

Cryoport, Inc.
 Form 424B5
 March 27, 2017

Filed Pursuant to Rule 424(b)(5)
 Registration No. 333-215776

The information in this preliminary prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS SUPPLEMENT (Subject to Completion)
(To Prospectus dated February 9, 2017)

Dated March 27, 2017

Shares

Common Stock

We are offering _____ shares of common stock. Our common stock is traded on the NASDAQ Capital Market under the symbol **CYRX**. On March 24, 2017, the last reported sales price for our common stock was \$3.53 per share.

As of March 23, 2017, the aggregate market value of our outstanding common stock held by non-affiliates pursuant to General Instruction I.B.6 of Form S-3 was approximately \$67.7 million, based on 17,326,112 shares of our common stock held by non-affiliates and a per share closing price of \$3.91 on March 9, 2017, a date within 60 days prior to the date of this prospective supplement. Other than securities offered by this prospectus supplement, we have not offered any securities pursuant to General Instruction I.B.6. of Form S-3 during the 12 calendar months prior to and including the date of this prospectus supplement.

Investing in our common stock involves significant risks. See **Risk Factors beginning on page **S-9** of this prospectus supplement and in the documents incorporated by reference into this prospectus.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus supplement. Any representation to the contrary is a criminal offense.

	<i>Per Share</i>	<i>Total</i>
Public offering price	\$	\$
Underwriting discount and commissions ⁽¹⁾	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) See Underwriting for additional disclosure regarding underwriting discounts, commissions and estimated offering expenses.

The Company has granted to the underwriters an option to purchase up to _____ additional shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days.

The underwriters expect to deliver the shares against payment in New York, New York on _____, 2017.

Joint Book-Running Managers

Cowen and Company
, 2017

Needham & Company

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT

	Page
<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	<u>S-1</u>
<u>FORWARD-LOOKING INFORMATION</u>	<u>S-2</u>
<u>PROSPECTUS SUPPLEMENT SUMMARY</u>	<u>S-4</u>
<u>THE OFFERING</u>	<u>S-7</u>
<u>SELECTED FINANCIAL DATA</u>	<u>S-8</u>
<u>RISK FACTORS</u>	<u>S-9</u>
<u>USE OF PROCEEDS</u>	<u>S-23</u>
<u>PRICE RANGE OF OUR COMMON STOCK</u>	<u>S-24</u>
<u>DIVIDENDS</u>	<u>S-24</u>
<u>CAPITALIZATION</u>	<u>S-25</u>
<u>DILUTION</u>	<u>S-26</u>
<u>UNDERWRITING</u>	<u>S-27</u>
<u>LEGAL MATTERS</u>	<u>S-32</u>
<u>EXPERTS</u>	<u>S-32</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>S-32</u>
<u>INCORPORATION OF DOCUMENTS BY REFERENCE</u>	<u>S-33</u>

PROSPECTUS

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>PROSPECTUS SUMMARY</u>	<u>2</u>
<u>INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS</u>	<u>6</u>
<u>RISK FACTORS</u>	<u>7</u>
<u>USE OF PROCEEDS</u>	<u>7</u>
<u>DESCRIPTION OF CAPITAL STOCK</u>	<u>7</u>
<u>DESCRIPTION OF WARRANTS</u>	<u>9</u>
<u>DESCRIPTION OF UNITS</u>	<u>10</u>
<u>DESCRIPTION OF SUBSCRIPTION RIGHTS</u>	<u>11</u>
<u>PLAN OF DISTRIBUTION</u>	<u>12</u>
<u>LEGAL MATTERS</u>	<u>14</u>
<u>EXPERTS</u>	<u>14</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>14</u>
<u>INFORMATION INCORPORATED BY REFERENCE</u>	<u>15</u>

S-i

TABLE OF CONTENTS

You should rely only on the information incorporated by reference or provided in this prospectus supplement and the accompanying prospectus. Neither we nor the underwriters have authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus supplement and the accompanying prospectus do not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this prospectus supplement and the accompanying prospectus in any jurisdiction where it is unlawful to make such offer or solicitation. You should assume that the information contained in this prospectus supplement or the accompanying prospectus, or any document incorporated by reference in this prospectus supplement or the accompanying prospectus, is accurate only as of the date of those respective documents. Neither the delivery of this prospectus supplement nor any distribution of securities pursuant to this prospectus supplement shall, under any circumstances, create any implication that there has been no change in the information set forth or incorporated by reference into this prospectus supplement or in our affairs since the date of this prospectus supplement. Our business, financial condition, results of operations and prospects may have changed since that date.

S-ii

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of securities. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to this offering. The information included or incorporated by reference in this prospectus supplement also adds to, updates and changes information contained or incorporated by reference in the accompanying prospectus. If information included or incorporated by reference in this prospectus supplement is inconsistent with the accompanying prospectus or the information incorporated by reference therein, then this prospectus supplement or the information incorporated by reference in this prospectus supplement will apply and will supersede the information in the accompanying prospectus and the documents incorporated by reference therein.

This prospectus supplement is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under the shelf registration process, we may from time to time offer and sell any combination of the securities described in the accompanying prospectus up to a total dollar amount of \$50,000,000, of which this offering is a part.

