if and when (and only if and when) it has been executed and delivered by both Landlord and Tenant.

30.21 **Counterparts and Electronic Transmissions**. This Lease may be executed in two or more counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument. The parties contemplate that they may be executing counterparts of this Agreement transmitted by facsimile or email in PDF format and agree and intend that a signature by either facsimile machine or email in PDF format shall bind the party so signing with the same effect as though the signature were an original signature.

30.22 **Waiver of Trial by Jury**. This Lease and the parties' respective rights hereunder shall be governed by the laws of the State. In the event of litigation, suit shall be brought in Collin County, Texas. LANDLORD AND TENANT WAIVE THEIR RESPECTIVE RIGHTS TO TRIAL BY JURY OF ANY CONTRACT OR TORT CLAIM, COUNTERCLAIM, CROSS-COMPLAINT, OR CAUSE OF ACTION IN ANY ACTION, PROCEEDINGS, OR HEARING BROUGHT BY EITHER PARTY AGAINST THE OTHER ON ANY MATTER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, OR TENANT'S USE OR OCCUPANCY OF THE PREMISES, INCLUDING WITHOUT LIMITATION ANY CLAIM OF INJURY OR DAMAGE OR THE ENFORCEMENT OF ANY REMEDY UNDER ANY CURRENT OR FUTURE LAW, STATUTE, REGULATION, CODE, OR ORDINANCE.

30.23 **Deceptive Trade Practices**. TENANT HEREBY WAIVES ALL ITS RIGHTS UNDER THE DECEPTIVE TRADE PRACTICES – CONSUMER PROTECTION ACT, SECTION 17.41 ET SEQ. OF THE TEXAS BUSINESS AND COMMERCE CODE, A LAW THAT GIVES CONSUMERS SPECIAL RIGHTS AND PROTECTIONS. AFTER CONSULTATION WITH AN ATTORNEY OF TENANT'S OWN SELECTION, TENANT VOLUNTARILY CONSENTS TO THIS WAIVER.

[Landlord and Tenant signatures, next page.]

EXECUTED to be effective as of the later of the dates accompanying a signature by Landlord or Tenant below; provided, however, that if the later of the dates accompanying a signature by Landlord or Tenant below is different from the date specified as the "Date of This Lease" on the cover page of this Lease, then the date so specified on the cover page of this Lease shall be deemed to be the "Date of This Lease" for all purposes.

LANDLORD:

TCG INDUSTRIAL SHILOH LLC,
a Delaware limited liability company

By:	/s/ Peter Walter
Name:	Peter Walter
Title:	Authorized Signatory

Date of Signature: August 29, 2019

TENANT:

INOGEN, INC.,
a Delaware corporation

By:	/s/ Alison Bauerlein
Name:	Alison Bauerlein
Title:	CFO

Date of Signature: August 26, 2019

EXHIBIT A

The Site Plan of the Premises

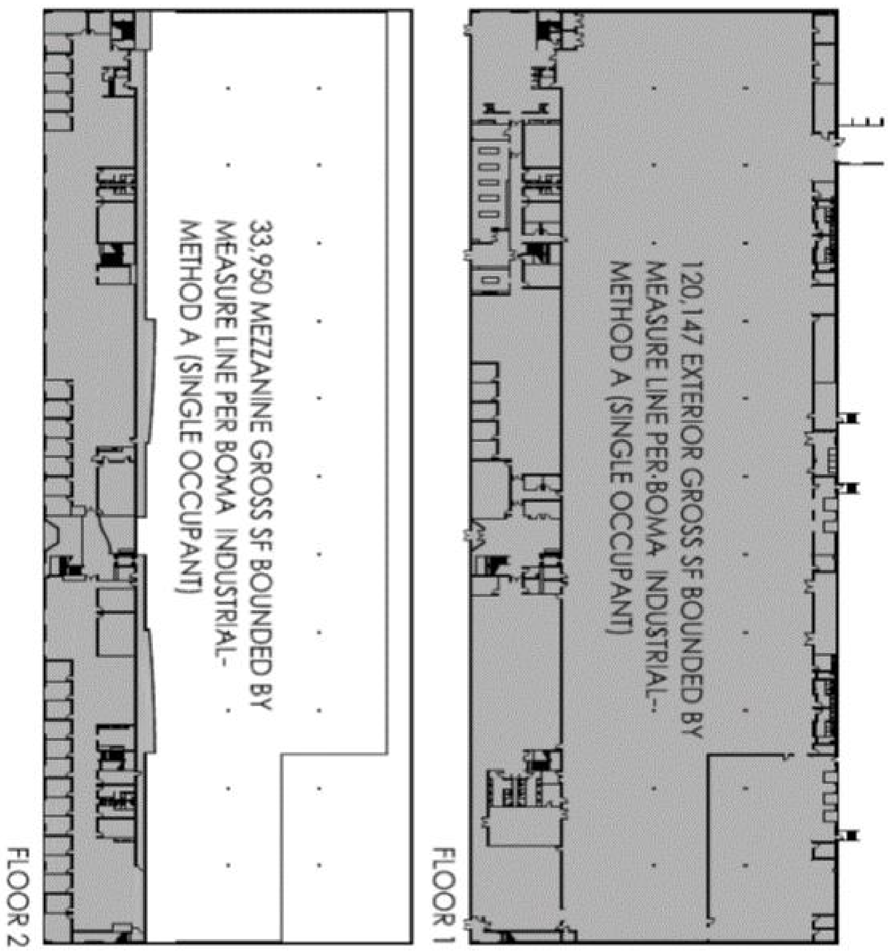


EXHIBIT B

Legal Description of The Project

BEING a 20.07 acre tract of land out of the J.T. McCullough Survey, Abstract Number 633, Collin County, Texas, and being all of Lot 2, Block A of FLEXTRONICS CAMPUS ADDITION, an addition to the City of Plano, Collin County, Texas, as recorded in Cabinet N, Page 527 of the Plat Records of Collin County, Texas (P.R.C.C.T.) and being a part of the land described by deed to Westcore Shiloh, LLC, as recorded in Instrument Number 20061221001799890, Deed Records of Collin County, Texas, (D.R.C.C.T.) and being more particularly described as follows:

BEGINNING at a 1/2-inch found iron rod with yellow plastic cap stamped "HALFF ASSOC, INC." (hereinafter referred to as "with cap") at the south end of a corner clip at the intersection of the south right-of-way line of Global Lane (a 60 foot wide right-of-way) with the east right-of-way line of Shiloh Road (a variable width right-of-way);

