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

Form 10-Q

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

For the quarterly period ended March 31, 2019

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

Commission File Number: 001-34632

CRYOPORT, INC.

(Exact Name of Registrant as Specified in its Charter)

Nevada	**88-0313393**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

17305 Daimler St.
Irvine, CA 92614
(Address of principal executive offices)

(949) 470-2300
(Registrant's telephone number, including area code)

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

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

Large accelerated filer	¨	Accelerated filer	x
Non-accelerated filer	¨	Smaller reporting company	x
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 x

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	CYRX	The Nasdaq Capital Market
Registered Warrants	CYRXW	The Nasdaq Capital Market

As of April 30, 2019 there were 30,566,780 shares of the registrant's common stock outstanding.

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Cryoport, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets

	March 31, 2019 (unaudited)	December 31, 2018
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 32,771,986	$ 37,327,125
Short-term investments	14,500,748	9,930,968
Accounts receivable, net	4,208,333	3,543,666
Inventories	227,090	220,514
Prepaid expenses and other current assets	741,614	752,269
Total current assets	52,449,771	51,774,542
Property and equipment, net	5,124,655	4,357,498
Operating lease right-of-use assets	1,711,727	—
Intangible assets, net	157,708	137,220
Deposits	350,494	350,837
Total assets	$ 59,794,355	$ 56,620,097
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable and other accrued expenses	$ 2,326,143	$ 1,709,397
Accrued compensation and related expenses	1,753,499	1,262,478
Current portion of operating lease liabilities	390,790	—
Current portion of finance lease liabilities	23,531	23,191
Deferred revenue	37,918	66,315
Total current liabilities	4,531,881	3,061,381
Convertible note, net of discount of $292,800 and $288,400, respectively	14,707,215	14,711,580
Operating lease liabilities, net of current portion	1,621,183	—
Finance lease liabilities, net of current portion	27,138	33,156
Deferred rent liability, net of current portion	—	267,415
Total liabilities	20,887,417	18,073,532
Commitments and contingencies		
Stockholders' Equity:		
Preferred stock, $0.001 par value; 2,500,000 shares authorized:		
Class A convertible preferred stock — $0.001 par value; 800,000 shares authorized; none issued and outstanding	—	—
Class B convertible preferred stock — $0.001 par value; 585,000 shares authorized; none issued and outstanding	—	—
Common stock, $0.001 par value; 100,000,000 shares authorized; 30,677,500 and 30,319,038 issued and outstanding at March 31, 2019 and December 31, 2018, respectively	30,678	30,319
Additional paid-in capital	182,230,799	179,501,577
Accumulated deficit	(143,375,386)	(140,988,484)
Accumulated other comprehensive income	20,847	3,153
Total stockholders' equity	38,906,938	38,546,565
Total liabilities and stockholders' equity	$ 59,794,355	$ 56,620,097

See accompanying notes to condensed consolidated financial statements.

Cryoport, Inc. and Subsidiaries
Condensed Consolidated Statements of Operations
(unaudited)

	For the Three Months Ended March 31,	
	2019	**2018**
Revenues	$ 6,652,912	$ 4,023,189
Cost of revenues	3,199,011	1,838,826
Gross margin	3,453,901	2,184,363
Operating costs and expenses:		
General and administrative	2,696,859	2,068,510
Sales and marketing	2,407,992	1,584,428
Engineering and development	489,596	329,730
Total operating costs and expenses	5,594,447	3,982,668
Loss from operations	(2,140,546)	(1,798,305)
Other income (expense):		
Interest expense	(338,728)	—
Warrant inducement and repricing expense	—	(899,410)
Other income, net	91,472	15,768
Loss before benefit (provision) for income taxes	(2,387,802)	(2,681,947)
Benefit (provision) for income taxes	900	(813)
Net loss	$ (2,386,902)	$ (2,682,760)
Net loss per share – basic and diluted	$ (0.08)	$ (0.10)
Weighted average shares outstanding – basic and diluted	30,441,996	26,774,179

See accompanying notes to condensed consolidated financial statements.

Cryoport, Inc. and Subsidiaries
Condensed Consolidated Statements of Comprehensive Loss

	For the Three Months Ended March 31,	
	2019	**2018**
Net loss	$ (2,386,902)	$ (2,682,760)
Other comprehensive income (loss), net of tax:		
Net unrealized gain on available-for-sale debt securities	30,872	—
Reclassification of realized gain on available-for-sale debt securities to earnings	(3,098)	—
Foreign currency translation adjustments	(10,080)	—
Other comprehensive gain	17,694	—
Total comprehensive loss	$ (2,369,208)	$ (2,682,760)

Cryoport, Inc. and Subsidiaries
Condensed Consolidated Statements of Stockholders' Equity

	Class A Preferred Stock		Class B Preferred Stock		Common Stock		Additional	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	Shares	Amount	Shares	Amount	Shares	Amount	Paid–In Capital	Deficit	Income	Equity (Deficit)
Balance at December 31, 2017	—	$ —	—	$ —	25,701,924	$ 25,702	$ 149,293,947	$(131,432,883)	$ —	$ 17,886,766
Net loss	—	—	—	—	—	—	—	(2,682,760)	—	(2,682,760)
Stock-based compensation expense	—	—	—	—	—	—	1,032,010	—	—	1,032,010
Warrant repricing expense	—	—	—	—	—	—	899,410	—	—	899,410
Proceeds from tender offer, net of costs of $99,357	—	—	—	—	1,580,388	1,580	4,640,227	—	—	4,641,807
Issuance of common stock for board of director compensation	—	—	—	—	1,938	2	17,498	—	—	17,500
Proceeds from exercise of stock options and warrants	—	—	—	—	308,868	309	658,235	—	—	658,544
Balance March 31, 2018	—	$ —	—	$ —	27,593,118	$ 27,593	$ 156,541,327	$(134,115,643)	$ —	$ 22,453,277
Balance at December 31, 2018	—	$ —	—	$ —	30,319,038	$ 30,319	$ 179,501,577	$(140,988,484)	$ 3,153	$ 38,546,565
Net loss	—	—	—	—	—	—	—	(2,386,902)	—	(2,386,902)
Other comprehensive income, net of taxes	—	—	—	—	—	—	—	—	17,694	17,694
Stock-based compensation expense	—	—	—	—	—	—	1,396,235	—	—	1,396,235
Issuance of common stock for board of director compensation	—	—	—	—	1,319	1	17,499	—	—	17,500
Proceeds from exercise of stock options and warrants	—	—	—	—	357,143	358	1,315,488	—	—	1,315,846
Balance at March 31, 2019	—	$ —	—	$ —	30,677,500	$ 30,678	$ 182,230,799	$(143,375,386)	$ 20,847	$ 38,906,938

See accompanying notes to condensed consolidated financial statements.

Cryoport, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(unaudited)

	For the Three Months Ended March 31,	
	2019	**2018**
Cash Flows From Operating Activities:		
Net loss	$ (2,386,902)	$ (2,682,760)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	300,565	187,834
Amortization of debt discount	15,383	—
Unrealized gain on investments in equity securities	(31,545)	—
Stock-based compensation expense	1,413,735	1,049,510
Warrant inducement and repricing expense	—	899,410
Loss on disposal of property and equipment	47,603	20,585
Changes in operating assets and liabilities:		
Accounts receivable	(664,667)	(760,428)
Inventories	(6,576)	(7,130)
Prepaid expenses and other current assets	10,049	(25,035)
Change in operating lease right-of-use assets and lease liabilities	(9,309)	—
Accounts payable and other accrued expenses	659,335	108,924
Accrued compensation and related expenses	491,123	149,018
Deferred revenue	(28,397)	(3,581)
Net cash used in operating activities	(189,603)	(1,063,653)
Cash Flows From Investing Activities:		
Purchases of property and equipment	(1,121,025)	(269,543)
Purchases of short-term investments	(5,010,461)	—
Maturity of short-term investment	500,000	—
Patent and trademark costs	(20,488)	(15,350)
Net cash used in investing activities	(5,651,974)	(284,893)
Cash Flows From Financing Activities:		
Proceeds from February 2018 tender offer, net of offering costs	—	4,641,807
Proceeds from exercise of stock options and warrants	1,315,846	658,544
Payment of deferred financing costs	(19,748)	—
Repayment of finance lease liabilities	(5,678)	—
Net cash provided by financing activities	1,290,420	5,300,351
Effect of exchange rates on cash and cash equivalents	(3,982)	—
Net change in cash and cash equivalents	(4,555,139)	3,951,805
Cash and cash equivalents — beginning of period	37,327,125	15,042,189
Cash and cash equivalents — end of period	$ 32,771,986	$ 18,993,994
Supplemental Disclosure of Non-Cash Financing Activities:		
Change in net unrealized gain on available-for-sale securities	$ 30,872	$ —
Reclassification of realized gain on available-for-sale debt securities to earnings	$ 3,098	$ —

See accompanying notes to condensed consolidated financial statements.

Cryoport, Inc. and Subsidiaries
Notes to Condensed Consolidated Financial Statements
For the Three Months Ended March 31, 2019 and 2018
(Unaudited)

Note 1. Management's Representation and Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared by Cryoport, Inc. (the "Company", "our" or "we") in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial information, and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X promulgated by the Securities and Exchange Commission ("SEC"). Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statement presentation. However, the Company believes that the disclosures are adequate to make the information presented not misleading. In the opinion of management, all adjustments (consisting primarily of normal recurring accruals) considered necessary for a fair presentation have been included.

Operating results for the three months ended March 31, 2019 are not necessarily indicative of the results that may be expected for the year ending December 31, 2019. The unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

The Company has evaluated subsequent events through the date of this filing and determined that no subsequent events have occurred that would require recognition in the unaudited condensed consolidated financial statements or disclosure in the notes thereto other than as disclosed in the accompanying notes.

Note 2. Nature of the Business

Cryoport, Inc. ("Cryoport") is the premier provider of temperature-controlled logistics solutions to the life sciences industry through its purpose-built proprietary packaging, information technology and specialized cold chain logistics expertise. The Company provides leading edge logistics solutions to the biopharma, reproductive medicine and animal health markets to ship, store and deliver biologic materials, such as immunotherapies, stem cells, CAR-T cell therapies, vaccines and reproductive cells for clients worldwide Cryoport actively supports pharmaceutical and biotechnology companies, points-of-care, contract research organizations, central laboratories, contract manufacturers, university researchers and other entities service the life sciences industry.

The Company is a Nevada corporation and its common stock is traded on the NASDAQ Capital Market exchange under the ticker symbol "CYRX."

Note 3. Summary of Significant Accounting Policies

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Cryoport, Inc. and its wholly owned subsidiaries, Cryoport Systems, Inc., Cryoport Netherlands B.V. and Cryoport UK Limited (collectively, the "Company"). All intercompany accounts and transactions have been eliminated.

Cash and Cash Equivalents

Our cash and cash equivalents represent demand deposits, and money market funds which are readily convertible into cash, have maturities of 90 days or less when purchased and are considered highly liquid and easily tradeable.

Short-Term Investments

Our investments in equity securities consist of mutual funds with readily determinable fair values which are carried at fair value with changes in fair value recognized in earnings.

Investments in debt securities are classified as available-for-sale and are carried at fair value, with unrealized gains and losses, net of tax, reported as accumulated other comprehensive income (loss) and included as a separate component of stockholders' equity.

Gains and losses are recognized when realized. When we have determined that an other than temporary decline in fair value has occurred, the amount related to a credit loss is recognized in earnings. Gains and losses are determined using the specific identification method.

Short-term investments are classified as current assets even though maturities may extend beyond one year because they represent investments of cash available for operations.

Use of Estimates

The preparation of the 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 periods. Actual results could differ from estimated amounts. The Company's significant estimates include the allowance for doubtful accounts, fair value of short-term investments, recoverability of long-lived assets, allowance for inventory obsolescence, deferred taxes and their accompanying valuations, and valuation of equity-based instruments.

Fair Value of Financial Instruments

The Company's financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, accounts payable and accrued expenses, finance lease liabilities and the convertible note. The carrying value for all such instruments, except finance lease liabilities and the convertible note, approximates fair value at March 31, 2019 and December 31, 2018 due to their short-term nature. The carrying value of finance lease liabilities approximates fair value because the interest rate approximates market rates available to us for similar obligations with the same maturities. The convertible note bears an interest rate that fluctuates with the changes in LIBOR and, because the variable interest rates approximate market borrowing rates available to us, we believe the carrying value of the convertible note approximates its fair value at March 31, 2019 and December 31, 2018.

Concentrations of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash, cash equivalents and short-term investments. From time to time, we maintain cash, cash equivalent and short-term investment balances in excess of amounts insured by the Federal Deposit Insurance Corporation ("FDIC") and the Securities Investor Protection Corporation ("SIPC"). Primarily all of our cash, cash equivalents and short-term investments at March 31, 2019 were in excess of amounts insured by the FDIC and SIPC. The Company performs ongoing evaluations of these institutions to limit its concentration risk exposure. We manage such risks in our portfolio by investing in highly liquid, highly-rated instruments, and limit investing in long-term maturity instruments.