This prospectus supplement, the accompanying prospectus and the information incorporated herein and therein by reference includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or the accompanying prospectus are the property of their respective owners.

Unless the context indicates otherwise, in this prospectus supplement and the accompanying prospectus the terms, Cryoport, the Company, we, our, or us refer to Cryoport, Inc.

S-1

TABLE OF CONTENTS

FORWARD-LOOKING INFORMATION

The prospectus and this prospectus supplement, including the documents that we incorporate by reference, contain forward-looking statements. All statements other than statements of historical fact, including statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as may, will, should, expects, plans, anticipates, could, intends, target, projects, contemplates, believes, estimates, predicts, potential, negative of these terms or other similar words. These statements are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus supplement. Forward-looking statements include, but are not necessarily limited to, those relating to:

- our intention to introduce new products or services;
- our expectations about securing strategic relationships with global couriers or large clinical research organization;
- our future capital needs;
- results of our research and development efforts; and
- approval of our patent applications.

Forward-looking statements are subject to risks and uncertainties, certain of which are beyond our control. Actual results could differ materially from those anticipated as a result of the factors described in Risk Factors in this prospectus supplement, the accompanying prospectus, and detailed in our other SEC filings incorporated by reference herein, including among others:

- the effect of regulation by United States and foreign governmental agencies;
- research and development efforts, including delays in developing, or the failure to develop, our products;
- the development of competing or more effective products by other parties;
- uncertainty of market acceptance of our products;
- errors in business planning attributable to insufficient market size or segmentation data;
- problems that we may face in manufacturing, marketing and distributing our products;
- problems that we may encounter in further development of Cryoport Express® Solutions, which includes the cloud-based logistics management software branded as Cryoportal™;
- our inability to raise additional capital when needed;
- delays in the issuance of, or the failure to obtain, patents for certain of our products and technologies;
- problems with important suppliers and strategic business partners; and
- difficulty or delays in establishing marketing relationships with international couriers.

S-2

TABLE OF CONTENTS

Because of these risks and uncertainties, the forward-looking events and circumstances discussed in the prospectus and this prospectus supplement might not transpire. Except for our ongoing obligations to disclose material information as required by the federal securities laws, we undertake no obligation to release publicly any revisions to any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. All of the above factors are difficult to predict, contain uncertainties that may materially affect our actual results and may be beyond our control. New factors emerge from time to time, and it is not possible for our management to predict all of such factors or to assess the effect of each factor on our business. You are advised to consult any further disclosures we make on related subjects in the reports we file with the SEC.

This prospectus supplement and the accompanying prospectus, including the documents we incorporate by reference, also contain estimates and other industry and statistical data developed by independent parties and by us relating to market size, growth, and segmentation of markets. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. While we believe the data referred to in this prospectus supplement and the accompanying prospectus, including the documents we incorporate by reference, to be reliable, industry and statistical data is subject to variations and cannot be verified due to limits on the availability and reliability of data inputs, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey. We have not independently verified these estimates generated by independent parties. In addition, projections, assumptions, and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in **Risk Factors** and elsewhere in this prospectus supplement and the accompanying prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

S-3

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about our Company, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus, and in the documents we incorporate by reference. This summary is not complete and does not contain all the information that you should consider before investing in our common stock. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the Risk Factors contained in this prospectus supplement beginning on page S-9, and the risk factors, financial statements and notes incorporated by reference herein, before making an investment decision. This prospectus supplement may add to, update or change information in the accompanying prospectus.

ABOUT CRYOPORT

We provide cryogenic logistics solutions to the life sciences industry through a combination of proprietary packaging, information technology and specialized cold chain logistics knowhow. We view our solutions as disruptive to the older technologies of dry ice and liquid nitrogen, in that our solutions are comprehensive and combine our competencies in configurations that are customized to our clients' requirements. We provide comprehensive, reliable, economic alternatives to all existing logistics solutions and services utilized for frozen shipping in the life sciences industry (e.g., personalized medicine, cell therapies, stem cells, cell lines, vaccines, diagnostic materials, semen, eggs, embryos, cord blood, bio-pharmaceuticals, infectious substances, and other commodities that require continuous exposure to cryogenic or frozen temperatures). As part of our services we provide the ability to monitor, record and archive crucial information for each shipment that can be used for scientific and regulatory purposes.

Our Cryoport Express® Solutions include a sophisticated cloud-based logistics operating platform, which is branded as the Cryoport™. The Cryoport™ supports the management of the entire shipment and logistics process through a single interface, including initial order input, document preparation, customs clearance, courier management, shipment tracking, issue resolution, and delivery. In addition, it provides unique and incisive information dashboards and validation documentation for every shipment. The Cryoport™ records and retains a fully documented chain-of-custody and, at the client's option, chain-of-condition for every shipment, helping ensure that quality, safety, efficacy, and stability of shipped commodities are maintained throughout the process. This recorded and archived information allows our clients to meet exacting requirements necessary for scientific work and for proof of regulatory compliance during the logistics phase.