THENCE North 44 degrees 30 minutes 03 seconds East, departing said east right-of-way line and along said south right-of-way line, a distance of 27.70 feet to a 1/2-inch found iron rod with cap for corner at the beginning of a non-tangent circular curve to the right, having a radius of 220.00 feet and whose chord bears South 73 degrees 41 minutes 28 seconds East, a distance of 102.64 feet;

THENCE in a Southeasterly direction along said south right-of-way line and with said curve to the right, through a central angle of 26 degrees 58 minutes 49 seconds, an arc distance of 103.60 feet to a set P.K. nail for corner;

THENCE South 60 degrees 12 minutes 06 seconds East, continuing along said south right-of-way line, a distance of 61.15 feet to a 1/2-inch found iron rod with cap at the beginning of a tangent circular curve to the left, having a radius of 280.00 feet and whose chord bears South 75 degrees 12 minutes 06 seconds East, a distance of 144.94 feet;

THENCE in a Southeasterly direction, continuing along said south right-of-way line and along said curve to the left, through a central angle of 30 degrees 00 minutes 04 seconds, an arc distance of 146.61 feet to a 1/2-inch found iron rod with cap for corner;

THENCE North 89 degrees 47 minutes 54 seconds East, continuing along said south right-of-way line, a distance of 91.05 feet to a 1/2-inch found iron rod with cap for corner at the beginning of a non-tangent circular curve to the left, having a radius of 60.00 feet and whose chord bears North 54 degrees 50 minutes 25 seconds East, a distance of 119.55 feet;

THENCE in a Northeasterly direction, continuing along said south right-of-way line and along said curve to the left, through a central angle of 189 degrees 54 minutes 58 seconds, an arc distance of 198.88 feet to a 1/2-inch found iron rod with cap for corner in the south line of Lot 4 of said Flextronics Campus Addition;

THENCE North 89 degrees 47 minutes 54 seconds East, departing said right-of-way line and along said south line, a distance of 837.67 feet to a 1/2-inch found iron rod with cap for corner;

THENCE South 00 degrees 12 minutes 06 seconds East, along the west line of said Lot 4, a distance of 546.50 feet to a 1/2-inch found iron rod with cap for the easterly common corner of Lots 2 and 3 of said Flextronics Campus Addition;

THENCE South 89 degrees 47 minutes 54 seconds West, along the common line of said Lots 2 and 3, a distance of 852.66 feet to a found "X" for corner;

THENCE South 00 degrees 12 minutes 06 seconds East, continuing along said common line, a distance of 331.59 feet to a 1/2-inch found iron rod with cap for corner;

THENCE South 89 degrees 47 minutes 54 seconds West, continuing along said common line, a distance of 496.67 feet to a found aluminum monument for corner on said east right-of-way line of Shiloh Road;

THENCE North 00 degrees 35 minutes 54 seconds East, along said east right-of-way line, a distance of 847.80 feet to a 1/2-inch found iron rod with cap at the beginning of a tangent circular curve to the left, having a radius of 1,255.00 feet and whose chord bears North 00 degrees 18 minutes 08 seconds West, a distance of 39.44 feet;

THENCE in a Northerly direction, continuing along said east right-of-way line and along said curve to the left, through a central angle of 01 degree 48 minutes 03 seconds, an arc distance of 39.45 feet to the POINT OF BEGINNING AND CONTAINING 874,305 square feet or 20.07 acres of land, more or less.

EXHIBIT C

Move-Out Standards

At the expiration or earlier termination of the Lease and in addition to any other provisions of the Lease regarding surrender of the Premises, Tenant shall surrender the Premises in the same condition as they were upon delivery of possession thereto under the Lease, reasonable wear and tear excepted, and shall deliver all keys to Landlord. Before surrendering the Premises, subject to the provisions of Section 12.4, Tenant shall remove all of its personal property and trade fixtures and such alterations or additions to the Premises made by Tenant as may be specified by Landlord for removal; provided, Landlord will not require Tenant to remove the Initial Alterations. If Tenant fails to remove its personal property, fixtures or alterations or additions upon the expiration or earlier termination of the Lease, the same shall be deemed abandoned and shall become the property of Landlord. Notwithstanding the foregoing, Tenant shall be liable to Landlord for all costs and damages incurred by Landlord in removing, storing or selling such property, fixtures, alterations or additions and in restoring the Premises to the condition required pursuant to the Lease.

Notwithstanding anything to the contrary in the Lease, Tenant shall surrender the Premises, at the time of the expiration or earlier termination of the Lease, in a condition that shall include, but is not limited to, the following:

1. Lights:	Office, exterior, emergency exit and warehouse lights will be fully operational with all bulbs functioning. Replacement lamps should be consistent in color, type and style.
2. Roll-Up Doors & Pedestrian Doors:	Roll-up doors must receive final maintenance by a licensed contractor to include: lube, adjustments, alignment and replacement of seals and panels (if required). Pedestrian doors must have all hardware in working condition (including crash hardware, thresholds, closers and weather-stripping). Replacement of doors and/or hardware shall be of similar type as existing. Tenant shall provide written evidence of such maintenance/repairs to Landlord.
3. Loading Docks:	Includes dock levelers, dock bumpers, dock door seals, pit levelers and sump pumps. Tenant to provide evidence of final maintenance on all items from a licensed contractor.
4. Warehouse Floor:	Tenant shall remove all paint and stickers and leave floors free of stains and swept, with no racking bolts or other protrusions left in floor. Cracks should be repaired with an epoxy or polymer.
5. Tenant-Installed Equipment & Wiring:	Tenant shall remove all air lines, junction boxes, distribution boxes, conduit, etc. All wiring shall be terminated back to point of connection. Telecom and associated data wiring shall be removed and terminated at the original phone board.
6. Walls:	Warehouse Walls - Sheetrock (drywall) damage should be patched and fire-taped so that there are no holes remaining. Office walls shall be patched and returned to a paint-ready condition.
7. Roof:	Any tenant-installed equipment must be removed and roof penetrations properly repaired by Landlord's roofing contractor.
8. Signs:	All Tenant-installed signage shall be removed, including interior and exterior window signage. Exterior building surface shall be restored to original condition, including patching of all holes and painting to match exterior color.
9. Heating & Air Conditioning System:	HVAC equipment must receive final maintenance by a licensed HVAC contractor, including filter changes and repairs/replacements if required. Tenant shall provide written evidence of maintenance/repairs to Landlord.