Our investment policy requires that purchased instruments in marketable securities may only be in highly-rated instruments, which are primarily U.S. Treasury bills or treasury-backed securities, and also limits our investment in securities of any single issuer.

Customers

The Company grants credit to customers within the U.S. and to a limited number of international customers and does not require collateral. Revenues from international customers are generally secured by advance payments except for established foreign customers. The Company generally requires advance or credit card payments for initial revenues from new customers. The Company's ability to collect receivables can be affected by economic fluctuations in the geographic areas and industries served by the Company. Reserves for uncollectible amounts are provided based on past experience and a specific analysis of the accounts, which management believes is sufficient. Accounts receivable at March 31, 2019 and December 31, 2018 are net of reserves for doubtful accounts of $100,000. Although the Company expects to collect amounts due, actual collections may differ from the estimated amounts. The Company maintains reserves for bad debt and such losses, in the aggregate, historically have not exceeded its estimates.

The Company's customers are in the biotechnology, pharmaceutical, animal health, reproductive medicine and other life science industries. Consequently, there is a concentration of accounts receivable within these industries, which is subject to normal credit risk. As of March 31, 2019, there were two customers that accounted for 31.2% and 22.9%, respectively, of net accounts receivable. As of December 31, 2018, there were two customers that accounted for 29.0% and 23.4%, respectively, of net accounts receivable. There were no other single customers that owed us more than 10% of net accounts receivable at March 31, 2019 and December 31, 2018.

The Company has revenue from foreign customers primarily in Europe, Japan, Canada, India and Australia. During the three months ended March 31, 2019 and 2018, the Company had revenues from foreign customers of approximately $483,800 and $528,200, respectively, which constituted approximately 7.8% and 13.1%, respectively, of total revenues. There were two customers that accounted for 24.7% and 10.6% of revenues during the three months ended March 31, 2019, respectively. No other single customer generated over 10% of revenues during the three months ended March 31, 2019 and 2018.

Inventories

The Company's inventories consist of packaging materials and accessories that are sold to customers. Inventories are stated at the lower of cost and net realizable value. Cost is determined using the standard cost method which approximates the first-in, first-to-expire method. Inventories are reviewed periodically for slow-moving or obsolete status. The Company writes down the carrying value of its inventories to reflect situations in which the cost of inventories is not expected to be recovered. Once established, write-downs of inventories are considered permanent adjustments to the cost basis of the obsolete or excess inventories. Raw materials and finished goods include material costs less reserves for obsolete or excess inventories. The Company evaluates the current level of inventories considering historical trends and other factors, such as selling prices and costs of completion, disposal and transportation, and based on the evaluation, records adjustments to reflect inventories at net realizable value. These adjustments are estimates, which could vary significantly from actual results if future economic conditions, customer demand, competition or other relevant factors differ from expectations. These estimates require us to make assessments about future demand for the Company's products in order to categorize the status of such inventories items as slow-moving, obsolete or in excess-of-need. These estimates are subject to the ongoing accuracy of the Company's forecasts of market conditions, industry trends, competition and other factors.

Property and Equipment

The Company provides shipping containers ("Shippers") to its customers and charges a fee in exchange for the use of the Shipper. The Company's arrangements are similar to the accounting standard for leases since they convey the right to use the Shipper over a period of time. The Company retains the title to the Shippers and provides its customers the use of the Shipper for a specific shipping cycle. At the culmination of the customer's shipping cycle, the Shipper is returned to the Company. As a result, the Company classifies the Shippers as property and equipment for the per-use Shipper program.

Property and equipment are recorded at cost. Shippers and data loggers, which comprise 39% and 34% of the Company's net property and equipment balance at March 31, 2019 and December 31, 2018, respectively, are depreciated using the straight-line method over their estimated useful lives of three years. Equipment and furniture are depreciated using the straight-line method over their estimated useful lives (generally three to seven years) and leasehold improvements are amortized using the straight-line method over the estimated useful life of the asset or the lease term, whichever is shorter.

Betterments, renewals and extraordinary repairs that extend the lives of the assets are capitalized; other repairs and maintenance charges are expensed as incurred. The cost and related accumulated depreciation and amortization applicable to assets retired are removed from the accounts, and the gain or loss on disposition is recognized in the consolidated statements of operations.

Leases

The Company determines if an arrangement is a lease at inception. Operating lease right-of-use ("ROU") assets represent the Company's right to use an underlying asset during the lease term, and operating lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating leases are included in ROU assets, current operating lease liabilities, and long-term operating lease liabilities on our consolidated balance sheets. Finance leases are included in property and equipment, current finance lease liabilities, and long-term finance lease liabilities on our consolidated balance sheets.

Lease ROU assets and lease liabilities are initially recognized based on the present value of the future minimum lease payments over the lease term at commencement date calculated using our incremental borrowing rate applicable to the lease asset, unless the implicit rate is readily determinable. ROU assets also include any lease payments made at or before lease commencement and exclude any lease incentives received. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Leases with a term of 12 months or less are not recognized on the condensed consolidated balance sheet. The Company's leases do not contain any residual value guarantees. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term.

The Company accounts for lease and non-lease components as a single lease component for all its leases.

Intangible Assets

Intangible assets are comprised of patents and trademarks and software development costs. The Company capitalizes costs of obtaining patents and trademarks, which are amortized, using the straight-line method over their estimated useful life of five years once the patent or trademark has been issued. The Company capitalizes certain costs related to software developed for internal use. Software development costs incurred during the preliminary or maintenance project stages are expensed as incurred, while costs incurred during the application development stage are capitalized and amortized using the straight-line method over the estimated useful life of the software, which is five years. Capitalized costs include purchased materials and costs of services.

Long-lived Assets

If indicators of impairment exist, we assess the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, we measure the amount of such impairment by comparing the fair value to the carrying value. We believe the future cash flows to be received from the long-lived assets will exceed the assets' carrying value, and accordingly, we have not recognized any impairment losses through March 31, 2019.

Deferred Financing Costs

Deferred financing costs represent costs incurred in connection with the issuance of debt instruments and equity financings. Deferred financing costs related to the issuance of debt are amortized over the term of the financing instrument using the effective interest method, and are presented in the consolidated balance sheets as an offset against the related debt. Offering costs from equity financings are netted against the gross proceeds received from the equity financings.

Income Taxes

The Company accounts for income taxes under the provision of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 740, *Income Taxes*, or ASC 740. As of March 31, 2019 and December 31, 2018, there were no unrecognized tax benefits included in the accompanying condensed consolidated balance sheets that would, if recognized, affect the effective tax rates.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided for certain deferred tax assets if it is more likely than not that the Company will not realize tax assets through future operations. Based on the weight of available evidence, the Company's management has determined that it is more likely than not that the net deferred tax assets will not be realized. Therefore, the Company has recorded a full valuation allowance against the net deferred tax assets. The Company's income tax provision consists of state minimum taxes.

The Company's policy is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company had no accrual for interest or penalties on its condensed consolidated balance sheets at March 31, 2019 and December 31, 2018 and has not recognized interest and/or penalties in the condensed consolidated statements of operations for the three months ended March 31, 2019 and 2018. The Company is subject to taxation in the U.S. and various state jurisdictions. As of March 31, 2019, the Company is no longer subject to U.S. federal examinations for years before 2015 and for California franchise and income tax examinations for years before 2014. However, to the extent allowed by law, the taxing authorities may have the right to examine prior periods where net operating losses were generated and carried forward, and make adjustments up to the amount of the net operating loss carry forward amount. The Company is not currently under examination by U.S. federal or state jurisdictions.

Revenue Recognition

Revenues are recognized when control is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods and services. Revenue recognition is evaluated through the following five steps: (i) identification of the contract, or contracts, with a customer; (ii) identification of the performance obligations in the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligations in the contract; and (v) recognition of revenue when or as a performance obligation is satisfied.

Performance Obligations

At contract inception, an assessment of the goods and services promised in the contracts with customers is performed and a performance obligation is identified for each distinct promise to transfer to the customer a good or service (or bundle of goods or services). To identify the performance obligations, the Company considers all of the goods or services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices. Revenue is recognized when our performance obligation has been met. The Company considers control to have transferred upon delivery because the Company has a present right to payment at that time, the Company has transferred use of the asset, and the customer is able to direct the use of, and obtain substantially all of the remaining benefits from, the asset.

For arrangements under which the Company provides logistics support and management to the customer, the Company satisfies its performance obligations as those services are performed whereby the customer simultaneously receives and consumes the benefits of such services under the agreement.

Revenue generated from short-term logistics and engineering consulting services provided to customers is recognized or when the Company satisfies the contractually defined performance obligations.

Our performance obligations on our orders are generally satisfied within one year from a given reporting date and, therefore, we omit disclosure of the transaction price allocated to remaining performance obligations on open orders.

Shipping and handling activities related to contracts with customers are accounted for as costs to fulfill our promise to transfer the associated products pursuant to the accounting policy election allowed under Topic 606 and are not considered a separate performance obligation to our customers. Accordingly, the Company records amounts billed for shipping and handling as a component of revenue. Shipping and handling fees and costs are included in cost of revenues in the accompanying condensed consolidated statements of operations.

Revenues are recognized net of any taxes collected from customers, which are subsequently remitted to governmental agencies.

Significant Payment Terms

Pursuant to the Company's contracts with its customers, amounts billed for services or products delivered by the Company are generally due and payable in full within 15 days from the date of the invoice (except for any amounts disputed by the customer in good faith). Accordingly, the Company determined that its contracts with customers do not include extended payment terms or a significant financing component.

Variable Consideration

In some cases, the nature of the Company's contracts may give rise to variable consideration, including discounts and allowances or other similar items that generally decrease the transaction price.

Variable consideration is estimated at the most likely amount that is expected to be earned. Estimated amounts are included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. Estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the anticipated performance and all information (historical, current and forecasted) that is reasonably available.

Revenues are recorded net of variable consideration, such as discounts and allowances.

Warranties

The Company's products and services are provided on an "as is" basis and no warranties are included in the contracts with customers. Also, the Company does not offer separately priced extended warranty or product maintenance contracts.

The Company expenses incremental direct costs of obtaining a contract (sales commissions) when incurred because the amortization period is generally 12 months or less. The Company does not incur costs to fulfill a customer contract that meet the requirements for capitalization.

Incremental Direct Costs

The Company expenses incremental direct costs of obtaining a contract (sales commissions) when incurred because the amortization period is generally 12 months or less. The Company does not incur costs to fulfill a customer contract that meet the requirements for capitalization.

Contract Assets

Typically, we invoice the customer and recognize revenue once we have satisfied our performance obligation. Accordingly, our contract assets comprise accounts receivable. Generally, we do not have material amounts of other contract assets since revenue is recognized as control of goods is transferred or as services are performed.

Contract Liabilities (Deferred Revenue)

Contract liabilities are recorded when cash payments are received in advance of the Company's performance. Deferred revenue was $37,900 and $66,300 at March 31, 2019 and December 31, 2018, respectively. During the three months ended March 31, 2019, the Company recognized revenues of $66,300 related to contact liabilities outstanding at December 31, 2018 as the services were performed.

Nature of Goods and Services

The Company provides Shippers to its customers and charges a fee in exchange for the use of the Shipper under long-term agreements with customers. The Company's arrangements convey to the customers the right to use the Shippers over a period of time. The Company retains title to the Shippers and provides its customers the use of the Shipper for a specified shipping cycle. At the culmination of the customer's shipping cycle, the Shipper is returned to the Company.

The vast majority of our revenues are covered under long-term agreements. We have determined that individual Statements of Work ("SOW"), whose terms and conditions taken with a Master Services Agreement ("MSA"), create the Topic 606 contracts which are generally short-term in nature (e.g., 15-day shipping cycle). Our agreements (including SOWs) generally do not have multiple performance obligations and, therefore, do not require an allocation of a single price amongst multiple goods or services. Prices under these agreements are generally fixed. The Company recognizes revenue for the use of the shipper at the time of the delivery of the shipper to the end user of the enclosed materials, and at the time that collectability is probable.

The Company also provides logistics support and management to some customers, which may include onsite logistics personnel. Revenue is recognized for these services as services are rendered over time and at the time that collectability is probable.

The Company also provides short-term logistics and engineering consulting services to some customers, with fees tied to the completion of contractually defined services. We recognize revenue from these services when we satisfy the performance obligation.

Revenue Disaggregation

The Company operates in one reportable segment and evaluates financial performance on a Company-wide basis. We consider sales disaggregated by end-market to depict how the nature, amount, timing and uncertainty of revenues and cash flows are impacted by changes in economic factors. The following table disaggregates our revenues by major source for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
(amounts in thousands)	2019	2018
Biopharmaceutical	$ 5,640	$ 3,282
Reproductive medicine	784	502
Animal health	229	239
Total revenues	$ 6,653	$ 4,023

Our geographical revenues, by origin, for the three months ended March 31, 2019 and 2018, were as follows:

	Three Months Ended March 31	
(amounts in thousands)	2019	2018
Americas	$ 6,169	$ 3,495
Europe, the Middle East and Africa (EMEA)	364	368
Asia Pacific (APAC)	120	160
Total revenues	$ 6,653	$ 4,023

Engineering and Development Expenses

Expenditures relating to engineering and development are expensed in the period incurred.