The branded packaging for our Cryoport Express® Solutions includes our liquid nitrogen dry vapor shippers, the Cryoport Express® Shippers. The Cryoport Express® Shippers are engineered shippers that can consist of cost-effective and reusable cryogenic transport shippers, which utilizes an innovative application of dry vapor liquid nitrogen (LN₂) technology and SmartPak Condition Monitoring Systems. Cryoport Express® Shippers are International Air Transport Association (IATA) certified and validated to maintain stable temperatures of minus 150° Celsius and below for a 10-day dynamic shipment period. The Company currently features three Cryoport Express® Shippers: the Standard Dry Shipper (holding up to 75 2.0 ml vials), the High Volume Dry Shipper (holding up to 500 2.0 ml vials) and Cryoport Express® CXVC1 Shipper (holding up to 1,500 2.0 ml vials). In addition, we assist clients with internal secondary packaging (e.g., vials, canes, straws and plates).

Our most used solution is the turnkey solution, which can be accessed directly through our cloud-based Cryoport™ or by contacting Cryoport Client Care for order entry. Once an order is placed and cleared, we ship a fully charged

Cryoport Express® Shipper to the client who conveniently loads its frozen commodity into the inner chamber of the Cryoport Express® Shipper. The customer then closes the shipper package and reseals the shipping box displaying the next recipient's address (Flap A) for pre-arranged carrier pick up. Cryoport arranges for the pick-up of the parcel by a shipping service provider, which is designated by the client or chosen by Cryoport, for delivery to the client's intended recipient. The recipient simply opens the shipper package and removes the frozen commodity that has been shipped.

The recipient then reseals the package, displaying the nearest Cryoport Staging Center address, making it ready for pre-arranged carrier pick-up. When the Cryoport

S-4

TABLE OF CONTENTS

Staging Center receives the Cryoport Express® Shipper, it is cleaned, put through quality assurance testing, and returned to inventory for reuse.

In late 2012, we shifted our focus to become a comprehensive cryogenic logistics solutions provider. Recognizing that clients in the life sciences industry have varying requirements, we unbundled our technologies, established customer-facing solutions and took a consultative approach to the market. Today, in addition to our standard turn-key solution, described above, we also provide the following value-added solutions to address our various clients' needs:

Customer Staged Solution, designed for clients making 50 or more shipments per month. Under this solution, we supply an inventory of our Cryoport Express® Shippers to our customer, in an uncharged state, enabling our customer (after training/certification) to charge them with liquid nitrogen and use our Cryoport™ to enter orders with shipping and delivery service providers for the transportation of the package.

Customer Managed Solution, a limited customer implemented solution, whereby we supply our Cryoport Express® Shippers to clients in a fully charged state, but leaving it to the client to manage the shipping, including the selection of the shipping and delivery service provider and the return of the shipper to us.

powered by CryoportSM, available to providers of shipping and delivery services who seek to offer a branded cryogenic logistics solution as part of their service offerings, with *powered by CryoportSM* appearing prominently on the offering software interface and packaging. This solution can also be private labeled upon meeting certain requirements, such as minimum required shipping volumes.

Integrated Solution, which is our total outsource solution. It is our most comprehensive solution and involves our management of the entire cryogenic logistics process for our client, including Cryoport employees at the client's site to manage the client's cryogenic logistics function in total.

Regenerative Medicine Point-of-Care Repository Solution, designed for allogeneic therapies. In this solution we supply our Cryoport Express® Shipper to ship and store cryogenically preserved life science products for up to six days (or longer periods with supplementary shippers) at a point-of-care site, with the Cryoport Express® Shipper serving as a temporary freezer/repository enabling the efficient and effective distribution of temperature sensitive allogeneic cell-based therapies without the expense, inconvenience, and potential costly failure of an on-site, cryopreservation device.

Personalized Medicine and Cell-based Immunotherapy Solution, designed for autologous therapies. In this solution our Cryoport Express® Shipper serves as an enabling technology for the safe transportation for the manufactured autologous cellular-based immunotherapy market by providing a comprehensive logistics solution for the verified chain of custody and condition transport from, (a) the collection of the patient's cells in a hospital setting, to (b) a central processing facility where they are manufactured into a personalized medicine, to (c) the safe, cryogenically preserved return of these irreplaceable cells to a point-of-care treatment facility. If required, the Cryoport Express® Shipper can then serve as a temporary freezer/repository to allow the efficient distribution of this personalized medicine to the patient when and where the medical provider needs it most without the expense, inconvenience, and potential costly failure of an on-site, cryopreservation device.

Cryoport is continuously expanding its solutions offerings in response to its customers' needs.

In April 2016, Cryoport launched its Temperature Controlled Logistics Consulting Division 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. The launch of Cryoport's Temperature Controlled Logistics Consulting Division addresses the demand created by the worldwide advances in cellular based therapies, including immunotherapies, stem cells

TABLE OF CONTENTS

and CAR T-cells. Cell-based immunotherapies are causing broad shifts and challenges for the life sciences industry, including how to obtain, properly store and 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.

In June 2016, Cryoport further broadened its capabilities and solutions offerings beyond cryogenic logistics and transportation services to include temperature-controlled storage solutions that include cGMP compliant biorepositories at controlled temperatures and climatized systems. Cryoport Biostorage services feature extensive management and monitoring, including controlled access to commodities, periodic temperature and activity reports, as well as 21 CFR, Part II compliant monitoring with 24/7/365 alarm response.