10. Plumbing:	Restroom/Kitchen fixtures and accessories (i.e. "insta-hot" water heaters, vanity heaters, handrails, soap dispensers, paper towel holders, etc.) shall be returned in good working condition, free of leaks and stains. Tenant shall provide written evidence of final service to water heater.
11. Overall Cleanliness:	Clean windows, sanitize bathroom(s), vacuum carpet, and remove any and all debris from office and warehouse. Remove all pallets and debris from exterior of premises and dock areas. In addition, Tenant shall properly dispose of all hazardous materials, including paint, at Tenant's expense.

EXHIBIT D

Rules and Regulations

General Rules

Tenant shall faithfully observe and comply with the following Rules and Regulations:

1. Tenant shall not alter any locks or install any new or additional locks or bolts on any doors or windows of the Premises without obtaining Landlord's prior written consent, which consent may be withheld in Landlord's reasonable discretion. Tenant shall bear the cost of any lock changes or repairs required by Tenant.

2. Access to the Project may be refused unless the person seeking access has proper identification or has a previously received authorization for access to the Project. Landlord and its agents shall in no case be liable for damages for any error with regarding to the admission to or exclusion from the Project of any person. In case of invasion, mob, riot, public excitement or other commotion, Landlord reserves the right to prevent access to the Project during the continuance thereof by any means it deems appropriate for the safety and protection of life and property.

3. No cooking shall be done or permitted on the Premises, nor shall the Premises be used for any improper or objectionable purposes. Notwithstanding the foregoing, Underwriters' Laboratory-approved equipment and microwave ovens may be used in the Premises for heating food and brewing coffee, tea, hot chocolate and similar beverages for employees and visitors of Tenant, provided that such use is in accordance with all applicable federal, state and city laws, codes, ordinances, rules and regulations; and provided further that such cooking does not result in odors escaping from the Premises.

4. No boring or cutting for wires shall be allowed without the consent of Landlord, which consent may be withheld in Landlord's sole and absolute discretion. Tenant shall not interfere with broadcasting or reception from or in the Project or elsewhere. No gaming devices shall be operated in the Premises.

5. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs, or who shall in any manner do any act in violation of any of these Rules and Regulations.

6. Tenant shall store all its trash and garbage within the interior of the Premises or in other locations approved by Landlord, in Landlord's sole and absolute discretion. 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. No material shall be placed in the trash boxes or receptacles if such material is of such nature that it may not be disposed of in the ordinary and customary manner of removing and disposing of trash in the vicinity of the Project without violation of any law or ordinance governing such disposal.

7. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any governmental agency.

8. The sidewalks, entries, and driveways of the Project shall not be obstructed by Tenant or any Tenant Parties, or used by them for any purpose other than ingress to and egress from the Premises.

9. Except for qualified service dogs, no animals shall be allowed in or about the Premises or in the Common Areas.

10. Tenant shall not install or operate any steam or gas engine, boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.

11. Tenant shall not permit 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 or the Project.

12. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.

PARKING RULES

1. Tenant shall not permit or allow any vehicles that belong to or are controlled by Tenant or Tenant's employees, suppliers, shippers, customers or invitees to be loaded, unloaded or parked in areas other than those designated by Landlord for such activities and at times approved by Landlord in Landlord's reasonable discretion consistent with the Lease terms. Tenant shall ensure that users of the parking area obey all posted signs and park only in the areas designated for vehicle parking. Tenant and its customers, employees, suppliers, shippers and invitees shall comply with all rules and regulations adopted by Landlord from time to time relating to truck parking and/or truck loading and unloading.

2. Landlord reserves the right to relocate all or a part of parking spaces within the current parking area. If access to the parking areas is not now controlled with gates or similar devices, Landlord shall have the right, but not the obligation, to install gates or other devices to control access to the parking areas, and Tenant shall comply with all of Landlord's rules and regulations relating to access to the parking areas. Landlord shall use commercially reasonable efforts to minimize inconvenience to Tenant caused by the relocation of parking spaces or the installation of parking controls.

3. Landlord will not be responsible for any damage to vehicles, injury to persons or loss of property, all of which risks are assumed by the party using the parking area.

4. The maintenance, washing, waxing or cleaning of vehicles in the parking area or Common Areas is prohibited.

5. Tenant shall be responsible for seeing that all of its employees, agents, contractors, suppliers, shippers, and invitees comply with the applicable parking rules, regulations, laws and agreements.

6. At Landlord's request, Tenant shall provide Landlord with a list which includes the name of each person using the parking facilities based on Tenant's parking rights under this Lease and the license plate number of the vehicle being used by that person. Tenant shall provide Landlord with an updated list within ten (10) days after any part of the list becomes inaccurate.

7. All parking spaces may only be used for parking vehicles no larger than full-size passenger automobiles or pick-up trucks. Parking any type of recreational vehicles is specifically prohibited on or about the Project. No vehicle of any type shall be stored in the parking areas at any time. No overnight truck parking shall be allowed except to the extent that the Premises include truck loading doors in which event one truck may be parked overnight in front of each loading door. 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. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.

8. If Tenant commits or allows in the parking lot any of the activities prohibited by this Lease or the Rules, then Landlord shall have the right, without notice, in addition to such other rights and remedies that it may have, to remove or tow away the vehicle involved and charge the cost to Tenant, which cost shall be immediately payable by Tenant upon demand by Landlord.

Landlord reserves the right at any time to change or rescind any one or more of these Rules and Regulations, or to make such other and further reasonable Rules and Regulations as in Landlord's judgment may from time to time be necessary for the management, safety, care and cleanliness of the Project, and for the preservation of good order therein, as well as for the convenience of other tenants therein, provided that Tenant's rights under the Lease are not materially and adversely impacted. Landlord may waive any one or more of these Rules and Regulations for the benefit of any particular tenant, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of any other tenant, nor prevent Landlord from thereafter enforcing any such Rules or Regulations against any or all tenants of the Project. Tenant shall be deemed to have read these Rules and Regulations and to have agreed to abide by them as a condition of its occupancy of the Premises.