Stock-Based Compensation

The Company accounts for stock-based payments in accordance with stock-based payment accounting guidance which requires all stock-based payments to be recognized based upon their fair values. The fair value of stock-based awards is estimated at the grant date using the Black-Scholes Option Pricing Model ("Black-Scholes") and the portion that is ultimately expected to vest is recognized as compensation cost over the requisite service period. The determination of fair value using Black-Scholes is affected by the Company's stock price as well as assumptions regarding a number of complex and subjective variables, including expected stock price volatility, risk-free interest rate, expected dividends and projected employee stock option exercise behaviors. The Company accounts for forfeitures of unvested awards as they occur.

The Company's stock-based compensation plans are discussed further in Note 10.

Basic and Diluted Net Loss Per Share

We calculate basic and diluted net income (loss) per share using the weighted average number of common shares outstanding during the periods presented. In periods of a net loss position, basic and diluted weighted average common shares are the same. For the diluted earnings per share calculation, we adjust the weighted average number of common shares outstanding to include dilutive stock options, warrants and shares associated with the conversion of convertible debt outstanding during the periods.

The following shows the amounts used in computing net loss per share for the three months ended March 31:

	Three Months Ended March 31,	
	2019	**2018**
Net loss	$ (2,386,902)	$ (2,682,760)
Weighted average common shares issued and outstanding - basic and diluted	30,441,996	26,774,179
Basic and diluted net loss per share	$ (0.08)	$ (0.10)

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

	Three Months Ended March 31,	
	2019	**2018**
Stock options	2,986,999	2,753,544
Warrants	1,155,365	3,261,763
Convertible note	1,372,998	—
	5,515,362	6,015,307

Segment Reporting

We currently operate in one reportable segment and our Chief Executive Officer is the chief operating decision maker.

Foreign Currency Transactions

Management has determined that the functional currency of its subsidiaries is the local currency. Assets and liabilities of the Netherlands and UK subsidiaries are translated into U.S. dollars at the period-end exchange rates. Income and expenses are translated at an average exchange rate for the period and the resulting translation gain (loss) adjustments are accumulated as a separate component of stockholders' equity. The translation gain (loss) adjustment totaled $(10,080) for the three months ended March 31, 2019.

Balance Sheet Arrangements

We do not currently have any off balance sheet arrangements.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation.

Recently Adopted Accounting Pronouncements

In June 2018, the FASB issued ASU 2018-07, "Compensation – Stock Compensation: Improvements to Nonemployee Share-Based Payment Accounting" which simplifies several aspects of the accounting for nonemployee share-based payment transactions resulting from expanding the scope of Topic 718, "Compensation-Stock Compensation", to include share-based payment transactions for acquiring goods and services from nonemployees. Some of the areas for simplification apply only to nonpublic entities. The amendments specify that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. The amendments also clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606, "Revenue from Contracts with Customers". The Company adopted ASU 2018-07 effective January 1, 2019, and the adoption of the standard did not have an impact on the Company's condensed consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases", as amended by ASU No. 2018-11, "Leases: Targeted Improvements", (ASC 842), which provides for a comprehensive change to lease accounting. The new guidance amends the existing accounting standards for leases to increase transparency and comparability among organizations by requiring the recognition of ROU assets and lease liabilities on the balance sheet. Most prominent among the changes in the standard is the recognition of ROU assets and lease liabilities by lessees for those leases classified as operating leases. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases.

We adopted the standard effective January 1, 2019 using the modified retrospective approach with the effective date as the date of initial application. Consequently, prior period balances and disclosures have not been restated. Also, the Company has implemented additional internal controls to enable future preparation of financial information in accordance with ASC 842.

The standard had a material impact on our condensed consolidated balance sheets, which resulted in the recognition of ROU assets of $1.8 million, lease liabilities of $2.1 million and a reduction in deferred rent liabilities of $308,600 for operating leases, while our accounting for finance leases remained substantially unchanged. However, the adoption of the new standard did not materially impact our consolidated results of operations and cash flows. Also, the adoption of ASC 842 did not have an impact on the Company's beginning accumulated deficit balance.

ASC 842 provides a number of optional practical expedients in transition. For leases that commenced prior to January 1, 2019, the Company elected: (1) the "package of practical expedients", which permits it not to reassess under the new standard its prior conclusions about lease identification, lease classification, and initial direct costs, and (2) the use-of-hindsight in determining the lease term and in assessing impairment of ROU assets. In addition, ASC 842 provides practical expedients for an entity's ongoing accounting that the Company has elected, comprised of the following: (1) the election for classes of underlying asset to not separate non-lease components from lease components, and (2) the election for short-term lease recognition exemption for all leases that qualify.

For additional information regarding the Company's leases, see Note 8.

Note 4. Cash, Cash Equivalents and Short-Term Investments

Cash, cash equivalents and short-term investments consisted of the following as of March 31, 2019 and December 31, 2018:

	March 31, 2019	December 31, 2018
Cash	$ 32,149,195	$ 37,223,698
Cash equivalents:		
Money market mutual fund	622,791	103,427
Total cash and cash equivalents	32,771,986	37,327,125
Short-term investments:		
U.S. Treasury notes and bills	11,454,106	7,925,975
Mutual funds	3,046,642	2,004,993
Total short-term investments	14,500,748	9,930,968
Cash, cash equivalents and short-term investments	$ 47,272,734	$ 47,258,093

Available-for-sale investments

The amortized cost, gross unrealized gains, gross unrealized losses and fair value of available-for-sale investments by type of security at March 31, 2019 were as follows:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. Treasury bills	$ 2,454,675	$ 32,185	$ —	$ 2,486,860
U.S. Treasury notes	8,948,075	20,820	(1,649)	8,967,246
Total available-for-sale investments	$ 11,402,750	$ 53,005	$ (1,649)	$ 11,454,106

The amortized cost, gross unrealized gains, gross unrealized losses and fair value of available-for-sale investments by type of security at December 31, 2018 were as follows:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
U.S. Treasury bills	$ 2,948,777	$ 19,523	$ —	$ 2,968,300
U.S. Treasury notes	4,953,616	4,059	—	4,957,675
Total available-for-sale investments	$ 7,902,393	$ 23,582	$ —	$ 7,925,975

The following table summarizes the fair value of available-for-sale investments based on stated contractual maturities as of March 31, 2019:

	Amortized Cost	Fair Value
Due within one year	$ 8,407,226	$ 8,459,616
Due between one and two years	2,995,524	2,994,490
Total	$ 11,402,750	$ 11,454,106

The gross unrealized losses of available-for-sale investments that were in an unrealized loss position as of March 31, 2019 were insignificant. As of December 31, 2018, there were no available-for-sale investments in an unrealized loss position.

The primary objective of our investment portfolio is to enhance overall returns in an efficient manner while maintaining safety of principal, prudent levels of liquidity and acceptable levels of risk. Our investment policy limits interest-bearing security investments to certain types of debt and money market instruments issued by institutions with primarily investment-grade credit ratings, and it places restrictions on maturities and concentration by asset class and issuer.

We review our available-for-sale investments for other-than-temporary declines in fair value below our cost basis each quarter and whenever events or changes in circumstances indicate that the cost basis of an asset may not be recoverable. The evaluation is based on a number of factors, including the length of time and the extent to which the fair value has been below our cost basis, as well as adverse conditions related specifically to the security such as any changes to the credit rating of the security and the intent to sell or whether we will more likely than not be required to sell the security before recovery of its amortized cost basis. Our assessment of whether a security is other-than-temporarily impaired could change in the future based on new developments or changes in assumptions related to that particular security.

During the three months ended March 31, 2019, we had realized gains of $5,900 on available-for-sale investments.

Equity Investments

We held investments in equity securities with readily determinable fair values of $3.0 million at March 31, 2019. These investments consist of mutual funds that invest primarily in tax free municipal bonds and treasury inflation protected securities.

Unrealized gains (losses) during 2019 related to equity securities held at March 31, 2019 are as follows:

Net gains recognized during the three months on equity securities	$ 31,545
Less: net gains (losses) recognized during the year on equity securities sold during the three months	—
Unrealized gains recognized during the three months on equity securities still held at March 31, 2019	$ 31,545

Note 5. Fair Value Measurements

We measure fair value based on the prices that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements are based on a three-tier hierarchy that prioritizes the inputs used to measure fair value. These tiers include the following:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that are accessible at the measurement date. The fair value hierarchy gives the highest priority to Level 1 inputs.

Level 2: Observable prices that are based on inputs not quoted on active markets, but corroborated by market data. These inputs include quoted prices for similar assets or liabilities; quoted market prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3: Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

In determining fair value, we utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible, as well as consider counterparty credit risk in the assessment of fair value.

We did not elect the fair value option, as allowed, to account for financial assets and liabilities that were not previously carried at fair value. Therefore, material financial assets and liabilities that are not carried at fair value, such as trade accounts receivable and payable, are reported at their historical carrying values.

The carrying values of our assets that are required to be measured at fair value on a recurring basis as of March 31, 2019 approximate fair value because of our ability to immediately convert these instruments into cash with minimal expected change in value which are classified in the table below in one of the three categories of the fair value hierarchy described above:

	Fair Value Measurements			
	Level 1	**Level 2**	**Level 3**	**Total**
March 31, 2019				
Cash equivalents:				
Money market mutual fund	$ 622,791	$ —	$ —	$ 622,791
Marketable equity securities:				
Mutual funds	3,046,642	—	—	3,046,642
Available-for-sale debt securities:				
U.S. Treasury notes	2,486,860	—	—	2,486,860
U.S. Treasury bills	8,967,246	—	—	8,967,246
	$ 15,123,539	$ —	$ —	$ 15,123,539

Our equity securities and available-for-sale debt securities, including U.S. treasury notes and U.S. treasury bills are valued using inputs observable in active markets for identical securities and are therefore classified as Level I within the fair value hierarchy.

We did not have any financial liabilities measured at fair value on a recurring basis as of March 31, 2019.

Note 6. Convertible Note

On December 14, 2018, we entered into a Securities Purchase and Registration Rights Agreement (the "SPA") with Petrichor Opportunities Fund I LP (the "Investor") in connection with (i) the issuance and sale of 1,000,000 shares of the Company's common stock, par value $0.001 per share (the "Investment Shares"), at a price equal to $10.00 per share (See Note 11) and (ii) the issuance of a $15,000,000 floating rate convertible note (the "Note") of the Company, with such Note convertible on the terms stated therein into shares of Common Stock (the "Note Shares") (together, the "Transaction"). In connection with the Transaction, the Company paid Petrichor Opportunities Fund I LP a commitment fee of $250,000 on the aggregate total purchase price for the Transaction.

The Note is the senior unsecured obligation of the Company. Unless earlier converted or redeemed, the Note will mature on December 14, 2023. The Note accrues interest at a rate equal to the greater of (a) three-month London Interbank Offered Rate (LIBOR) or (b) two percent, plus the applicable margin of six percent on the outstanding balance of the Notes, payable quarterly on the first business day of each calendar quarter.

Prior to the maturity, a holder of the Note will have the right to convert all or any portion of the Note, including any accrued but unpaid interest, into shares of Common Stock at a conversion price of $13.11 per share (the "Conversion Price"), subject to certain adjustments as set forth in the Note. The Company determined that the Note's conversion option includes a down round price protection feature which triggers upon the occurrence of a future event. As a result, the Company will account for the conversion option in accordance with ASU 2017-11 and related accounting guidance, which requires the Company to recognize a contingent beneficial conversion feature in earnings at such time the conversion price is adjusted. If, at any time on or prior to December 14, 2021, the volume-weighted average price of the Common Stock exceeds $17.48 for 15 consecutive trading days and certain additional conditions are satisfied, the Note will automatically convert into shares of Common Stock at the Conversion Price, subject to certain conditions.

At any time after June 14, 2019, the Company has the right to redeem all, but not less than all, of the outstanding Note for cash prior to the Maturity Date, at a redemption premium on such amount as follows: (a) prior to December 14, 2019, 112%; (b) after December 14, 2019 but on or prior to December 14, 2020, 109%; and (c) after December 14, 2020, 106% (the "Redemption Premium").

Upon the occurrence of certain events of default as set forth in the Note (other than events of default relating to bankruptcy, insolvency, reorganization or liquidation proceedings) or a change of control, a holder of the Note may require the Company to redeem all or any portion of its Note at the applicable Redemption Premium. If certain events of default relating to bankruptcy, insolvency, reorganization or liquidation proceedings occur, all outstanding principal and accrued and unpaid interest (plus any accrued and unpaid late charges) will automatically become due and payable at the applicable Redemption Premium.

The Note contains certain covenants and restrictions, including, among others, that, for so long as the Note is outstanding, the Company will not incur any indebtedness (other than permitted indebtedness under the Note), permit liens on its properties (other that permitted liens under the Note), make payments on junior securities, make dividends or transfer certain assets or permit its unrestricted cash to be less than a minimum amount.