Also in June 2016, Cryoport announced a new Laboratory Relocation Service for transport of complete laboratories. The Laboratory Relocation Service manages the safe, secure and proper transportation of materials that are stored in labs as well as lab equipment and instruments. Relocation projects can range in size from the relocation of a fully equipped lab to the move of a single freezer.

Our Corporate Information

We are a Nevada corporation originally incorporated under the name G.T.5-Limited (GT5) on May 25, 1990. In connection with a Share Exchange Agreement, on March 15, 2005 we changed our name to Cryoport, Inc. and acquired all of the issued and outstanding shares of common stock of Cryoport Systems, Inc., a California corporation, in exchange for 200,901 shares of our common stock (which represented approximately 81% of the total issued and outstanding shares of common stock following the close of the transaction). Cryoport Systems, Inc., which was originally formed in 1999 as a California limited liability company, and subsequently reorganized into a California corporation on December 11, 2000, remains the operating company under Cryoport, Inc. Our principal executive offices are located at 17305 Daimler Street, Irvine, CA 92614. The telephone number of our principal executive offices is (949) 470-2300, and our main corporate website is www.cryoport.com.

The Company became public by a reverse merger with a shell company in May 2005. Over time the Company has transitioned from being a development company to a fully operational public company, providing cold chain logistics solutions to the life sciences industry globally.

S-6

TABLE OF CONTENTS

THE OFFERING

Common stock offered by us

shares (or shares if the underwriters exercise their over-allotment option to purchase additional shares in full)

Common stock to be outstanding immediately after the offering⁽¹⁾

shares (or shares if the underwriters exercise their over-allotment option to purchase additional shares in full)

Over-allotment option

The Company has granted the underwriters an option to purchase up to additional shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days.

Use of proceeds

We intend to use the proceeds from this offering for business growth, including as working capital and for other general corporate purposes. See Use of Proceeds.

Risk factors

You should carefully consider the information in Risk Factors beginning on page S-9 of this prospectus supplement before making a decision to invest in our securities.

NASDAQ Capital Market symbol

Our common stock is traded on the NASDAQ Capital Market under the symbol **CYRX**.

The number of shares of our common stock that will be outstanding immediately after this offering as shown above (1) is based on 17,604,283 shares of common stock issued and outstanding as of March 15, 2017, and excludes, as of that date:

6,820,427 shares of common stock reserved for issuance upon the exercise of outstanding warrants with a weighted average exercise price of \$3.92 per share;

4,521,273 shares of common stock reserved for issuance upon the exercise of outstanding stock options with a weighted average exercise price of \$4.01 per share; and

2,370,969 shares of common stock available for future grant under our Cryoport, Inc. 2015 Omnibus Equity Incentive Plan.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise by the underwriters of their over-allotment option.

S-7

TABLE OF CONTENTS**SELECTED FINANCIAL DATA**

The following selected financial data for the years ended March 31, 2013 through March 31, 2016 and the nine months ended December 31, 2016 have been derived from audited consolidated financial statements of the Company.

The nine months ended December 31, 2015 is unaudited. You should read the following financial information together with the information under Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and related notes included in our Transition Report on Form 10-K for the nine months ended December 31, 2016, as well as any amendments thereto, as filed with the SEC (the Form 10-K). The information set forth below is not necessarily indicative of our future financial condition or results of operations.

Statement of Operations Data

(in thousands)	Nine Months Ended December 31, 2016	Nine Months Ended December 31, 2015 (unaudited)	Years Ended March 31,			
			2016	2015	2014	2013
Revenues	\$6,123	\$4,327	\$5,882	\$3,935	\$2,660	\$1,101
Cost of revenues	3,604	3,018	3,992	2,766	2,223	1,588
Gross margin (loss)	2,520	1,309	1,890	1,169	437	(487)
General and administrative	4,635	4,111	5,925	3,497	2,600	3,032
Sales and marketing	3,573	2,909	4,156	2,912	2,507	2,380
Engineering and development	454	406	550	353	409	425
Loss from operations	(6,142)	(6,117)	(8,741)	(5,593)	(5,078)	(6,324)
Debt conversion expense					(13,714)	
Interest expense	(58)	(985)	(1,066)	(1,428)	(784)	(72)
Change in fair value of derivative liabilities					21	16
Warrant inducement and repricing expense	(4,195)					
Other expense, net	(2)	(5)	(9)	(4)	(8)	
Loss before provision for income taxes	(10,397)	(7,107)	(9,816)	(7,025)	(19,563)	(6,380)
Provision for income taxes	(6)	(5)	(4)	(2)	(2)	(2)
Net loss	(10,403)	(7,110)	(9,820)	(7,027)	(19,565)	(6,382)
Preferred stock beneficial conversion charge		(4,474)	(4,474)	(4,864)		
Undeclared cumulative preferred dividends		(687)	(763)	(306)		
Net loss attributable to common	\$(10,403)	\$(12,272)	\$(15,057)	\$(12,197)	\$(19,565)	\$(6,382)

stockholders

Net loss per share attributable to

common stockholders basic and diluted \$(0.68) \$ (1.96) \$ (2.05) \$ (2.44) \$ (4.81) \$ (2.03)