EXHIBIT E

Form of Hazardous Materials Disclosure Certificate

General Information

Name of Responding Company: ______________________________________

Mailing Address: ______________________________________

Signature: ______________________________________

Title: ____________________ Phone: ____________________

Date: ______________ Age of Facility: __________ Length of Occupancy: ______________

Major products manufactured and/or activities conducted on the property: ____________________

Types of Business Activities
(check all that apply)

☐ Machine Shop
☐ Light assembly
☐ Research and development
☐ Product service or repair
☐ Photo processing
☐ Automotive service and repair
☐ Manufacturing
☐ Warehouse
☐ Integrated/printed circuit
☐ Chemical/pharmaceutical product

Hazardous Materials Activities
(check all that apply)

☐ Degreasing
☐ Chemical/etching/milling
☐ Wastewater treatment
☐ Painting
☐ Striping
☐ Cleaning
☐ Printing
☐ Analytical lab
☐ Plating
☐ Chemical/missing/synthesis
☐ Silkscreen
☐ Lathe/mill machining
☐ Deionizer water product
☐ Photo masking
☐ Wave solder
☐ Metal finishing

HAZARDOUS MATERIALS/WASTE HANDLING AND STORAGE

A. Are hazardous materials handled on any of your shipping and receiving docks in container quantities greater than one gallon? ☐ Yes ☐ No

B. If hazardous materials or waste are stored on the premises, please check off the nature of the storage and type(s) of materials below.

Types of Storage Container
(list above-ground storage only)

☐ 1 gallon or 3 liter bottles/cans
☐ 5 to 30 gallon carboys
☐ 55 gallon drums
☐ Tanks

Type of Hazardous Materials and/or Waste Stored

☐ Acid
☐ Phenol
☐ Caustic/alkaline cleaner
☐ Cyanide

- ☐ Photo resist stripper
- ☐ Paint
- ☐ Flammable solvent
- ☐ Gasoline/diesel Fuel
- ☐ Nonflammable/chlorinated solvent
- ☐ Oil/cutting fluid

C. Do you accumulate hazardous waste onsite? ☐ Yes ☐ No

If yes, how is it being handled?

- ☐ On-site treatment or recovery
- ☐ Discharged to sewer
- ☐ Hauled offsiteIf hauled offsite, by whom: ____________________________
- ☐ Incineration

D. Indicate your hazardous waste storage status with Department of Health Services:

- ☐ Generator
- ☐ Interim status facility
- ☐ Permitted TSDF
- ☐ None of the above

WASTEWATER TREATMENT/DISCHARGE

A. Do you discharge industrial wastewater to:

- ☐ Sewer
- ☐ Storm drain
- ☐ Surface water
- ☐ No industrial discharge

B. Is your industrial wastewater treated before discharge? ☐ Yes ☐ No

If yes, what type of treatment is being conducted:

- ☐ Neutralization
- ☐ Metal hydroxide formation
- ☐ Closed-loop treatment
- ☐ Cyanide destruct
- ☐ HF treatment
- ☐ Other

SUBSURFACE CONTAINMENT OF HAZARDOUS MATERIALS/WASTES

A. Are buried tanks/sumps being used for any of the following:

- ☐ Hazardous waste storage
- ☐ Chemical storage
- ☐ Gasoline/diesel fuel storage
- ☐ Waste treatment
- ☐ Wastewater neutralization
- ☐ Industrial wastewater treatment
- ☐ None of the above

B. If buried tanks are located onsite, indicate their construction:

☐ Steel ☐ Fiberglass ☐ Concrete
☐ Inside open vault ☐ Double walled

C. Are hazardous materials or untreated industrial wastewater transported via buried piping to tanks, process areas or treatment areas: ☐ Yes ☐ No

D. Do you have wet floors in your process areas? ☐ Yes ☐ No

If yes, name processes: ______________________________

E. Are abandoned underground tanks or sumps located on the property? ☐ Yes ☐ No

HAZARDOUS MATERIALS SPILLS

A. Have hazardous materials ever spilled to:

☐ The sewer
☐ The storm drain
☐ Onto the property
☐ No spills have occurred

B. Have you experienced any leaking underground tanks or sumps? ☐ Yes ☐ No

C. If spills have occurred, were they reported? ☐ Yes ☐ No

Check which government agencies that you contacted regarding the spill(s):

☐ Department of Health Services
☐ Department of Fish and Game
☐ Environmental Protection Agency
☐ Regional Water Quality Control Board
☐ Fire Department

D. Have you been contacted by a government agency regarding soil or groundwater contamination on your site? ☐ Yes ☐ No

Do you have exploratory wells onsite? ☐ Yes ☐ No

If yes, indicate the following:

Number of wells: __________ Approximate depth of wells: __________ Well diameters: __________

PLEASE ATTACH ENVIRONMENTAL REGULATORY PERMITS, AGENCY REPORTS THAT APPLY TO YOUR OPERATION AND HAZARDOUS WASTE MANIFESTS.

Check off those enclosed:

- ☐ Hazardous Materials Inventory Statement, HMIS
- ☐ Hazardous Materials Management Plan, HMMP
- ☐ Department of Health Services, Generator Inspection Report
- ☐ Underground Tank Registrations
- ☐ Industrial Wastewater Discharge Permit
- ☐ Hazardous Waste Manifest

EXHIBIT F

Commencement Date Certificate

[SAMPLE ONLY – FORM TO BE COMPLETED BY LANDLORD AND EXECUTED BY TENANT ON OR AFTER COMMENCEMENT DATE]

LANDLORD:

TENANT:

LEASE DATE: ___,

PREMISES:

Tenant hereby accepts the Premises as being in the condition required under the Lease.

The Commencement Date of the Lease is___,___.

The Expiration Date of the Lease is___,___.