Pursuant to the SPA, the Company agreed to register the Investment Shares and the Note Shares by filing a registration statement with the SEC by the 45th calendar day after the closing date of the Transaction. The registration statement was filed on January 28, 2019 and was declared effective by the SEC on February 14, 2019.

The issuance costs for this Transaction, including the commitment fee paid to the Investor totaled approximately $480,000. As these costs were incurred to raise both debt and equity, the total costs have been allocated on a pro rata basis to the debt and equity financings based on their relative fair values. The pro-rata portion of these fees related to the Note will be amortized over the five-year stated life of the Note.

The interest expense was $322,500 for the three months ended March 31, 2019, all of which is included in accounts payable and other accrued expenses in the accompanying condensed consolidated balance sheet as of March 31, 2019.

Note 7. Commitments and Contingencies

Facility and Equipment Leases

We lease 27,600 square feet of corporate, research and development, and logistics facilities in Irvine, California under an operating lease expiring February 2023, subject to our option to extend the lease for two additional five-year periods. The initial base rent is approximately $24,700 per month. We also lease 8,100 square feet of logistics facilities in Livingston, New Jersey under an operating lease expiring December 2024, subject to our option to extend the lease for an additional five-year period. The initial base rent is approximately $7,600 per month. In addition, we lease 7,600 square feet of logistics facilities in Hoofddorp, The Netherlands under an operating lease expiring May 2023, subject to our option to extend the lease for two additional five-year periods. The initial base rent is approximately $5,400 per month. These lease agreements contain certain scheduled annual rent increases which are accounted for on a straight-line basis. In addition, we lease certain equipment which expires through January 2024.

Employment Agreements

We have entered into employment agreements with certain of our officers under which payment and benefits would become payable in the event of termination by us for any reason other than cause, or upon a change in control of our Company, or by the employee for good reason.

Litigation

The Company may become a party to product litigation in the normal course of business. The Company accrues for open claims based on its historical experience and available insurance coverage. In the opinion of management, there are no legal matters involving the Company that would have a material adverse effect upon the Company's consolidated financial condition or results of operations.

Indemnities and Guarantees

The Company has made certain indemnities and guarantees, under which it may be required to make payments to a guaranteed or indemnified party, in relation to certain actions or transactions. The guarantees and indemnities do not provide for any limitation of the maximum potential future payments the Company could be obligated to make. Historically, the Company has not been obligated nor incurred any payments for these obligations and, therefore, no liabilities have been recorded for these indemnities and guarantees in the accompanying consolidated balance sheets.

The Company indemnifies its directors, officers, employees and agents, as permitted under the laws of the States of California and Nevada. In connection with its facility and equipment leases, the Company has indemnified its lessors for certain claims arising from the use of the facilities and equipment. The duration of the guarantees and indemnities varies, and is generally tied to the life of the agreements.

Note 8. Leases

The Company has operating and finance leases for corporate offices and certain equipment. These leases have remaining lease terms of two years to approximately six years, some of which include options to extend the leases for multiple renewal periods of five years each. As of March 31, 2019 and December 31, 2018, assets recorded under finance leases were $71,000, and accumulated depreciation associated with finance leases was $15,200 and $6,800, respectively.

The components of lease cost were as follows:

	Three Months Ended March 31, 2019
Operating lease cost	$ 124,100
Finance lease cost:	
Amortization of right-of-use assets	$ 2,500
Interest on finance lease liabilities	807
	3,307
Total lease cost	$ 127,407

Other information related to leases was as follows:

Supplemental Cash Flows Information	Three Months Ended March 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	$ 133,000
Operating cash flows from finance leases	$ 807
Financing cash flows from finance leases	$ 5,700
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	
Finance leases	$ 21,100
	$ —
Weighted-Average Remaining Lease Term	
Operating leases	4.4 years
Finance leases	2.1 years
Weighted-Average Discount Rate	
Operating leases	8.3%
Finance leases	6.0%

Future minimum lease payments under non-cancellable leases as of March 31, 2019 were as follows:

Years Ending December 31,	Operating Leases	Finance Leases
2019 (excluding the three months ended March 31, 2019)	$ 406,256	$ 19,455
2020	552,601	25,940
2021	552,970	8,647
2022	556,359	—
2023	218,632	—
Thereafter	132,982	—
Total future minimum lease payments	2,419,800	54,042
Less imputed interest	(407,827)	(3,373)
Total	$ 2,011,973	$ 50,669

Reported as of March 31, 2019	Operating Leases	Finance Leases
Current lease liabilities	$ 390,790	$ 23,531
Noncurrent lease liabilities	1,621,183	27,138
Total	$ 2,011,973	$ 50,669

Disclosures related to periods prior to adoption of ASC 842

The future minimum obligations under operating and capital leases in effect as of December 31, 2018 having a noncancelable term in excess of one year as determined prior to the adoption of ASC 842 are as follows:

Years Ending December 31,	Operating Leases	Capital Leases
2019	$ 525,592	$ 25,940
2020	537,742	25,940
2021	538,893	8,647
2022	542,790	—
2023	198,219	—
Thereafter	109,773	—
Total minimum lease payments	$ 2,453,009	60,527
Amount representing interest at 6%		(4,180)
Present value of future minimum capital lease obligations		56,347
Current portion		(23,191)
		$ 33,156

Note 9. Stockholders' Equity

Authorized Stock

The Company has 100,000,000 authorized shares of common stock with a par value of $0.001 per share, and 2,500,000 undesignated or "blank check" preferred stock, with a par value of $0.001, of which, 800,000 shares have been designated as Class A Convertible Preferred Stock and 585,000 shares have been designated as Class B Convertible Preferred Stock.

Common Stock Issued for Services

During the three months ended March 31, 2019, 1,319 shares of common stock with a fair value of $17,500 were issued to two members of the board of directors as compensation for services.

During the three months ended March 31, 2018, 1,938 shares of common stock with a fair value of $17,500 were issued to two members of the board of directors as compensation for services.

Common Stock Reserved for Future Issuance

As of March 31, 2019, approximately 7.5 million shares of common stock were issuable upon conversion or exercise of rights granted under prior financing arrangements, stock options and warrants, as follows:

Exercise of stock options	5,738,313
Exercise of warrants	1,789,260
Total shares of common stock reserved for future issuances	7,527,573

In addition, we reserved 1,372,998 shares of common stock issuable upon conversion of our Note, which reflects 120% of the maximum number of Note Shares issuable upon conversion of the Note (see Note 6).

February 2018 Tender Offer

On February 8, 2018, we completed an exchange offer with respect to the Company's outstanding warrants to purchase one share of common stock at an exercise price of $3.57 per share (the "Original Warrants"). Through February 2, 2018, we offered holders of the Original Warrants the opportunity to exchange such Original Warrants for an equal number of warrants to purchase one share of common stock at an exercise price of $3.00 per share (the "New Warrants"), conditioned upon the immediate exercise of such New Warrants.

Pursuant to the February 2018 Tender Offer, warrants to purchase 1,580,388 shares of the Company's common stock were tendered by holders of warrants and were amended and exercised in connection therewith, resulting in the issuance by the Company of an aggregate of 1,580,388 shares of its common stock for aggregate gross proceeds of $4.7 million.

The Original Warrants were issued (i) in July 2015 in connection with the Company's registered public offering of 2,090,750 units (each unit consisting of one share of the Company's common stock and one Original Warrant), and (ii) in January 2016 in connection with the mandatory exchange of all of the Company's outstanding Class A Convertible Preferred Stock and Class B Convertible Preferred Stock into 4,977,038 units (each unit consisting of one share of the Company's common stock and one Original Warrant).

The terms of the New Warrants included (i) an exercise price of $3.00 per share and (ii) an exercise period that expired concurrently with the expiration of the Offer at 5:00 p.m. (Eastern Time) on February 2, 2018 (the "Expiration Date"). In addition, the shares issuable upon exercise of the New Warrants (the "New Warrant Shares") were subject to a 60-day lock-up period.

The purpose of the Offer was to raise funds to support the Company's growth plans by providing the holders of the Original Warrants an incentive to exchange their Original Warrants for New Warrants and exercise the New Warrants to purchase shares of the Company's common stock at a reduced exercise price as compared to the Original Warrants. The Company received all of the proceeds from the immediate exercise of the New Warrants, which will be used by the Company for business growth, including as working capital and for other general corporate purposes.

As a result of reducing the exercise price of certain warrants in connection with the February 2018 Tender Offer, a warrant repricing expense of $899,400 was incurred which was determined using the Black-Scholes option pricing model and was calculated as the difference between the fair value of the warrants prior to, and immediately after, the reduction in the exercise price on the date of repricing. Such amount is included in warrant inducement and repricing expense in the condensed consolidated statement of operations for the three months ended March 31, 2018. In connection with this offering, the Company incurred $99,400 in offering costs that were offset against the proceeds from this offering.

Note 10. Stock-Based Compensation

Warrant Activity

We typically issue warrants to purchase shares of our common stock to investors as part of a financing transaction or in connection with services rendered by placement agents and consultants. Our outstanding warrants expire on varying dates through November 2021. A summary of warrant activity is as follows:

	Number of Shares	Weighted-Average Exercise Price/Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (1)
Outstanding — December 31, 2018	2,049,534	$ 4.03		
Issued	—	—		
Exercised	(237,225)	4.22		
Expired	(23,049)	11.95		
Outstanding — March 31, 2019	1,789,260	$ 3.91	1.3	$ 16,223,500
Vested (exercisable) — March 31, 2019	1,789,260	$ 3.91	1.3	$ 16,223,500

(1) Aggregate intrinsic value represents the difference between the exercise price of the warrant and the closing market price of our common stock on March 29, 2019, which was $12.92 per share.

Total intrinsic value of warrants exercised during the three months ended March 31, 2019 was $1.6 million.

Stock Options

We have five stock incentive plans: the 2002 Stock Incentive Plan (the "2002 Plan"), the 2009 Stock Incentive Plan (the "2009 Plan"), the 2011 Stock Incentive Plan (the "2011 Plan"), the 2015 Omnibus Equity Incentive Plan (the "2015 Plan"), and the 2018 Omnibus Equity Incentive Plan (the "2018 Plan"), (collectively, the "Plans"). The 2002 Plan, the 2009 Plan, the 2011 Plan and the 2015 Plan (the "Prior Plans") have been superseded by the 2018 Plan. In May 2018, the stockholders approved the 2018 Plan for issuance up to 3,730,179 shares. The Prior Plans will remain in effect until all awards granted under such Prior Plans have been exercised, forfeited, cancelled, or have otherwise expired or terminated in accordance with the terms of such awards, but no awards will be made pursuant to the Prior Plans after the effectiveness of the 2018 Plan. As of March 31, 2019, the Company had 4,019,728 shares available for future awards under the 2018 Plan.

During the three months ended March 31, 2019, we granted stock options at exercise prices equal to or greater than the quoted market price of our common stock on the grant date. The fair value of each option grant was estimated on the date of grant using Black-Scholes with the following weighted average assumptions:

Expected life (years)	5.7 – 6.2
Risk-free interest rate	2.4% - 2.6%
Volatility	94% – 99%
Dividend yield	0%

The expected option life assumption is estimated based on the simplified method. Accordingly, the Company has utilized the average of the contractual term of the options and the weighted average vesting period for all options to calculate the expected option term. The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of our employee stock options. The expected volatility is based on the historical volatility of our stock commensurate with the expected life of the stock-based award. We do not anticipate paying dividends on the common stock in the foreseeable future.

We recognize stock-based compensation expense over the vesting period using the straight-line single option method. Stock-based compensation expense is recognized only for those awards that vest. We account for the forfeitures of unvested awards as they occur.

Total stock-based compensation expense related to all of our share-based payment awards is comprised of the following:

	Three Months Ended March 31, 2019	Three Months Ended March 31, 2018
Cost of revenues	$ 62,753	$ 35,457
General and administrative	940,139	727,723
Sales and marketing	339,075	229,565
Engineering and development	71,768	56,765
	$ 1,413,735	$ 1,049,510

A summary of stock option activity is as follows:

	Number of Shares	Weighted-Average Exercise Price/Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (1)
Outstanding — December 31, 2018	5,757,305	$ 5.16		
Granted (weighted-average fair value of $7.20 per share)	154,650	9.27		
Exercised	(119,918)	3.12		
Forfeited	(53,724)	10.85		
Outstanding — March 31, 2019	5,738,313	$ 5.26	7.0	$ 44,101,200
Vested (exercisable) — March 31, 2019	3,998,833	$ 4.67	6.4	$ 33,026,000
Expected to vest after March 31, 2019 (unexercisable)	1,739,480	$ 6.61	8.4	$ 11,075,200

(1) Aggregate intrinsic value represents the difference between the exercise price of the option and the closing market price of our common stock on March 29, 2018, which was $12.92 per share.

Total intrinsic value of options exercised during the three months ended March 31, 2019 was $1.0 million,

As of March 31, 2019, there was unrecognized compensation expense of $8.7 million related to unvested stock options, which we expect to recognize over a weighted average period of 2.7 years.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

In this Form 10-Q, the terms "Cryoport", "Company" and similar terms refer to Cryoport, Inc., and its wholly owned subsidiary, Cryoport Systems, Inc.