Balance Sheet Data

(in thousands)	December 31, 2016	December 31, 2015 (unaudited)	March 31, 2016	2015	2014	2013
Cash and cash equivalents	\$ 4,525	\$ 5,247	\$2,793	\$1,405	\$370	\$563
Working capital (deficit)	3,865	3,738	1,958	(835)	(2,903)	(1,539)
Total assets	8,112	7,459	5,824	2,607	1,710	1,756
Convertible notes and accrued interest, net					1,622	1,304
Long term obligations, less current portion	200		554	26		1,322
Total stockholders equity (deficit)	\$ 5,680	\$ 4,990	\$3,096	\$ (416)	\$ (2,304)	\$ (2,063)

S-8

TABLE OF CONTENTS**RISK FACTORS**

Any investment in our common stock involves a high degree of risk, including the risks described below. Before purchasing our common stock, you should carefully consider the risk factors set forth below, as well as all other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference herein and therein, including the risks described under the heading "Risk Factors" and our consolidated financial statements and the related notes contained in our Form 10-K before deciding whether to invest in our common stock. Our business, financial condition and results of operations could suffer, and the trading price of our stock could decline, and you could lose all or part of your investment, as a result of these risks. The risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See the section entitled "Forward-Looking Information."

Risks Related to Our Financial Condition**We have incurred significant losses to date and may continue to incur losses.**

We have incurred net losses in each fiscal year since we commenced operations. The following table represents net losses incurred for each of our last two reporting periods:

	Net Loss
Nine Months Ended December 31, 2016	\$ 10,403,000
Year Ended March 31, 2016	\$ 9,820,400

As of December 31, 2016, we had an accumulated deficit of \$123.5 million. In order to achieve and sustain revenue growth in the future, we must significantly expand our market presence and revenues from existing and new customers. We may continue to incur losses in the future and may never generate revenues sufficient to become profitable or to sustain profitability. Continuing losses may impair our ability to raise the additional capital required to continue and expand our operations.

Our auditors have expressed substantial doubt about our ability to continue as a going concern.

The Report of Independent Registered Public Accounting Firm contained in our December 31, 2016 consolidated financial statements includes an explanatory paragraph stating that the recurring losses and negative cash flows from operations since inception, and the fact that management estimates that our cash and cash equivalents balance at December 31, 2016 will only be sufficient to allow us to continue our operations through the third quarter of calendar year 2017, raise substantial doubt about our ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

If we are unable to obtain additional funding, we may have to reduce or discontinue our business operations.

As of December 31, 2016, we had cash and cash equivalents of \$4.5 million. Therefore, our ability to continue and expand our operations is highly dependent on the amount of cash and cash equivalents on hand combined with our ability to raise additional capital to fund future operations.

We anticipate, based on currently proposed plans and assumptions relating to our ability to market and sell our products, that our cash on hand and the proceeds from our warrant tender offer transactions and rights offering completed in 2016, together with projected cash flows, will satisfy our operational and capital requirements through the third quarter of fiscal year 2017. There are a number of uncertainties associated with our financial projections that could reduce or delay our future projected revenues and cash inflows, including, but not limited to, our ability to increase our customer base and revenues. If our projected revenues and cash inflows are reduced or delayed, we may not have sufficient capital to operate through the third quarter of fiscal year 2017 unless we raise more capital. Additionally, if we are unable to realize satisfactory revenue in the near future, we will be required to seek additional financing to continue our operations beyond that period. We will also require additional financing to expand into other markets and further develop and market our products. We have no

S-9

TABLE OF CONTENTS

current arrangements with respect to any additional financing. Consequently, there can be no assurance that any additional financing on commercially reasonable terms, or at all, will be available when needed. The inability to obtain additional capital may reduce our ability to continue to conduct business operations. Any additional equity financing may involve substantial dilution to our then existing stockholders. The uncertainties surrounding our future cash inflows have raised substantial doubt regarding our ability to continue as a going concern.

Risks Related to Our Business

Our agreements with global providers of shipping services may not result in a significant increase in our revenues or cash flow, soon or in the future.

We believe that establishing strategic alliances with global providers (integrators) of logistics and of shipping services, such as our agreements with FedEx, DHL, and UPS can drive growth in our revenues, but there is no certainty to this view. See Strategic Logistics Alliances in Part I, Item 1 of our Form 10-K for additional information about our agreements with FedEx, DHL, and UPS. We are seeking to establish similar arrangements with other providers of international shipping services. We anticipate all such alliances will enable us to provide seamless, end-to-end shipping solutions to customers of our respective alliance partners and allow us to leverage the established relationships with those customers, but there is no guarantee this will happen.

Because our agreements with FedEx, DHL, and UPS do not contain any requirement that they use a minimum level of our services, there can be no assurance of any significant increase in our revenues or cash flows as a result of these strategic alliances.

Our agreements with providers of vaccines may not result in a significant increase in our revenues or cash flow.

We believe that establishing strategic relationships with manufacturers and distributors of treatments for animals and humans, such as our agreements with Zoetis, Inc. can drive growth in our revenues.

In December 2012, we entered an agreement with what became Zoetis, Inc. (in January 2013, Pfizer spun off its animal health business into Zoetis, Inc., a public company) pursuant to which we were engaged to manage frozen shipments of a key poultry vaccine from Zoetis' production site in the United States. Over time, Zoetis has further expanded our role in providing them assistance in managing their cryogenic distribution of their vaccines and has become our largest customer.