Landlord:	**Tenant**:
[DO NOT SIGN]	**[DO NOT SIGN]**
By: , a	
By: ______	By: ______
Its: ______	Its: ______
______	______
Telephone: ( ) ______	Telephone: ( ) ______
Facsimile: ( ) ______	Facsimile: ( ) ______
Date: ______	Date: ______

EXHIBIT G

Option to Extend Addendum

Provided no default exists and Tenant is not subleasing any of the Premises at the time of such election, Tenant may extend this Lease for two (2) additional periods of five (5) years each (each, an "Extension Term"), by delivering written notice of the exercise thereof to Landlord not earlier than 12 months nor later than nine (9) months before the then-scheduled expiration of the Lease Term. The Base Rent payable for each month during each Extension Term shall be the prevailing effective market rental rate . The applicable effective fair market rental rate shall be the effective rate that Landlord and comparable landlords of comparable buildings in the East Plano Industrial Submarket have accepted in current transactions from new (non-renewal and non-expansion) non-sublease and nonaffiliated tenants including annual adjustments to the base rent, tenant improvement allowances, other concessions and commissions with such comparable transactions adjusted, as appropriate, for differences in building quality, size, term, credit of tenant and any other appropriate adjustments (the "Fair Market Rental Rate"). There will be no "floor" or "minimum" for the Fair Market Rental Rate, and Landlord and Tenant (and, if applicable, the arbitrator) will disregard comparable rents established as a result of any such "floor" or "minimum", and disregard any value associated with tenant improvements paid for by Tenant, if any, in excess of the tenant improvement allowance. Within 30 days after receipt of Tenant's notice to extend, Landlord shall deliver to Tenant written notice of the Fair Market Rental Rate and shall advise Tenant of the required adjustment to Base Rent, if any, and the other terms and conditions offered. Tenant shall, within thirty (30) days after receipt of Landlord's notice, notify Landlord in writing whether Tenant accepts or rejects Landlord's determination of the Fair Market Rental Rate. If Tenant timely notifies Landlord that Tenant accepts Landlord's determination of the Fair Market Rental Rate, then, on or before the commencement date of the extended Lease Term, Landlord and Tenant shall execute an amendment to this Lease extending the Lease Term on the same terms provided in this Lease, except as follows:

(a) Base Rent shall be adjusted to the Fair Market Rental Rate;

(b) Tenant shall have no further renewal option beyond these two Extension Terms unless expressly granted by Landlord in writing; and

(c) Landlord shall provide to Tenant any allowances (e.g., moving allowance, construction allowance, and the like) or other tenant inducements if and to the extent such allowances were applicable in determining the Fair Market Rental Rate.

If Tenant rejects Landlord's determination of the Fair Market Rental Rate, Landlord and Tenant shall attempt in good faith to agree upon such Fair Market Rental Rate using their best good faith efforts. If Landlord and Tenant fail to reach agreement within fifteen (15) days following Tenant's Review Period (the " Outside Agreement Date"), then each party's determination shall be submitted to arbitration in accordance with the following paragraph. If Tenant fails to so accept or object in writing within Tenant's Review Period, Tenant shall conclusively be deemed to have disapproved of the Fair Market Rental Rate determined by Landlord.

If Tenant elects to require that the Fair Market Rental Rate be determined pursuant to arbitration, the determination of the Fair Market Rental Rate shall be made by brokers (and if Tenant makes such election, Tenant shall be deemed to have irrevocably renewed the Lease Term, subject only to the determination of the Fair Market Rental Rate as provided below). In such event, within ten days thereafter, each party shall select a qualified commercial real estate broker with at least ten years' experience in leasing property and buildings in the submarket in which the Premises are located. The two brokers shall give their opinion of prevailing rental rates within 20 days after their retention. In the event the opinions of the two brokers differ and, after good faith efforts over the succeeding 20-day period, they cannot mutually agree, the brokers shall immediately and jointly appoint a third broker with the qualifications specified above. This third broker shall immediately (within five days) choose either the determination of Landlord's broker or Tenant's broker and such choice of this third broker shall be final and binding on Landlord and Tenant. Each party shall pay its own costs for its real estate broker. Following the determination of the Fair Market Rental Rate by the brokers, the parties shall equally share the costs of any third broker. The parties shall immediately execute an amendment as set forth above. If Tenant fails to timely notify Landlord in writing that Tenant accepts or rejects Landlord's determination of the Fair Market Rental Rate, time being of the essence with respect thereto, Tenant shall be deemed to have accepted Landlord's determination of the Fair Market Rental Rate and Landlord and Tenant shall execute an amendment to the Lease as provided above.

Tenant's rights under this Exhibit shall terminate if (1) this Lease or Tenant's right to possession of the Premises is terminated, (2) Tenant assigns any of its interest in this Lease or sublets any portion of the Premises which is continuing at the time of exercising the renewal option (other than in connection with a Permitted Transfer), or (3) Tenant fails to timely exercise its option under this Exhibit, time being of the essence with respect to Tenant's exercise thereof.

EXHIBIT H

IMPROVEMENT ADDENDUM

1. **Initial Alterations**. Following the mutual execution of this Lease and Tenant's payment of all Rent and security deposits required to be paid upon the execution of the Lease, Tenant shall have the right to perform certain alterations and improvements in the Premises (the "Initial Alterations"). Notwithstanding the foregoing, Tenant and its contractors shall not have the right to perform Initial Alterations in the Premises unless and until Tenant has complied with all of the terms and conditions of the Lease with respect to Alterations, including, without limitation, approval by Landlord of (a) the final plans for the Initial Alterations, (b) the contractors to be retained by Tenant to perform such Initial Alterations, and (c) the insurance coverage obtained by Tenant and its contractors in connection with the Initial Alterations. Landlord shall reimburse Tenant for up to $5,000.00 for the initial space plan and one revision (the "Space Plan Allowance"). Upon completion of the space plan, Tenant shall provide Landlord the invoice for such. Landlord shall reimburse Tenant for the Space Plan Allowance within ten (10) days following receipt of the invoice. Tenant shall be responsible for all elements of the plans for the Initial Alterations (including, without limitation, compliance with law, the structural integrity of the design, the configuration of the Premises and the placement of Tenant's furniture, appliances and equipment), and Landlord's approval of such plans shall in no event relieve Tenant of the responsibility therefor. Landlord's approval of the contractors to perform the Initial Alterations shall not be unreasonably withheld. Landlord's approval of the general contractor to perform the Initial Alterations shall not be considered to be unreasonably withheld if any such general contractor (i) does not have trade references reasonably acceptable to Landlord, (ii) does not maintain insurance as required by Landlord, (iii) does not have the ability to be bonded for the work in an amount satisfactory to Landlord, (iv) does not provide current financial statements reasonably acceptable to Landlord, or (v) is not licensed as a contractor in the state and municipality in which the Premises is located. Tenant acknowledges the foregoing is not intended to be an exclusive list of the reasons why Landlord may reasonably withhold its consent to a general contractor.