SAFE HARBOR FOR FORWARD LOOKING STATEMENTS:

This Quarterly Report on Form 10-Q contains forward-looking statements that have been made pursuant to the provisions of the Private Securities Litigation Reform Act of 1995 and concern matters that involve risks and uncertainties that could cause actual results to differ materially from those projected in the forward-looking statements. In some cases, you can identify these statements by terminology such as "may," "will," "should," "could," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential," "continue" or similar words which are intended to identify forward-looking statements, although not all forward-looking statements contain these words. Although we believe that our opinions and expectations reflected in the forward-looking statements are reasonable as of the date of this Quarterly Report, we cannot guarantee future results, levels of activity, performance or achievements, and our actual results may differ substantially from the views and expectations set forth in this Quarterly Report. You should be aware that these statements are projections or estimates as to future events and are subject to a number of factors that may tend to influence the accuracy of the statements. These forward-looking statements should not be regarded as a representation by the Company or any other person that the events or plans of the Company will be achieved. You should not unduly rely on these forward-looking statements, which speak only as of the date of this Quarterly Report. We undertake no obligation to publicly revise any forward-looking statement to reflect circumstances or events after the date of this Quarterly Report or to reflect the occurrence of unanticipated events. You should, however, review the factors and risks we describe in the reports we file from time to time with the Securities and Exchange Commission ("SEC"), including those contained in our Report on Form 10-K for the year ended December 31, 2018, as filed with the SEC on March 13, 2019 and those reports filed after the date of this Quarterly Report. Actual results may differ materially from any forward looking statement.

The following management's discussion and analysis of the Company's financial condition and results of operations ("MD&A") should be read in conjunction with the condensed consolidated balance sheet as of March 31, 2019 (unaudited) and the consolidated balance sheet as of December 31, 2018 (audited) and the related unaudited condensed consolidated statements of operations for the three months ended March 31, 2019 and 2018, and cash flows for the three months ended March 31, 2019 and 2018 and the related notes thereto (see Item 1. Financial Statements), as well as the audited consolidated financial statements of the Company for years ended December 31, 2018 and 2017, included in the Company's Form 10-K for the year ended December 31, 2018.

General Overview

Overview

Cryoport is a life sciences services company focused on providing critical solutions, such as temperature-controlled logistics, bioservices and end-product fulfillment to the biopharma, reproductive medicine and animal health markets. Our differentiated products and services enable our clients to ship, store and deliver biologics and other life sciences commodities in a continual temperature-controlled state, including ultra-low cryogenic and other temperature ranges.

Cryoport's advanced, comprehensive and technology-centric systems and solutions were designed to support the global high-volume distribution of commercial biologic and cell-based products regulated by the United States Food and Drug Administration (FDA) and other international regulatory bodies for distribution in the Americas, EMEA (Europe, the Middle East, and Africa) and APAC (Asia-Pacific) regions. Cryoport's solutions are also designed to support pre-clinical, clinical trials, Biologics License Applications (BLA), Investigational New Drug Applications (IND) and New Drug Applications (NDA) with the FDA as well global clinical trials initiated in other countries, where strict regulatory compliance and quality assurance is mandated. Our industry standard setting Chain of Compliance™ solution, which includes vital analytics, such as 'chain-of-condition' and 'chain-of-custody' information in a single data stream, empowers our clients' continuous vigilance over their commodities. In addition, our Chain of Compliance™ standard ensures full traceability of the equipment used and the processes employed, further supporting each client's goal to minimize risk and maximize success of their new biologics or other commodities as they are introduced into the global markets.

As part of our services, our technologies provide the ability for Cryoport personnel and our clients to monitor conditions of the internal shipping environment, location and other specified critical variables for each shipment in near real time. In accordance with client requirements, information is recorded and archived for each shipment for scientific, quality assurance and regulatory purposes in a secure cloud-based system that can be accessed globally. This information provides an audit trail that can verify the in-shipment condition in which the life sciences commodity, material, product, vaccine or therapy was shipped and/or stored.

One of the most important features of our Cryoport Express® Solutions is the sophisticated, cloud-based, logistics management platform, which is branded as the Cryoportal® Logistics Management Platform. The Cryoportal® supports the management of shipments through a single interface, which includes order entry, document preparation, customs documentation, courier management, near real-time shipment tracking, issue resolution, and regulatory compliance requirements. In addition, it provides unique and incisive information dashboards and validation documentation for every shipment through data collected by the SmartPak II™ Condition Monitoring System). The Cryoportal® can record and retain a fully documented history of all Cryoport Express® Shippers, including 'chain-of-custody', 'chain-of-condition', 'chain-of-identity', and Chain of Compliance™ information for each shipment, which is used to ensure that the stability of shipped biologic commodities are maintained throughout the shipping cycle. At the client's option, recorded information is archived, allowing the client to meet exacting requirements necessary for scientific work and/or for proof of regulatory compliance during the logistics process.

Our Cryoport Express® Solutions include a family of Cryoport Express® Shippers ranging from liquid nitrogen dry vapor shippers (-150℃) to our C3™ Shippers (2-8℃), which are powered by phase-change materials. Cryoport Express® Shippers are precision engineered assemblies that are reliable, cost-effective and reusable or recyclable. Our liquid nitrogen dry vapor Cryoport Express® Shippers utilize an innovative application of 'dry vapor' liquid nitrogen technology and, most often, include a SmartPak II™ Condition Monitoring System. Cryoport Express® Shippers meet International Air Transport Association ("IATA") requirements for transport, including Class 6.2 infectious substances. Cryoport Express® Shippers are also International Safe Transit Association ("ISTA") "Transit Tested" certified.

As part of our services, we assist and/or provide clients with secondary packaging that is placed inside the main chamber of our Cryoport Express® Shippers. In addition to vials, canes, straws, goblets, plates, etc., we also offer engineering and consulting services to assist clients in creating and developing customized secondary packaging that meet their specific requirements.

Our advanced technologies and dedicated personnel allow us to continue to expand our services footprint with a growing suite of services, products and competencies serving the life sciences industry, which currently include: information technology, primary and secondary packaging, near real-time monitoring, analytics, logistics distribution, consulting, laboratory relocation, fleet management, embedded logistics support, validation services (especially for shipping lanes and packaging). A sample of our client facing, value-added competencies addressing specific client requirements are as follows:

- "***Personalized Medicine and Cell-based Immunotherapy Solutions,"*** designed for autologous therapies in which our Cryoport Express® Solutions serve as an enabling technology for the safe and efficient transportation of leukapheresis or apheresis blood products as well as the manufactured autologous cellular-based immunotherapies by providing a comprehensive logistics solution for the verified chain of condition and chain of custody, chain of identity, and Chain of Compliance™ transport from, (a) the collection of the patient's blood or cells at a point-of-care setting, to (b) a central processing facility where they are manufactured into a personalized medicine, to (c) the safe, cryogenically preserved delivery of these often irreplaceable cells to a point-of-care treatment facility. If required, Cryoport Express® Shippers can then serve as a temporary freezer/repository supporting the efficient distribution of the personalized medicine to the patient when and where the medical provider needs it, without the expense and inconvenience of on-sight, cryopreservation storage freezers.

- ***"Allogeneic Therapy Solutions,"*** designed for allogeneic therapies in which our Cryoport Express® Solutions serve as an enabling technology for the safe and efficient transportation of health donor blood products as well as the manufactured allogeneic therapies by providing a comprehensive logistic solutions for the verified chain of condition, chain of custody, chain of identity, and Chain of Compliance™ transport from, (a) the blood collection center, to (b) the manufacturing facility for the allogeneic therapy, to (c) a storage and fulfillment facility, or (d) to a point-of-care treatment facility. Again, if required, the Cryoport Express® Shipper can then serve as a temporary freezer/repository to allow the efficient distribution of the personalized medicine to the patient.

- ***"Embedded Solutions,"*** our most comprehensive solution, which involves our management of the entire temperature-controlled logistics process for our client using Cryoport technology and Cryoport employees working on-sight at the client's location to manage all of the client's temperature-controlled logistics needs.

- ***"Fleet Management,"*** our fleet management support service is designed to reduce our clients upfront and recurring costs through optimized utilization of resources and minimization of equipment loss. We offer both complete and partial temperature-controlled outsourced fleet management services, including fleet evaluation and disposition (if required), inventory control, fleet maintenance and ongoing fleet requalification and validation.

- ***"Packaging Development,"*** using 'Design-of-Experiment' and 'Quality-by-Design' processes, Cryoport can design, engineer and employ customized packaging and/or accessories to ensure effective distribution of our client's critical commodities using our in-house team of packaging engineering competencies in the cryogenic, 2-8℃ and other temperature-controlled ranges to meet or exceed our client's specifications. Packaging development may include integration of our SmartPak II™ Condition Monitoring System and the accommodation of our Cryoportal® Logistics Management Platform into our clients' packaging configurations, providing full access to our logistics management support competencies.

- ***"Consulting Services,"*** provides our clients an opportunity to leverage our in-house talent to: design custom logistics plans, perform lane assessment, lane validation, carrier validation; design custom packaging and validation, permitting clinical trial logistics design; commercial launch planning; systems integration; and end user training.

- ***"Laboratory Relocation,"*** for large moves of life sciences commodities, we use redundant temperature-controlled shippers and environmentally controlled trucks. Along with our logistics partners, we ensure the integrity of client materials during all logistics phases, including loading, transport, unloading and placement. Our service includes lane and carrier permitting and validation. Our large sample capacity Cryoport Express® CryoMax™ Shipper has a holding time of up to 20 days and includes the benefit of our near real time SmartPak II™ Condition Monitoring System, which supplies monitoring information to our Cryoportal® Logistic Management Platform, providing LiveView information on the client's transport. By employing our 24/7/365 client support team to actively monitoring shipments and mitigate risks, we ensure safe shipping and relocation of large-scale collections.

- ***"powered by cryoport℠,"*** available to providers of shipping and delivery services who seek to offer a "branded" cryogenic logistics solution as part of their service offerings. "powered by cryoport℠" appears prominently on the offering software interface and packaging. This option for the client to private label its service is available upon committing to certain requirements, such as minimum annual shipping volumes.

In addition to the offerings above, Cryoport is continuously evaluating, expanding and improving its range of services and solutions in response to market needs and client demand.

Competitive Advantages

With our first-to-market and technology-driven logistics services for the life sciences industry and over a decade of experience, we have established a unique lead over potential competitors. Furthermore, we are not aware of any company that offers Cryoport's full suite of solutions. Working with our tools in information technology, packaging and temperature-controlled logistics, we approach our growing markets with innovation, creative thinking and advanced technologies.

The most common alternatives to Cryoport's solutions are "older technologies" and/or systems. In fact, a portion of the biopharma market and much of the animal health market still uses hazardous liquid nitrogen or dry ice with no ongoing validation processes for their equipment or procedures. In the case of dry ice, the technology delivers temperatures of approximately -80℃ with standard deviations up to 14℃. Consequently, it provides an environment that allows cellular activity to continue and cells to degrade, impacting cell line performance and cell viability. Liquid nitrogen, on the other hand, while effective in holding cryogenic temperatures, is bulky, heavy, expensive and requires special handling to avoid spillage and accommodate weight. Both dry ice and liquid nitrogen are classified "hazardous" by IATA (International Air Transportation Association) and, therefore, are also classified as "dangerous goods," requiring additional permits and fees. Cryoport solutions on the other hand are classified as non-hazardous.

Through our experience, we know that logistics distribution can have a large impact on product/commodity conditions. This is especially important for high value and at times irreplaceable commodities that we transport, whether in support of a clinical trial or the commercial distribution of a product. We therefore go beyond traditional ISTA (International Safe Transit Association) packaging validation and have implemented Quality-by-Design processes that allow us to assess in-field events, the impact of logistics on the commodity being shipped, and the equipment being used for each individual shipments.

We have been qualified as a trusted temperature-controlled logistics solutions provider for hundreds of life sciences companies and institutions and, currently, support over 300 clinical trials in the regenerative medicine space. Cryoport has logged over 260,000 shipments to over 100 countries with hundreds of different types of life sciences materials. This experience and reputation, combined with over a decade of know-how and technology, provides us with significant competitive advantages. In fact, since our inception, we have experienced minimal client attrition.

In addition, Novartis and Kite Pharmaceuticals Inc. (a Gilead company) have both entrusted Cryoport to manage the global clinical shipments of its cell therapies trials and the commercial shipments of its CAR-T cell therapies, Kymriah® and Yescarta®, respectively, which were the first two CAR-T cell therapies approved by the FDA.

Our competitive position is further enhanced by our respective "*powered by cryoport℠*" partnership agreements with FedEx, DHL, UPS, who collectively, have more than 87% of the express logistics aircraft in service and who, respectively, have been expanding other parts of their temperature-controlled offerings for the life sciences industry.