While we anticipate growth in shipments by Zoetis under our management, there can be no assurance of any significant increase in our revenues or cash flows as a result of these important alliances.

We will have difficulty increasing our revenues if we experience delays, difficulties or unanticipated costs in establishing the sales, distribution and marketing capabilities necessary to successfully commercialize our solutions.

We plan to improve our sales, distribution, and marketing capabilities in the Americas, Europe, and Asia. It will be expensive and time-consuming for us to develop our global marketing and sales network and thus we intend to rely on our strategic alliances with FedEx, DHL, and UPS. We further intend to seek to enter into additional strategic

alliances with international providers of shipping services to incorporate use of our solutions in their service offerings. We may not be able to provide adequate incentive to our sales force or to establish and maintain favorable distribution and marketing collaborations with others to promote our solutions. In addition, any third party with whom we have established a marketing and distribution relationship may not devote sufficient time to the marketing and sales of our solutions, thereby exposing us to potential expenses in exiting such distribution agreements. We, and any of our alliance partners, must also market our services in compliance with federal, state, local and international laws relating to the provision of incentives and inducements. Violation of these laws can result in substantial penalties. Therefore, if we are unable to successfully motivate and expand our marketing and sales force and further develop our sales and marketing

S-10

TABLE OF CONTENTS

capabilities, or if our alliance partners fail to promote our solutions, we will have difficulty increasing our revenues and the revenue may not off-set the additional expense of expansion.

Our ability to grow and compete in our industry will be hampered if we are unable to retain the continued service of our key professionals or to identify, hire and retain additional qualified professionals.

Our success in implementing our business strategy depends largely on the skills, experience and performance of key members of our executive management team and others in key management positions. The collective efforts of each of these persons working as a team will be critical to us as we continue to develop our technologies, tests and engineering and development and sales programs. As a result of the difficulty in locating qualified new management, the loss or incapacity of existing members of our executive management team could adversely affect our operations. If we were to lose one or more of these key employees, we could experience difficulties in finding qualified successors, competing effectively, developing our technologies and implementing our business strategy. We do not maintain key person insurance on any of our employees.

In addition, a critical factor to our business is our ability to attract and retain qualified professionals including key employees and consultants. We are continually at risk of losing current professionals or being unable to hire additional professionals as needed. If we are unable to attract new qualified employees, our ability to grow will be adversely affected. If we are unable to retain current employees or strategic consultants, our financial condition and ability to maintain operations may be adversely affected.

Sustainable future revenue growth is dependent on new solutions and services.

Our future revenue stream depends to a large degree on our ability to bring new solutions and services to market on a timely basis. We must continue to make significant investments in engineering and development in order to continue to develop new solutions and services, enhance existing solutions and services, and achieve market acceptance of such solutions and services. We may incur problems in introducing new solutions and services.

The adoption cycle of our target customers tends to be very lengthy, which continues to adversely affect our ability to increase revenues quickly.

We offer our solutions primarily to companies in the life sciences industry. These companies operate within a heavily regulated environment and as such, changing vendors and distribution practices typically require a number of steps, which may include the audit of our facilities, review of our procedures, qualifying us as a vendor, and performing test shipments. This process can take several months or longer to complete, involving multiple levels of approval, prior to a company fully adopting our Cryoport Express® Solutions. The logistics management of many companies is decentralized adding to the time needed to effect adaptation of our solutions. In addition, any such adoption may be on a gradual basis such that the customer progressively ramps up use of our Cryoport Express® Solutions following adoption. The slow adoption process continues to adversely affect our ability to increase revenues.

Our solutions and services may contain errors or defects, which could result in damage to our reputation, lost revenues, diverted development resources and increased service costs and litigation.

Our ability to grow and compete in our industry will be hampered if we are unable to retain the continued service of

Our solutions and services must meet stringent requirements and we must develop our services and solutions quickly to keep pace with the rapidly changing market. Solutions as sophisticated as ours could contain undetected errors or defects, especially when first introduced or when new equipment or versions of our software are released. If our solutions are not free from errors or defects, we may incur an injury to our reputation, lost revenues, diverted development resources, increased customer service and support costs, and litigation. The costs incurred in correcting any product errors or defects may be substantial and could adversely affect our business, results of operations and financial condition.

S-11

TABLE OF CONTENTS

If we were sued for product liability, we could face substantial liabilities that exceed our resources.

The marketing, sale and use of our products could lead to the filing of product liability claims were someone to allege that our products failed to perform as designed. A product liability claim could result in substantial damages and be costly and time-consuming for us to defend.

Although we believe that our existing insurance is adequate, our insurers may fail to defend us or our insurance may not fully protect us from the financial impact of defending against product liability claims. Any product liability claim brought against us, with or without merit, could increase our insurance rates or prevent us from securing insurance coverage in the future. Additionally, any product liability lawsuit could damage our reputation, or cause current clinical partners and collaborators to terminate existing agreements and potential clinical partners to seek other partners, cause customers to terminate their relationship with us and potential customers to seek alternative solutions, any of which could impact our results of operations.