2. **Cost of Initial Alterations**. Promptly after obtaining Landlord's approval of the plans for the Initial Alterations and before commencing construction of the Initial Alterations, Tenant shall deliver to Landlord a reasonably detailed estimate of the cost of the Initial Alterations. If such estimated cost exceeds the Construction Allowance (hereinafter defined), Tenant shall pay the difference (the "Excess Cost") to Landlord before proceeding with the Initial Alterations (and the amount so paid to Landlord shall be referred to herein as "Tenant's Deposit"). In addition, Tenant shall pay to Landlord, within ten (10) days after Landlord's written demand, a construction management fee equal to 1% of the hard costs of the Initial Alterations to compensate Landlord for reviewing the plans for the Initial Alterations and for costs incurred by Landlord in facilitating completion of the Initial Alterations. Landlord reserves the right to deduct such fee from the Construction Allowance.

3. **Construction and Construction Allowance**.

(a) Provided Tenant is not in default pursuant to the terms of the Lease, Landlord agrees to contribute up to $2,346,765.00 (the "Construction Allowance") toward the cost of performing the Initial Alterations. The Construction Allowance may be used for all hard and soft costs of construction and relocation including; construction management, architect and engineering, permits, security, signage, cabling, moving and furniture fixtures and equipment The Construction Allowance and Tenant's Deposit, if applicable, less a 10% retainage (which retainage shall be payable as part of the final draw), shall be paid to Tenant or, at Landlord's option, to the order of the general contractor that performs the Initial Alterations, in periodic disbursements within thirty (30) days after receipt of the following documentation: (i) an application for payment and sworn statement of contractor substantially in the form of AIA Document G-702 covering all work for which disbursement is to be made to a date specified therein; (ii) a certification from an AIA architect substantially in the form of the Architect's Certificate for Payment which is located on AIA Document G702, Application and Certificate of Payment; (iii) contractor's, subcontractor's and material supplier's waivers of liens which shall cover all Initial Alterations for which disbursement is being requested and all other statements and forms required for compliance with the mechanics' lien laws of the state in which the Premises is located, together with all such invoices, contracts, or other supporting data as Landlord or Landlord's mortgagee may reasonably require; (iv) a cost breakdown for each trade or subcontractor performing the Initial Alterations; (v) plans and specifications for the Initial Alterations, together with a certificate from an AIA architect that such plans and specifications comply in all material respects with all laws affecting the Building, Property and Premises; (vi) copies of all construction contracts for the Initial Alterations, together with copies of all change orders, if any; and (vii) a request to disburse from Tenant containing an approval by Tenant of the work done and a good faith estimate of the cost to complete the Initial Alterations. Upon completion of the Initial Alterations, and prior to final disbursement of the Construction Allowance, Tenant shall furnish Landlord with: (1) general contractor and architect's completion affidavits, (2) full and final waivers of lien, (3) receipted bills covering all labor and materials expended and used, (4) as-built plans of the Initial Alterations, (5) the certification of Tenant and its architect that the Initial Alterations have been installed in a good and workmanlike manner in accordance with the approved plans, and in accordance with applicable laws, codes and ordinances, and (6) a final certificate of occupancy for the Premises. In no event shall Landlord be required to disburse the Construction Allowance or Tenant's Deposit, if applicable, more than one time per month. Notwithstanding anything herein to the contrary, Landlord shall not be obligated to disburse any portion of the Construction Allowance or Tenant's Deposit, if applicable, during the continuance of an uncured default under the Lease, and Landlord's obligation to disburse shall only resume when and if such default is cured.

(b) If Tenant delivers Tenant's Deposit to Landlord, all disbursements by Landlord under this Improvement Addendum shall be deemed to have been made from the Construction Allowance until the Construction Allowance has been fully disbursed. Any portion of Tenant's Deposit which has not been disbursed by Landlord after the full completion and payment of the Initial Alterations, as evidenced to Landlord's reasonable satisfaction, shall be returned to Tenant. In the event Tenant does not submit to Landlord a written request for payment of the entire Construction Allowance (together with all of the documents and certificates required for such payment) by December 31, 2020, any portion of the Construction Allowance not disbursed to Tenant shall automatically accrue to the sole benefit of Landlord, it being understood that Tenant shall not be entitled to any credit, abatement or other concession in connection therewith. Tenant shall be responsible for all applicable state sales or use taxes, if any, payable in connection with the Initial Alterations and/or Construction Allowance.

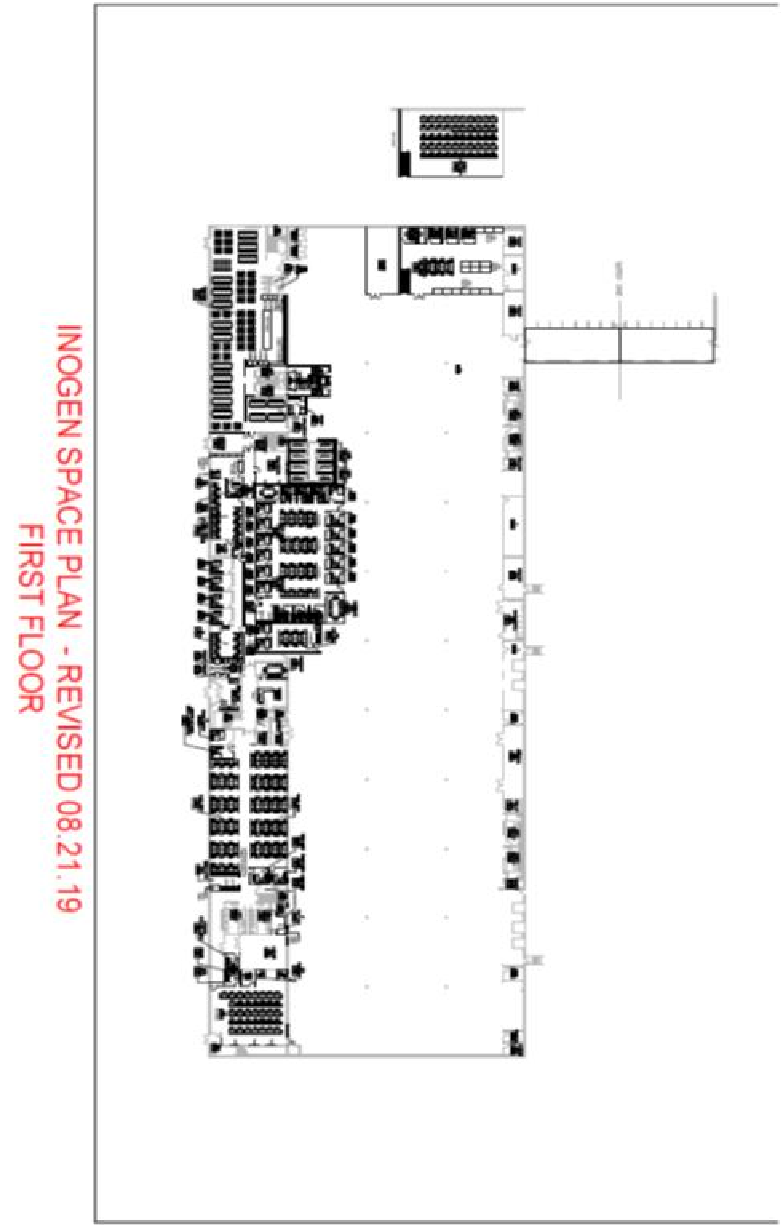
5. **Landlord's Obligations**. Except as otherwise set forth in the Lease (i.e. Section 11.1), Landlord shall not be required to perform any work or, except as provided above with respect to the Construction Allowance, incur any costs in connection with the construction or demolition of any improvements in the Premises.