We continuously enhance and broaden our solutions offering in order to maintain and extend what we believe to be a significant lead in the marketplace. We believe that it would take a serious potential competitor an extended period of time and investment to build out the tools, solutions, and competencies we possess along with our know-how. In addition to our lead as the first-to-market mover and leader in market share in the regenerative medicine space, we think our biggest competitive advantage falls into our trade secrets and our speed to market with new solutions. Our market leading position enables us to be uniquely tuned to the markets we serve, which enables us to anticipate and quickly react to client needs and market demand. We try to employ the best people in the industry, and we foster the development and implementation of new technologies to maintain that lead. In every aspect possible, we strive to be a 'green,' environmentally responsible company, which we consider to be a competitive advantage.

Strategic Logistics Alliances and Collaborations

We have been successful in establishing strategic distribution alliances around the world, under our "*powered by Cryoport℠*" strategy, as a long-term method of marketing our solutions to the life sciences industry. We have focused our efforts on leading companies in the logistics services industry as well as participants in the life sciences industry. The "*powered by Cryoport℠*" strategy with our alliance partners reflects our solutions being integrated into our alliance partner's services.

Cryoport now supports the three largest integrators in the world, FedEx, DHL and UPS, with its advanced cryogenic logistics solutions for the life sciences industry and for logistics support. To support each integrator's marketing efforts, we operate with each independently and confidentially in support of each company's respective strategy.

FedEx. Since January 2013, we have had a master agreement with Federal Express Corporation ("FedEx") the FedEx Agreement provides FedEx with a non-exclusive license and right to use a customized version of our Cryoportal® Logistics Management Platform for the management of shipments made by FedEx customers. The FedEx Agreement was last amended in December 2018 to extend its term through December 31, 2019, with the intent to develop a new and updated multiyear agreement. Under our FedEx Agreement, we provide frozen shipping logistics services through the combination of our purpose-built proprietary technologies and turnkey management processes. FedEx markets and sells Cryoport's services for frozen temperature-controlled cold chain transportation as its FedEx® Deep Frozen Shipping Solution on a non-exclusive basis and at its sole expense. As part of the solution, Cryoport has developed a FedEx branded version of our Cryoportal® Logistics Management Platform, which is "*powered by cryoport℠*" for use by FedEx and its customers, giving them access to the full capabilities of our cloud-based logistics management software platform.

DHL. Since June 2014, through a master agreement with LifeConEx, a part of DHL Global Forwarding ("DHL"), which automatically renews for successive one-year periods, we have provided DHL with cold chain logistics offerings to its life sciences and healthcare customers with Cryoport's validated cryogenic solutions. DHL offers Cryoport's cryogenic solutions through its worldwide Thermonet network of Certified Life Sciences Stations under the DHL brands as "*powered by cryoport℠*". In addition, DHL's customers have direct access to our cloud-based order entry and tracking portal to order Cryoport Express® Solutions and receive preferred DHL shipping rates and discounts. Our proprietary logistics management platform, the Cryoportal®, is integrated with DHL's tracking and billing systems to provide DHL life sciences and healthcare customers with a seamless way of accessing critical information regarding shipments of biological material worldwide.

UPS. Since October 2014, United Parcel Services, Inc. ("UPS") has been a distributor, under our "*powered by cryoport℠*" strategy, by entering into an agreement with UPS Oasis Supply Corporation, a part of UPS, whereby UPS offers our validated and comprehensive cryogenic solutions to its life sciences and healthcare customers on a global basis. Under this agreement, UPS customers have direct access to our proprietary Cryoportal® Logistics Management Platform, which is integrated with UPS's tracking and billing systems, to provide UPS life sciences and healthcare customers with a seamless way to enter orders and access critical information regarding shipments of biological material worldwide.

We also have relationships using our "*powered by cryoport℠*" strategy with the following alliance partners:

McKesson Specialty Health, a division of McKesson Corporation. In February 2018, we announced a strategic collaboration with McKesson Specialty Health. Adding Cryoport's integrated cold-chain capabilities and near real-time monitoring, the McKesson and Cryoport collaboration provides an end-to-end solution for complex products which require high-touch patient access and adherence support as well as temperature-controlled product transportation. McKesson Specialty Health works together with stakeholders across the healthcare delivery system to preserve and strengthen specialty care. Cryoport's solutions coupled with McKesson's end-to-end patient access and support services are focused on helping patients avoid delays in treatment through accelerated patient on-boarding, prior authorizations, end-user training and comprehensive adherence and educational support programs.

World Courier, a part of AmerisourceBergen. In July 2018 we announced World Courier's integration of Cryoport's full suite of temperature-controlled solutions into its global network. World Courier is a global specialty logistics company that designs world-class supply chain programs. The integration allows Cryoport's Chain of Compliance™ solutions availability to World Courier clients. The integrated platform combines the strengths of both the Cryoport and World Courier systems to their respective biopharmaceutical clients, allowing each client to proactively minimize risks to their cell and gene therapies through the entire biopharma supply chain in order to maintain the efficacy of their valuable commodities. Our integrated solutions will be offered through World Courier's global network of more than 140 company-owned offices operating across 50 countries, as well as directly through Cryoport's business development team.

Be The Match BioTherapies®. **I**n October 2018, we announced a strategic partnership with Be The Match BioTherapies to deliver end-to-end supply chain services to the cell and gene therapy industry. Be The Match BioTherapies is the only cell and gene therapy solutions provider with customizable services to support the end-to-end cell therapy supply chain. Backed by the industry-leading experience of the National Marrow Donor Program/Be The Match, and a research partnership with the CIBMTR® (Center for International Blood and Marrow Transplant Research®), the organization designs solutions that advance cell and gene therapies in any stage of development. By pairing Cryoport's expertise in temperature-controlled logistics with Be The Match BioTherapies' expertise in apheresis center onboarding and management, case management and logistics, clinical research, and outcomes data collection and analysis, the two organizations will offer full end-to-end supply chain and outcomes support for companies developing and delivering autologous and allogeneic cell and gene therapies. An important part of the agreement is to integrate Be The Match BioTherapies' MatchSource® cell therapy supply chain software and Cryoport's Cryoportal® Logistics Management Platform. The outcome is a platform that manages more cell therapy products than any other solution in the marketplace, enabling cell and gene therapy companies to more rapidly discover, develop and deliver next-generation therapies. Our collaboration will support both organizations' efforts to standardize critical elements of the cell therapy supply chain, as well as processes in apheresis and transplant center networks.

Cryoport's Positioning in the Life Sciences Industry

Life sciences technology advancements are expected to have a significant impact on global society over the next 25 years. The industry is growing in a way where research and manufacturing pipelines span across the globe. This also increases the need to mitigate supply chain risks, especially for cellular-based therapies/products and other life sciences commodities today and tomorrow.

Over the past several years, Cryoport has assumed the leadership position in supporting the rapidly growing regenerative medicine market with its temperature-controlled logistics solutions. According to the Alliance for Regenerative Medicine's State of the Industry Briefing in January of 2019, there were 906 regenerative medicine companies worldwide, conducting a total of 1,028 clinical trials of which 92 were in Phase III as of the end of 2018. The total targeted enrollment of patients in regenerative medicine clinical trials word-wide were 59,757 patients. Total global financings in this space were $13.3 billion, up 73% compared to 2017. The FDA stated that by 2025 it predicts that it will be approving 10 to 20 cell and gene therapy products per year. This data further amplifies the significant position regenerative medicine is taking in the development of new therapies and products in the life sciences industry.

The total cold chain logistics market for the life sciences industry has historically grown faster per annum than the total life sciences logistics market. For 2018, global cold chain logistics spending, overall, was forecasted to be $15.0 billion; with approximately $3.4 billion in spending supporting global clinical trials. By 2022, the global life sciences cold chain logistics market is forecast to grow to $18.6 billion for a 24% increase. The majority of the growth is a result of the recent advancements in the development of biologics and cell-based therapies. As a result, scientists, intermediaries, and manufacturers require means for cryogenically transporting and storing their work and products, such as CAR-T cell therapies, where temperatures must be maintained below the "glass point" (generally, below minus 136°C). In addition, our Cryoport Express® C3™ solution was specifically developed to address the front-end logistics of some autologous therapies that transport whole blood to the point of manufacturing, requiring a stable 2-8°C temperature range. It is more robust than any competing shipper today with its exacting and reliable design. These solutions incorporate our Cryoportal® Logistics Management Platform and the SmartPak II™ Condition Monitoring System, giving our clients a seamless logistics record of all vital information for each therapy shipped on a worldwide basis.

We think Cryoport is appropriately positioned as a life sciences services company focused on providing solutions such as temperature-controlled logistics, bioservices and end-product fulfillment, to the regenerative medicine, reproductive medicine and animal health markets. Our differentiated products and services enable our clients to ship, store and deliver biologics and other commodities required to remain in a continual cryogenic or temperature-controlled state, such as CAR-T therapies and other cell therapies, gene therapies, embryos for reproductive medicine, vaccines, and stem cells. Our standard setting Chain of Compliance™, which includes vital analytics, including 'chain-of-condition' and 'chain-of-custody' information, in a single data stream, allows our clients continuous vigilance over their commodities to minimize risk and maximize success through traceability of the equipment used and the processes employed in supporting each client's therapy or other commodity.

Life Sciences Agreements

Our clients include life sciences companies and institutions that have engaged us to support their clinical studies and trials as well as the global distribution of their commercial biologics, vaccines and other products with our temperature-controlled logistics and bioservices solutions. Our most significant agreements are as follows:

Zoetis. In December 2012, we signed an agreement with Pfizer Inc. relating to Zoetis Inc. (formerly the animal health business unit of Pfizer Inc.) pursuant to which we are now managing all cryogenic shipments of Zoetis' key poultry vaccines. Under this arrangement, we provide on-site logistics personnel and our Cryoportal® Logistics Management Platform to manage shipments from the Zoetis manufacturing site in the United States to domestic customers as well as various international distribution centers. The Company manages Zoetis' total fleet of shippers used for this purpose, including liquid nitrogen shippers. In July 2013, the Agreement was amended to expand Cryoport's scope to manage all logistics of Zoetis' key frozen poultry vaccine to all Zoetis' international distribution centers as well as all domestic shipments. In October 2013, the Agreement was further amended to further expand Cryoport's role to include the logistics management for a second poultry vaccine. In September 2015 and May 2018, the Agreement was further amended and extended through March 2019, subject to certain termination and extension provisions. We are currently in discussions with Zoetis to further extend and amend the agreement.

Novartis. In May 2017, we signed an agreement with Novartis Inc. to manage the global clinical and commercial shipments of its CAR-T cell therapies, including the commercial launch of CAR-T cell therapy, Kymriah® (CTL019), for children and young adults with B-cell ALL that is refractory or has relapsed at least twice. On August 30, 2017 Novartis received from the FDA the first ever CAR-T cell approval for the first indication of Kymriah®. Subsequently on May 1, 2018 the FDA approved Kymriah® for the treatment for adult patients with relapsed/refractory DLBCL. Following the U.S. approvals, on August 27, 2018 the EU approved Kymriah® for both ALL and DLBCL, Canadian approval on September 6, 2018, and Australian approval on December 20, 2018. Most recently, in April 2019, Kymriah® received approval from the Japanese regulator authority. Novartis has treated patients in 11 countries and has over 500 employees dedicated to the support of Kymriah®. Under our agreement with Novartis, Cryoport provides cryogenic packaging and shipping using its Cryoport Express® Shippers, monitoring using its SmartPak II™ Condition Monitoring System technology and communications and information recording using its Cryoportal® Logistics Management Platform to manage shipments from the Novartis manufacturing sites to their clinical and commercial sites for patient administration globally.

Kite/Gilead. In July 2017, we signed an agreement with Kite Pharmaceuticals Inc. (a Gilead company) to manage the clinical and commercial shipments of its CAR-T cell therapy, Yescarta® (Axicabtagene Ciloleucel). On October 18, 2017, Yescarta® became the first CAR-T therapy approved by the FDA for the treatment of adult patients with relapsed or refractory large B-cell lymphoma. Additionally, Yescarta® received EU approval on August 27, 2018 for relapsed/refractory DLBCL and PMBCL. As of January 31, 2019, Kite had 68 cancer centers authorized to treat patients in the United States and 12 certified in the EU. Through these centers over 700 patients have been treated with Yescarta®. Under our agreement with Kite, Cryoport provides cryogenic packaging and shipping using its Cryoport Express® Shippers, monitoring using its SmartPak II™ Condition Monitoring System technology and communications and information recording using its Cryoportal® Logistics Management Platform to manage shipments from the Kite manufacturing sites to their clinical and commercial sites of patient administration globally.

Cryoportal™ Logistics Management Platform

The Cryoportal® Logistics Management Platform records and retains a fully traceable and documented history of all serialized equipment and components as part of our Chain of Compliance™ solution, as well as "chain-of-condition" and "chain-of-custody" for every shipment, helping ensure that quality, safety, efficacy, and stability of shipped commodities are maintained throughout the process. Additionally, the Cryoportal® is used by Cryoport, our clients and business partners to automate the entry of orders, documentation preparation, to assist in managing logistics operations and to reduce administrative costs typically provisioned through manual labor relating to order-entry, order processing, preparation of shipping documents and back-office accounting. It is also used to support the high level of customer service expected by the life sciences industry. Certain features of the Cryoportal® are designed to reduce operating costs and facilitate the scaling of Cryoport's business. Examples of these features include automation of order entry, development of key performance indicators ("KPI's") to support efforts for continuous process improvements in our business, and programmatic exception monitoring to detect and sometimes anticipate delays in the shipping process, often before the customer or the shipping company is aware of them. These features offer significant value to our customers in terms of cost avoidance and risk mitigation.