If we experience manufacturing delays, interruptions in production, or delays in procurement of shippers manufactured by third parties, then we may experience customer dissatisfaction and our reputation could suffer.

If we fail to produce enough shippers at our own manufacturing facility or at a third party manufacturing facility, or if we fail to complete our shipper recycling processes as planned, we may be unable to deliver shippers to our customers on a timely basis, which could lead to customer dissatisfaction and could harm our reputation and ability to compete. We currently acquire various component parts for our shippers from various independent manufacturers in the United States. We would likely experience significant delays or cessation in producing our shippers if a labor strike, natural disaster or other supply disruption were to occur at any of our main suppliers. If we are unable to procure a component from one of our manufacturers, we may be required to enter into arrangements with one or more alternative manufacturing companies, which may cause delays in producing our shippers. In addition, because we depend (in part) on third party manufacturers, our profit margins may be lower, which will make it more difficult for us to achieve profitability. To date, we have not experienced any material delay that has adversely impacted our operations. As our business develops it becomes more likely that such problems could arise.

We expect to base our equipment and inventory purchasing decisions on our forecasts of customers demand, and if our forecasts are inaccurate, our operating results could be materially harmed.

As our customer base increases, we expect to need to purchase additional equipment and inventory. Our forecasts will be based on multiple assumptions, each of which may cause our estimates to be inaccurate, affecting our ability to provide products to our customers. When demand for our products increases significantly, we may not be able to meet demand on a timely basis, and we may need to expend a significant amount of time working with our customers to allocate limited supply and maintain positive customer relations, or we may incur additional costs in order to rush the manufacture and delivery of additional products. If we underestimate customers demand, we may forego revenue opportunities, lose market share and damage our customer relationships. Conversely, if we overestimate customer demand, we may purchase more equipment and inventory than we are able to use or sell at any given time or at all. As a result of our failure properly to estimate demand for our products, we could have excess or obsolete equipment and/or inventory, resulting in a decline in the value of our equipment and/or inventory, which would increase our costs of revenues and reduce our liquidity. Our failure to accurately manage our equipment purchases and inventory relative

to demand would adversely affect our operating results.

S-12

TABLE OF CONTENTS

If we experience delays or interruption in shipping due to factors outside of our control, such disruption could lead to customer dissatisfaction and harm our reputation.

We rely on third party shipment and carrier services to transport our shippers containing biological material. These third party operations could be subject to natural disasters, adverse weather conditions, other business disruptions, and carrier error, which could cause delays in the delivery of our shippers, which in turn could cause serious harm to the biological material being shipped. As a result, any prolonged delay in shipment, whether due to technical difficulties, power failures, break-ins, destruction or damage to carrier facilities as a result of a natural disaster, fire, or any other reason, could result in damage to the contents of the shipper. If we are unable to cause the delivery of our shippers in a timely matter and without damage, this could also harm our operating results and our reputation, even if we are not at fault.

Our solutions and services may expose us to liability in excess of our current insurance coverage.

Our solutions and services involve significant risks of liability, which may substantially exceed the revenues we derive from them. We cannot predict the magnitude of these potential liabilities. We currently maintain general liability insurance, with coverage in the amount of \$1 million per occurrence, subject to a \$2 million annual limitation, and product liability insurance with a \$1 million annual coverage limitation. Claims may be made against us that exceed these limits.

Our liability policy is an occurrence based policy. Thus, our policy is complete when we purchase it and following cancellation of the policy it continues to provide coverage for future claims based on conduct that took place during the policy term. Our insurance coverage, however, may not protect us against all liability because our policies typically have various exceptions to the claims covered and also require us to assume some costs of the claim even though a portion of the claim may be covered. In addition, if we expand into new markets, we may not be aware of the need for, or be able to obtain insurance coverage for such activities or, if insurance is obtained, the dollar amount of any liabilities incurred could exceed our insurance coverage. A partially or completely uninsured claim, if successful and of significant magnitude, could have a material adverse effect on our business, financial condition and results of operations.

If we use biological and hazardous materials in a manner that causes injury, we could be liable for damages.

Our customers may ship potentially harmful biological materials in our dewars. We cannot eliminate the risk of accidental contamination or injury to employees or third parties from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our resources or any applicable insurance coverage we may have. Additionally, we are subject to, on an ongoing basis, federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. In the event of an accident, we could be held liable for damages.

If we cannot compete effectively, we will lose business.

Our services and solutions are positioned to be competitive in the life sciences cold-chain logistics market. While there are technological and marketing barriers to entry, we cannot guarantee that the barriers we are capable of

If we experience delays or interruption in shipping due to factors outside of our control, such disruption could lead to

producing will be sufficient to defend the market share we wish to gain against current and future competitors. Our principal competitive considerations in our market include:

financial resources to allocate to proper marketing and an appropriate sales effort
acceptance of our solutions model
acceptance of our solutions including per use fee structures and other charges for services
keeping up technologically with ongoing development of enhanced features and benefits
reductions in the delivery costs of competitors solutions

S-13

TABLE OF CONTENTS

the ability to develop and maintain and expand strategic alliances
establishing our brand name
our ability to deliver our solutions to our customers when requested
our timing of introductions of new solutions, and services

financial resources to support working capital needs and required capital investments in infrastructure

Current and prospective competitors have substantially greater resources, more customers, longer operating histories, greater name recognition and more established relationships in the industry. As a result, these competitors may be able to develop and expand their networks and product offerings more quickly, devote greater resources to the marketing and sale of their solutions and adopt more aggressive pricing policies. In addition, these competitors have entered and will likely continue to enter into business relationships to provide additional solutions competitive to those we provide or plan to provide.