6. **Representatives**. Tenant has designated Juan Fernandez of CBRE as its sole representative with respect to the matters set forth in this Improvement Addendum, who shall have full authority and responsibility to act on behalf of the Tenant as required in this Improvement Addendum, until further written notice to Landlord. Landlord has designated ________ of __________ as its sole representative with respect to the matters set forth in this Improvement Addendum, who, until further notice to Tenant, shall have full authority and responsibility to act on behalf of the Landlord as required in this Improvement Addendum.

7. **Interpretation; Incorporation Into Lease**. This Improvement Addendum shall not be deemed applicable to any additional space added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise, or to any portion of the Premises or any additions to the Premises in the event of a renewal or extension of the Lease Term, whether by any options under the Lease or otherwise, unless expressly so provided in the Lease or any amendment or supplement to the Lease. All capitalized terms used in this Improvement Addendum but not defined herein shall have the same meanings ascribed to such terms in the Lease.

SCHEDULE 1

WORKLIST



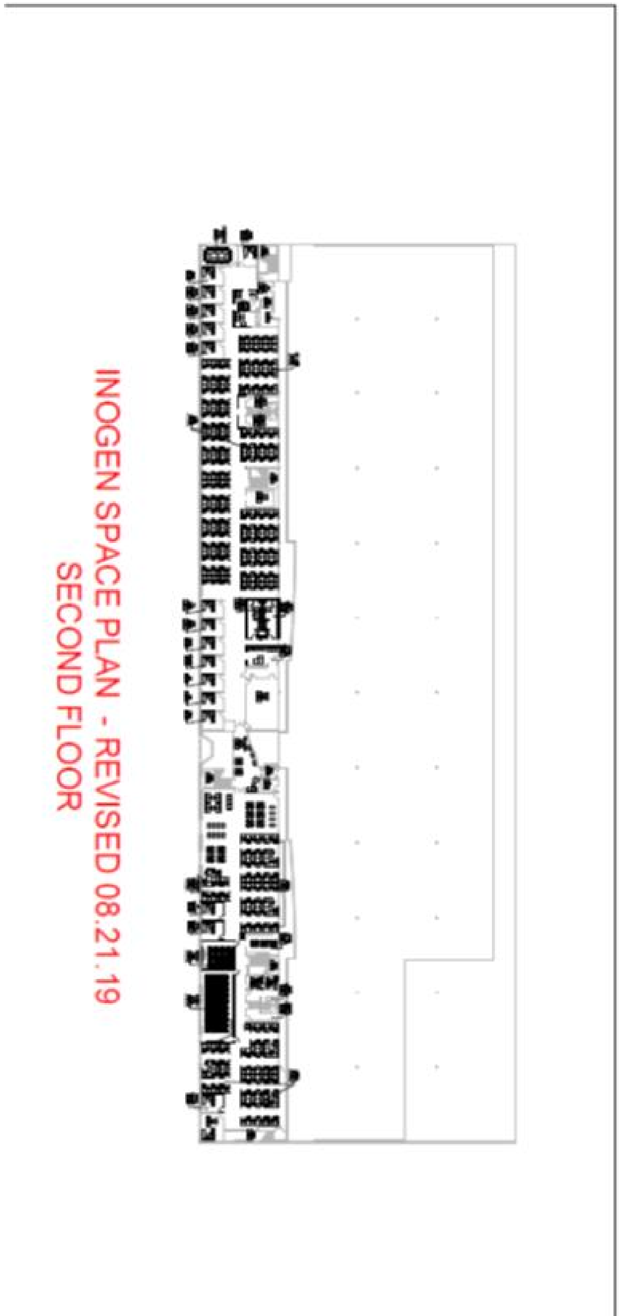

INOGEN SPACE PLAN - REVISED 08.21.19
SECOND FLOOR

EXHIBIT I

RIGHT OF FIRST OFFER

Provided that (a) Tenant or a Permitted Transferee is occupying the entire Premises, (b) Tenant is not in Default under this Lease beyond applicable notice and cure periods, and (c) no third party, including any current tenant of the Project, has any superior rights of first offer or right of first refusal, Tenant shall have a right of first offer ("ROFO") to lease any space in the Project ("ROFO Space") if and when it becomes available. Prior to offering the ROFO Space (or any portion thereof) for lease to third parties, Landlord shall deliver to Tenant a written notice ("ROFO Notice"), which ROFO Notice shall constitute an offer to Tenant to lease the ROFO Space identified therein and shall set forth the Fair Market Rental Rate (defined in Exhibit G) for the ROFO Space, for a term which is coterminous with the Lease, but in no event less than sixty (60) months. This coterminous right shall not apply if Tenant has less than 60 months remaining in the Lease Term, unless Tenant has previously exercised or concurrently also exercises Tenant's Renewal Option contained in Exhibit G. Tenant's ROFO shall be exercised, if at all, by written notice thereof delivered to Landlord within ten (10) business days following Landlord's delivery of the ROFO Notice. If Tenant duly and timely exercises the ROFO by accepting in writing the offer to lease the entire ROFO Space identified in the ROFO Notice on the terms and conditions contained in the ROFO Notice, then Landlord and Tenant shall promptly amend this Lease to include such ROFO Space on the express terms and conditions set forth in the ROFO Notice. If Tenant disputes Landlord's proposed Fair Market Rental Rate, Tenant shall respond in writing with its proposed Fair Market Rental Rate and if the parties cannot agree within ten (10) business days, the issue of Fair Market Rental Rate shall be submitted to arbitration in accordance with Exhibit G attached hereto, in which event Tenant shall be bound to lease the ROFO Space. If Tenant fails to respond in writing within the ten (10) business day period following delivery of the ROFO Notice, then Tenant shall be deemed to have rejected the offer, and the ROFO and Tenant's rights under this section with respect to such ROFO Space then being offered to Tenant (but not the remainder of the ROFO Space) shall terminate and be of no further force and effect and Landlord shall be free to lease such ROFO Space to another tenant without any obligation pursuant to this Exhibit I for a period of six (6) months after the date that Landlord delivered the ROFO Notice to Tenant; if, after such six (6) month period, Landlord has not leased such ROFO Space, then Landlord shall deliver a revised ROFO Notice to Tenant and the procedure set forth in this Exhibit I shall once again apply. The ROFO shall be personal to Tenant (or any Permitted Transferee) and may not be exercised or assigned, voluntarily or involuntarily, by or to any person or entity other than such Tenant or Permitted Transferee and shall not be assignable separate and apart from this Lease.