The Cryoportal® Logistics Management Platform also serves as the communications center for the management, collection and analysis of SmartPak II™ Condition Monitoring System data collected in near real time from the field. Collected data is converted into information reports containing valuable and actionable information that becomes the quality control or "pedigree" of the shipment. This information can be utilized by Cryoport to provide valuable feedback in near real time to our clients relating to their shipments. Additionally, our SmartPak II™ Condition Monitoring System provides the ability to apply Quality by Design fundamentals to our logistics solutions enabling intervention and risk mitigation capabilities to be employed.

The Cryoportal® Logistics Management Platform has been developed as a "carrier-agnostic" system, allowing clients and the Cryoport Logistics Management team to work with any combination of integrators, freight forwarders, couriers and/or brokers depending on the specific requirements and/or client preferences. To increase operational efficiencies, the Cryoportal® Logistics Management Platform is integrated with the tracking systems of FedEx, DHL and UPS and other key logistics providers.

The Cryoportal® was developed for time-and temperature-sensitive shipments that are required to be maintained at specific temperatures, beginning with the most demanding cryogenic temperatures (-150℃) and moving upward to ambient (20-25℃) to ensure that the shipped samples/commodities/products are not subject to degradation or out of designated "safe" range temperatures. While our current focus is on cryogenic (-150℃) as well as 2-8℃ logistics within the life sciences industry, the use of the Cryoportal® Logistics Management Platform can and may be extended into other temperature-controlled ranges for the life sciences. To our knowledge, the Cryoportal® Logistics Management Platform is unique to temperature-controlled logistics in the life sciences industry. It is robust and has considerable capabilities. We frequently receive favorable feedback about the Cryoportal® from our clients and partners.

Cryoport Express® Shippers

Our Cryoport Express® Shippers are a family of shippers engineered specifically to serve the life sciences industry. Engineering of these devices, which are made up of proprietary packaging, dewar vacuum flasks, near real time electronic monitoring systems and engineered shock absorbing overpackaging requires multiple and varied engineering disciplines. Each Cryoport Express® Shipper is ISTA (International Safe Transit Association) validated and IATA, UN, International Civil Aviation Organization ("ICAO") compliant. Cryoport Express® Shippers are the highest level, most comprehensive logistics shippers serving the life sciences industry.

Cryogenic Cryoport Express® Shippers employ liquid nitrogen vapor shipper vacuum flask tanks capable of maintaining cryogenic temperatures of minus 150℃ or below for a dynamic shipping period of 10 days or more. A dry vapor cryogenic shipper is a device that uses liquid nitrogen contained inside a vacuum insulated vessel (vacuum flask tank), which serves as a refrigerant to provide stable storage temperatures below minus 150℃. Our Cryoport Express® Shippers are designed to ensure that there is no pressure build up as the liquid nitrogen evaporates. We have developed a proprietary retention system to ensure that liquid nitrogen stays inside the vacuum container, which allows the shipper to be designated as a dry vapor shipper meeting IATA requirements. Biological or pharmaceutical specimens are stored in a specimen chamber, referred to as a "well" inside the container and refrigeration is provided by gas evolving from the liquid nitrogen entrapped within the proprietary retention system. Specimens that may be transported using our cryogenic shipper include: live cells, scientific or pharmaceutical commodities such as cancer therapies, vaccines, diagnostic materials, semen, eggs, embryos, infectious substances, and other commodities that require continuous exposure to cryogenic temperatures, i.e., temperatures below minus 150℃.

An important feature of our Cryoport Express® Shippers is their compliance with the stringent packaging requirements of IATA Packing Instructions 602 and 650, respectively. These specifications include meeting internal pressure (hydraulic) and drop performance requirements. Under IATA guidelines, Cryoport Express® Shippers are classified as "Non-hazardous." Dry ice and liquid nitrogen are classified as "Dangerous Goods." Our shippers are also in compliance with International Civil Aviation Organization ("ICAO") regulations that prohibit egress of liquid nitrogen residue from the shipping packages. The ICAO is a United Nations organization that develops regulations for the safe transport of dangerous goods by air.

We currently offer dry vapor shippers with varying storage capacities, including our Cryoport Express® Standard Shipper, Cryoport Express® High Volume Shipper, Cryoport Express® Sliderite® Shipper, Cryoport Express® CXVC1 Shipper and Cryoport Express® CryoMax™, which has a capacity of 36,400 2.0 ml vials. Our Cryoport Express® Shippers are composed of aluminum (aircraft-grade) material, with an engineered well for holding high value biologics or other materials in its inner chamber.

Cryoport Express® Dry Vapor Shippers

Cryoport Express® Dry Vapor Shippers are lighter than liquid nitrogen flasks. They are engineered units that consist of dewar flasks, electronics, and engineered outer packaging. Cryoport Express™ Shippers include re-usable dry vapor liquid nitrogen storage containers (vacuum flask tanks) that, we believe, combine the best features of life sciences packaging, cryogenics science and vacuum insulation technology. Cryoport Express® Dry Vapor Shippers are composed of aluminum metallic dewar flasks, with wells for holding the biological material in the inner chambers. The dewar vessel is a device in which the conduction, convection and radiation of heat are reduced as much as possible giving it the capability of maintaining its contents at a near-constant temperature over relatively long periods of time. The inner chamber of the shippers is surrounded by a high surface, low-density material which retains the liquid nitrogen in-situ by absorption, adsorption, and surface tension. Absorption is defined as the taking up of matter in bulk by other matter, as in the dissolving of a gas by a liquid, whereas adsorption is the surface retention of solid, liquid or gas molecules, atoms or ions by a solid or liquid. This material absorbs liquid nitrogen relatively rapidly, while providing our shippers with hold times and capacities to transport biological materials safely and conveniently. The specimen-holding chamber has a primary cap to enclose the specimens/commodities, and a removable and replaceable secondary cap to further enclose the specimen/commodity-holding container and to contain the liquid nitrogen dry vapor. The entire dewar vessel is then wrapped in a plurality of insulating and cushioning materials and placed in an outer packaging that been engineered specifically for absorbing shock and the challenges encountered in transportation. This outer packaging also houses the Smart Pak II™ Condition Monitoring System which communicates with the Cryoportal™ Logistics Management Platform.

Cryoport Express® C3™ Shippers

Non-cryogenic, temperature-controlled Cryoport Express™ Shippers employ sourced components that are modified and assembled to meet the requirements of the task for which they were designed. An example is the Cryoport Express™ C3™ Shipper.

Cryoport Express® C3™ Shippers are designed to maintain a controlled temperature range of 2°-8°C for up to 96 hours under dynamic shipping conditions. These reusable shippers are offered as part of our *Cryoport. Certified. Cool.* or *C3™* Solution. It includes our Cryoport's SmartPak II™ Condition Monitoring System and the Cryoportal® Logistics Management Platform. This solution was introduced to support the growing need in the regenerative therapy market and to enable our clients to utilize our solutions for both, the transportation of leukapheresis and apheresis blood products as well as the manufactured autologous cellular-based immunotherapies.

Cryoport Express® Shipper Summary

We believe Cryoport Express® Shippers used in Cryoport Express® Solutions do the best job in the life sciences industry to mitigate risks. We believe that our Cryoport Express® Solutions are the most advanced and most cost-effective temperature-controlled logistics solutions available to the life sciences industry. We believe Cryoport Express® Solutions satisfy client needs and scientific and regulatory requirements relating to each shipment of time- and temperature-critical, frozen and/or refrigerated transport of biological materials, such as stem cells, cell lines, pharmaceutical clinical trial samples, gene biotechnology, infectious materials handling, animal and human reproduction markets. We believe that due to our proprietary technology, innovative design and systems, our Cryoport Express® Shippers are less prone to losing critical functional hold time than competing products.

Cryoport Express® SmartPak II™ Condition Monitoring System

For our clients, condition monitoring is a high-value feature as it is an effective and reliable method to determine that their commodity/product was not damaged and did not experience degradation during shipment due to temperature fluctuations or other undesirable conditions. Our SmartPak II™ Condition Monitoring System is designed to track the key aspects of each shipment that could affect the quality and/or timing of delivery of the commodity/product to its intended destination. This includes near real-time tracking using GPS, cellular and Wi-Fi technologies, technology monitoring of internal and external temperatures, humidity, barometric pressure, shock, orientation of the shipper, as well as exposure to light as a measure of security breaches, compromised packaging or shipper openings during transit. Our exacting temperature sensors are positioned within our Cryoport Express® Shippers to record the most accurate readings. The resultant temperature mapping includes both the temperature inside the chamber (which is closest to the actual biomaterial) and the external temperature. Our advanced SmartPak II™ Condition Monitoring System is engineered to work in tandem with our Cryoportal® Logistics Management Platform, enabling predictive and proactive monitoring of materials shipped. The data collected and resulting analytics, combined with the mapping of shipment check-in points, provide a holistic view of the complete shipping process. At the client's election, shipments can have a full 'chain-of-custody', chain-of-condition, and chain-of-identity along with other data monitoring analytics. Archival storage is available for every shipment.

Chain-of-Condition, Chain-of-Custody, and Chain-of-Identity

Chain-of-Condition information is essential for many life sciences customers. Our monitoring services are provided by our SmartPak II™ Condition Monitoring System, which provides data on the condition of our Cryoport Express® Shipper and the conditions in which commodities/products are being shipped, which is critical for temperature-sensitive biologics.

Chain-of-Custody relates to the traceability of which party has the physical custody of the Cryoport Express® Shipper during each segment of transport. With the assistance of an overlay on carrier check-ins and our algorithms, our SmartPak II™ Condition Monitoring System supplies a data monitor that reports chain-of-custody information, which is another essential information element required for temperature-sensitive biologics.

Chain-of-Identity refers to the traceability of the identity of each client's or patient's therapy that is inside of the Cryoport Express® Shipper, which can be tracked through the Cryoportal® Logistics Management Platform

The Cryoportal® Logistics Management Platform acts as the data repository for all shipment and condition information. Our customers can access their information via the cloud-based Cryoportal® Logistics Management Platform through an internet connection anywhere in the world and all data is securely retained for quality assurance and regulatory purposes.

Chain of Compliance™

During 2018 we introduced Cryoport's Chain of Compliance™ solution, as a new industry standard. Cryoport's Chain of Compliance™ goes beyond Chain of Condition and Chain of Custody by providing traceability of the equipment and processes supporting each client or patient therapy. The Chain of Compliance™ enables Cryoport to recall every transport that an individual Cryoport Express® Shipper has taken, the client it supported, the commodity transported, it's performance during transit, and each step that Cryoport performs before the shipper is put back into service. This includes container performance and requalification history, commodity history, courier handling and performance history, calibration history, and correlation competencies that can link in field events to equipment performance. A review of these requirements are as follows:

1. **Container performance history**: All transportation equipment should have a validated hold time standard that can change over time for multi-use equipment. Data supporting an accurate calculation of the hold time of a cold chain container should include the nitrogen evaporation rate, liquid nitrogen capacity, vacuum integrity, dynamic hold time, as well as the actual in field temperature, humidity, shock, and orientation data.

2. **Commodity history:** In addition to the performance of the equipment utilized for a given shipment, a complete historical record of the contents shipped in any given container should be tracked such that it can be certified that a given piece of equipment has only been used for the distribution of non-infectious human materials.

3. **Container (re)qualification history:** Additionally, accurate records should be maintained as to the requalification or testing of the performance of the equipment to be utilized. These records should also include any repairs or maintenance performed on the equipment, any deviations or damage during use, as well as any contamination or sterility issues over the entire historical usage of the equipment.

4. **Calibration history:** All calibration data for any electronic components of a given package should be traceable back to the equipment. This should include thermocouple calibration or validation data, battery performance, software or firmware updates by date and version, and serialized accessories that are archived by part number.

5. **Correlation:** Lastly, the ability to cross reference in-field handling events including shock, damage, delays, orientation, and anti-tamper competencies to the impact on the commodity shipped is a key requirement and should include the ability to cross reference the historical custody of the container. This should include all locations receiving the container, as well as the courier for freight partners who were responsible for the delivery of the container from origin to destination.

The main reason that the FDA and other regulatory bodies are interested in Cryoport's Chain of Compliance™ is that it provides the ability to collect, interpret, and leverage comprehensive data enabling a significantly more intelligent supply chain. Rather than reactively trying to determine what has gone wrong after multiple failures, it becomes possible to take a proactive approach. Moreover, we believe that effective implementation provides historical traceability of logistics processes, equipment, and third party support entities, which enables the critical assessment of the complete supply chain to minimize failures and risk.