If Tenant has not exercised its ROFO in accordance with this Exhibit I above, and Landlord receives a bona fide proposal or makes a proposal for all or any of the ROFO Space, Landlord shall notify Tenant of the space for which there was such a proposal and the terms received or offered. Tenant shall have three (3) business days within which to respond with an exercise of Tenant's right to lease the applicable ROFO Space that was the subject of such proposal at the terms contained in such proposal.

AMENDMENT NO. 1

This Amendment No. 1 (this "**Amendment**") is executed as of November 1, 2019, between TCG Industrial Shiloh LLC, a Delaware limited liability company ("**Landlord**"), and Inogen, Inc., a Delaware corporation ("**Tenant**"), for the purpose of amending the Lease Agreement between Landlord and Tenant dated August 29, 2019 (the "**Lease**"). Capitalized terms used herein but not defined shall be given the meanings assigned to them in the Lease.

RECITALS:

Pursuant to the terms of the Lease, Tenant is currently leasing Initial Premises, consisting of approximately 53,603 square feet of leaseable area, and the Must Take Space, consisting of approximately 100,494 square feet of leaseable area (the "**Premises**") in the Building located at 600 Shiloh Road, Plano, Texas 75704. Landlord and Tenant desire to amend the Section 1.1(m) of the Lease to clarify the Base Rent table for the Must Take Space, in accordance with the terms and conditions contained herein.

AGREEMENTS:

For valuable consideration, whose receipt and sufficiency are acknowledged, Landlord and Tenant agree as follows:

1. **Base Rent for Must Take Space**. The Base Rent table for the Must Take Space included in Section 1.1(m) of the Lease is hereby deleted and replaced with the following:

"Must Take Space:

Months of Lease Term	**Base Rent/Month**
Prior to the Must Take Date	N/A+
Must Take Date – 18	$75,108.80+**
19 – 30	$76,986.52
31 – 42	$78,911.18
43 – 54	$80,883.96
55 – 66	$82,906.06
67 – 78	$84,978.71
79 – 90	$87,103.18
91 – 102	$89,280.76
103 – 114	$91,512.78
115 – 126	$93,800.60
127 – 132	$96,145.61

+Base Rent for the Must Take Space shall commence on the Must Take Date (subject to adjustment as provided in Section 1.1(k)).

**Base Rent for the Must Take Space for the period commencing on the Must Take Date and ending six (6) months thereafter will be conditionally abated in accordance with Section 30.16."

2. **Brokerage**. Landlord and Tenant each warrant to the other that it has not dealt with any broker or agent in connection with the negotiation or execution of this Amendment. Tenant and Landlord shall each indemnify the other against all costs, expenses, attorneys' fees, and other liability for commissions or other compensation claimed by any broker or agent claiming the same by, through, or under the indemnifying party.

3. **Prohibited Persons and Transactions**. Tenant represents and warrants to Landlord that Tenant is currently in compliance with and shall at all times during the Term (including any extension thereof) remain in compliance with the regulations of the Office of Foreign Assets Control ("**OFAC**") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) and any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit or Support Terrorism), or other governmental action relating thereto.

4. **Ratification**. Tenant hereby ratifies and confirms its obligations under the Lease, and represents and warrants to Landlord that it has no defenses thereto. Additionally, Tenant further confirms and ratifies that, as of the date hereof, (1) the Lease is and remains in good standing and in full force and effect and (2) Tenant has no claims, counterclaims, set-offs or defenses against Landlord arising out of the Lease or in any way relating thereto or arising out of any other transaction between Landlord and Tenant.

5. **Binding Effect; Governing Law**. Except as modified hereby, the Lease shall remain in full effect and this Amendment shall be binding upon Landlord and Tenant and their respective successors and assigns. If any inconsistency exists or arises between the terms of the Lease and the terms of this Amendment, the terms of this Amendment shall prevail. This Amendment shall be governed by the laws of the State in which the Premises is located.

6. **Counterparts**. This Amendment may be executed in multiple counterparts, each of which shall constitute an original, but all of which shall constitute one document.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

Executed as of the date first written above.

LANDLORD:

TCG INDUSTRIAL SHILOH LLC,
a Delaware limited liability company

By:	/s/ Peter Walter
Name:	Peter Walter
Title:	Authorized Signatory

TENANT:

INOGEN, INC.,
a Delaware corporation

By:	/s/ Alison Bauerlein
Name:	Alison Bauerlein
Title:	CFO

Exhibit 31.1

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

I, Scott Wilkinson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Inogen, 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.

Dated: November 5, 2019

By: /s/ Scott Wilkinson
Scott Wilkinson
Chief Executive Officer, President and Director
(Principal Executive Officer)

Exhibit 31.2

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

I, Alison Bauerlein, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Inogen, 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.

Dated: November 5, 2019

By: /s/ Alison Bauerlein
Alison Bauerlein
Chief Financial Officer
Executive Vice President, Finance
Secretary and Treasurer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Scott Wilkinson, the chief executive officer of Inogen, Inc. (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the three months ended September 30, 2019 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

November 5, 2019

By: /s/ Scott Wilkinson
Scott Wilkinson
Chief Executive Officer, President and Director

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

I, Alison Bauerlein, the chief financial officer of Inogen, Inc. (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the three months ended September 30, 2019 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

November 5, 2019

By: /s/ Alison Bauerlein
Alison Bauerlein
Chief Financial Officer
Executive Vice President, Finance
Secretary and Treasurer