Cryoport Express® Analytics

Cryoport Express® Analytics information is captured by the Cryoportal® Logistics Management Platform to provide us and our clients access to important information from the shipments, which and assist in the management of our clients' logistics needs. We use anonymized information to support planning for future features of our solutions offering. Analytics is a term used by IT professionals to refer to performance benchmarks or KPI's that management utilizes to measure performance against desired standards. Examples for analytics tracked through the Cryoportal® include time-based metrics for order processing time and on-time deliveries by our shipping partners, as well as profiling shipping lanes to determine average transit times and predicting potential shipping exceptions based on historical metrics. Our analytics are utilized internally to proactively improve our client services and develop new offerings. Cryoport Express® Analytics information is also used by Cryoport Consulting to support some of its work.

Logistics Expertise, Consulting and Support

Cryoport's client services professionals provide 24/7/365 live logistics and monitoring services with specialized knowledge in the domestic and global logistics of life sciences material requiring controlled temperatures. Cryoport logistics professionals have validated shipping lanes in and out of well over 100 countries to ensure shipments maintain temperatures and arrive securely and on time.

Cryoport Consulting provides consulting services to assist life sciences companies in developing strategies for global cold chain logistics management and contingency options to protect their valuable, and often irreplaceable, biological commodities. Cryoport Consulting addresses the demand created by the worldwide advances in cellular based therapies, including immunotherapies, stem cells and CAR-T cells. Cell-based immunotherapies are driving broad shifts and challenges for the life sciences industry, including how to obtain, properly store and carefully transport the growing number of new, individualized, temperature sensitive therapies. Improper temperature maintenance or temperature excursions during any portion of a logistics cycle can adversely affect the viability of these biologically based commodities. Consequently, strategic, global logistics planning for cryogenic cold chain solutions has taken on a strategic importance to the life sciences industry and a rapidly growing demand for consulting expertise.

Other Development Activities

We continue to build out our ecosystem through partnerships and alliances. We are, also, continuing our research, engineering and development efforts to continue to advance our technology applications for temperature-controlled logistics and bioservices. We are further expanding the functionality of our Cryoportal® Logistics Management Platform and will advance our Smart Pak II™ Condition Monitoring technology to ensure our continued leadership and the highest level of effectiveness and efficiency in the temperature-controlled logistics for the life sciences industry.

Results of Operations

Three months ended March 31, 2019 compared to three months ended March 31, 2018:

The following table summarizes certain information derived from our condensed consolidated statements of operations:

	Three Months Ended March 31,			
	2019	2018	$ Change	% Change
	($ in 000's)			
Revenues	$ 6,653	$ 4,023	$ 2,630	65.4%
Cost of revenues	(3,199)	(1,839)	(1,360)	74.0%
Gross margin	3,454	2,184	1,270	58.2%
General and administrative	(2,697)	(2,069)	(628)	30.4%
Sales and marketing	(2,408)	(1,584)	(824)	52.0%
Engineering and development	(489)	(330)	(159)	48.5%
Interest expense	(339)	—	(339)	100%
Warrant inducement and repricing expense	—	(899)	899	(100)%
Other income, net	91	16	75	480.1%
Provision for income taxes	1	(1)	2	(210.7)%
Net loss	$ (2,387)	$ (2,683)	$ 296	(11.0)%

Total revenues

	Three Months Ended March 31,			
	2019	2018	$ Change	% Change
	($ in 000's)			
Biopharmaceutical	$ 5,640	$ 3,282	$ 2,358	71.8%
Reproductive medicine	784	502	283	56.3%
Animal health	229	239	(11)	(4.5)%
Total revenues	$ 6,653	$ 4,023	$ 2,630	65.4%

Revenues. We generated revenues from customers in all of our target life sciences markets, biopharma, reproductive medicine and animal health. Revenues increased $2.6 million or 65.4% to $6.7 million for the three months ended March 31, 2019, as compared to $4.0 million for the three months ended March 31, 2018. This increase was primarily driven by the ramp in commercial revenue from the therapies launched by Novartis and Kite/Gilead in late 2017, the continuing increase in the number of biopharmaceutical customers utilizing our services and the increase in clinical trials supported for these customers. Biopharmaceutical revenue increased $2.4 million or 71.8%, to $5.6 million for the three months ended March 31, 2019 as compared to $3.3 million for the three months ended March 31, 2018. Commercial revenue increased to $1.4 million for the three months ended March 31, 2019 as compared to $294,400 for the three months ended March 31, 2018. During the three months ended March 31, 2019, we added approximately 22 new biopharma clients and added 26 clinical trials, net of completed or terminated trials, of which 21 trials were in the Americas and 5 in EMEA. We now support 383 clinical trials (338 in the Americas and 45 in EMEA) compared to 261 clinical trials supported as of March 31, 2018 (236 in the Americas and 25 in EMEA). The number of Phase III clinical trials supported increased to 49 trials as of March 31, 2019 (39 in the Americas and 10 in EMEA. This compares to 38 Phase III trials (31 in the Americas and 7 in EMEA) supported as of March 31, 2018. This increased activity in the clinical trial space is expected to drive future revenue growth as these clinical trials advance and resulting therapies are commercialized. Revenues in the reproductive medicine market increased by 56.3% for the three months ended March 31, 2019, as compared to 2018. This increase was driven by a 47.4% increase in revenues in the U.S. market through continued success of our CryoStork® services offering and a 88.2% increase in revenues in the international markets, which was primarily a result of our marketing initiatives and growing brand recognition in this market, driving stronger demand in the Americas and EMEA. Our revenue from animal health decreased 4.5% for the three months ended March 31, 2019, as compared to the same period in 2018 as a result of non-recurring activity in the previous year.

Gross margin and cost of revenues. Gross margin for the three months ended March 31, 2019 was 51.9% of revenues, as compared to 54.3% of revenues for the three months ended March 31, 2018. The decrease in gross margin by almost two percentage points is primarily due to the increased operating costs of our new global logistics centers in Livingston, New Jersey and Hoofddorp, The Netherlands that commenced operations during the third quarter of 2018. Our cost of revenues are primarily comprised of freight charges, payroll and associated expenses related to our global logistics centers, third-party charges for our European and Asian staging centers in the Netherlands and Singapore, depreciation expenses of our Cryoport Express® Shippers and supplies and consumables used for our solutions. Cost of revenues increased $1.4 million, or 74.0%, to $3.2 million for the three months ended March 31, 2019, as compared to $1.8 million in the same period in 2018. The increase in cost of revenues was primarily due to freight charges from the increased volume of shipments and an increase in operating costs for our global logistics centers.

General and administrative expenses. General and administrative expenses increased $628,300 for the three months ended March 31, 2019 or 30.4% as compared to the same period in 2018. This increase is primarily due to an increase in salaries and associated employee costs of $281,400, an increase in stock-based compensation of $212,400, an increase in public company related expenses of $81,800 including legal fees, an increase in insurance premiums of $34,600, and an increase in director fees of $11,500.

Sales and marketing. Sales and marketing expenses increased $823,600 or 52.0% and is primarily due to an increase in salaries and associated employee costs of $562,500 which includes recruiting fees of $35,900 for the expansion of our domestic logistics force, an increase in facility cost allocations of $167,100, an increase in stock-based compensation of $109,500 and an increase in travel and lodging expense of $29,400. These increases were partially offset by a decrease in trade shows of $45,100 and a decrease in marketing and advertising promotions of $17,900.

Engineering and development expenses. Engineering and development expenses increased $159,900 or 48.5% for the three months ended March 31, 2019, as compared to the same period in 2018. The increase is primarily due to $91,900 in wages and associated employee costs to add a software development product manager and senior engineers, an increase in facility cost allocation of $45,300, an increase in prototype expenses of $17,900, and an increase in stock-based compensation of $15,000. These increases were partially offset by a reduction of $6,200 in testing expenses and a reduction in travel and lodging expense of $6,100. We continually strive to improve and expand the features of our Cryoport Express® Solutions. Our primary developments are directed towards facilitating the safe, reliable and efficient shipment of life science commodities through innovative and technology-based solutions. We supplement our internal engineering and development resources with subject matter experts and consultants.

Warrant inducement and repricing expense. Warrant inducement and repricing expense for the three months ended March 31, 2018 was due to the repricing of certain warrants for the tender offer that was completed in February 2018.

Interest expense. Interest expense increased $338,700 for the three months ended March 31, 2019, as compared to the three months ended March 31, 2018 due to the interest on the convertible note recorded in December 2018.

Other income, net. The other income, net for the three months ended March 31, 2019 is primarily due to investment income on our cash and cash equivalents and short-term investments.

Liquidity and Capital Resources

As of March 31, 2019, the Company had cash and cash equivalents of $32.8 million, $14.5 million in short-term investments and had working capital of $47.9 million. Historically, we have financed our operations primarily through sales of equity securities and debt instruments.

For the year three months ended March 31, 2019, we used $189,600 of cash for operations primarily as a result of the net loss of $2.4 million offset by non-cash expenses of $1.7 million primarily comprised of amortization of a debt discount, stock-based compensation expense, and depreciation and amortization. Also contributing to the cash impact of our net operating loss, excluding non-cash items, was an increase in accounts receivable of $664,700 offset by an increase in accounts payable and accrued expenses of $659,300 and an increase in accrued compensation of $491,100.

Net cash used in investing activities of $5.7 million during the three months ended March 31, 2019 was primarily due to the $5.0 million purchase of short-term investments, capitalization of software development costs for our Cryoportal™ Logistics Management Platform, additional purchases of Cryoport Express® Shippers, Smart Pak II™ Condition Monitoring Systems and computer equipment as well as legal expenses incurred for patent and trademark applications which was partially offset by the maturity of a short-term investment of $500,000.

Net cash provided by financing activities totaled $1.3 million during the three months ended March 31, 2019, as a result of $1.3 million in proceeds from the exercise of stock options and warrants which was partially offset by payments $19,700 for deferred financing costs and $5,700 for finance lease liabilities.

The Company's management believes that, based on its current plans and assumptions, the current cash and cash equivalents on hand, short-term investments, together with projected cash flows, will satisfy our operational and capital requirements for at least the next twelve months. The Company's management recognizes that the Company may need to obtain additional capital to fund its operations until sustained profitable operations are achieved. Additional funding plans may include obtaining additional capital through equity and/or debt funding sources. No assurance can be given that additional capital, if needed, will be available when required or upon terms acceptable to the Company.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business and by the nature of our global operations, we are exposed to risks associated with foreign currency exchange rate fluctuations relating to payments we make to vendors and employees based in Europe.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures.

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the timelines specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Principal Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can only provide reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by Securities and Exchange Commission Rule 13a-15(b), we carried out an evaluation, under the supervision and with the participation of our management, including our Principal Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based on the foregoing, our Principal Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of March 31, 2019 at the reasonable assurance level.

Changes in internal control over financial reporting.

There were no changes in our internal controls over financial reporting during the fiscal quarter ended March 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None

ITEM 1A. RISK FACTORS

The risks described in *Part I*, *Item 1A*, *Risk Factors*, in our Annual report on Form 10-K for the year ended December 31, 2018, could materially and adversely affect our business, financial condition and results of operations. These risk factors do not identify all of the risks that we face. Our business, financial condition and results of operations could also be affected by factors that are not presently known to us or that we currently consider to be immaterial. There have been no material changes to the "Risk Factors" section included in our Annual Report on Form 10-K for the year ended December 31, 2018.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

None

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable

ITEM 5. OTHER INFORMATION

None

ITEM 6. EXHIBITS

Exhibit Index	
31.1+	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2+	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1+	Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS+	XBRL Instance Document.
101.SCH+	XBRL Taxonomy Extension Schema Document.
101.CAL+	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF+	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB+	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE+	XBRL Taxonomy Extension Presentation Linkbase Document.

\+ Filed herewith.

SIGNATURES

In accordance with the requirements of the Exchange Act, the Registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Cryoport, Inc.

Dated: May 9, 2019

By: */s/ Jerrell W. Shelton*

Jerrell W. Shelton
Chief Executive Officer

Dated: May 9, 2019

By: */s/ Robert S. Stefanovich*

Robert S. Stefanovich
Chief Financial Officer

EXHIBIT 31.1

CERTIFICATION
CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jerrell W. Shelton, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cryoport, Inc.

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 my 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 quarterly report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my 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 quarterly report my conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly 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 that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: May 9, 2019

/s/ Jerrell W. Shelton

JERRELL W. SHELTON
Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION
CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert S. Stefanovich, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Cryoport, Inc.

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 my 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 quarterly report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my 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 quarterly report my conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly 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 that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: May 9, 2019

/s/ Robert S. Stefanovich

ROBERT S. STEFANOVICH
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Cryoport, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jerrell W. Shelton, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge that:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jerrell W. Shelton

JERRELL W. SHELTON
President and Chief Executive Officer

May 9, 2019

In connection with the Quarterly Report of Cryoport, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert S. Stefanovich, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge that:

(1) The Quarterly Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert S. Stefanovich

ROBERT S. STEFANOVICH
Chief Financial Officer

May 9, 2019

A signed original of this written statement required by Section 906 has been provided to Cryoport, Inc. and will be retained by Cryoport, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

This Certification is being furnished pursuant to Rule 15(d) and shall not be deemed "filed" for purposes of Section 18 of the Exchange Act (15 U.S.C. 78r), or otherwise subject to the liability of that section. This Certification shall not be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.