We may acquire other businesses, products or technologies in order to remain competitive in our market and our business could be adversely affected as a result of any of these future acquisitions.

We may make acquisitions of complementary businesses, products or technologies. If we identify any appropriate acquisition candidates, we may not be successful in negotiating acceptable terms of the acquisition, financing the acquisition, or integrating the acquired business, products or technologies into our existing business and operations. Further, completing an acquisition and integrating an acquired business will significantly divert management time and resources. The diversion of management attention and any difficulties encountered in the transition and integration process could harm our business. If we consummate any significant acquisitions using stock or other securities as consideration, our shareholders' equity could be significantly diluted. If we make any significant acquisitions using cash consideration, we may be required to use a substantial portion of our available cash. Acquisition financing may not be available on favorable terms, if at all. In addition, we may be required to amortize significant amounts of other intangible assets in connection with future acquisitions, which would harm our operating results and financial condition.

If we successfully develop products and/or services, but those products and/or services do not achieve and maintain market acceptance, our business will not be profitable.

The degree of acceptance of our Cryoport Express® Solutions or any future products or services by our current target markets, and any other markets to which we attempt to sell our products and services, and our profitability and growth will depend on a number of factors including, among others:

our shippers' ability to perform and preserve the integrity of the materials shipped
relative convenience and ease of use of our shipper and/or CryoportTM
availability of alternative products
pricing and cost effectiveness
effectiveness of our or our collaborators' sales and marketing strategy
the adoption cycles of our targeted customers

We may acquire other businesses, products or technologies in order to remain competitive in our market and our business

If any products or services we may develop do not achieve market acceptance, then we may not generate sufficient revenue to achieve or maintain profitability.

In addition, even if our products and services achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or services are introduced that are more favorably received than our products and services, are more cost effective, or render our products obsolete. Although we are not aware of any other treatments or methods currently being developed that would directly compete with the methods we employ, there can be no assurance that future

S-14

TABLE OF CONTENTS

developments in technology will not make our technology non-competitive or obsolete, or significantly reduce our operating margins or the demand for our offerings, or otherwise negatively impact our ability to be profitable.

We may not be able to compete with our competitors in the industry because many of them have greater resources than we do.

We expect to continue to experience significant and increasing levels of competition in the future. In addition, there may be other companies which are currently developing competitive products and services or which may in the future develop technologies and products that are comparable, superior or less costly than our own. For example, some cryogenic equipment manufacturers with greater resources currently have solutions for storing and transporting cryogenic liquid and gasses and may develop storage solutions that compete with our products. Additionally, some specialty couriers with greater resources currently provide dry ice transportation and may develop other products in the future, both of which compete with our products. A competitor that has greater resources than us may be able to bring its product to market faster than we can and offer its product at a lower price than us to establish market share. We may not be able to successfully compete with a competitor that has greater resources and such competition may adversely affect our business.

Intellectual Property Risks Associated with Our Business

Our success depends, in part, on our ability to obtain patent protection for our solutions and business model, preserve our trade secrets, and operate without infringing the proprietary rights of others.

Our policy is to seek to protect our proprietary position by, among other methods, filing United States patent applications related to our technology, inventions and improvements that are important to the development of our business. We have three issued U.S. patents and one pending U.S. patent application all relating to various aspects of our solutions and services. Our patents or patent application may be challenged, invalidated or circumvented in the future or the rights granted may not provide a competitive advantage. We intend to vigorously protect and defend our intellectual property. Costly and time-consuming litigation brought by us may be necessary to enforce our patents and to protect our trade secrets and know-how, or to determine the enforceability, scope and validity of the proprietary rights of others.

We also rely upon trade secrets, technical know-how and continuing technological innovation to develop and maintain our competitive position. In the past our employees, consultants, advisors and suppliers have not always executed confidentiality agreements and inventions assignment and work for hire agreements in connection with their employment, consulting, or advisory relationships. Consequently, we may not have adequate remedies available to us to protect our intellectual property should one of these parties attempt to use our trade secrets or refuse to assign any rights he or she may have in any intellectual property he or she developed for us. Additionally, our competitors may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our proprietary technology, or we may not be able to meaningfully protect our rights in unpatented proprietary technology.

While we are not aware of any third party that is infringing any of our patents or trademarks nor do we believe that we are infringing on the patents or trademarks of any other person or organization, we cannot guarantee that our current and potential competitors and other third parties have not filed (or in the future will not file) patent applications for (or have not received or in the future will not receive) patents or obtain additional proprietary rights that will prevent,

We may not be able to compete with our competitors in the industry because many of them have greater ~~res~~ resources

limit or interfere with our ability to make, use or sell our solutions either in the United States or internationally. Additionally, we may face assertions of claims by holders of patents alleging that we are infringing upon their patent rights, which claims may be without merit, but may nonetheless result in our incurring substantial costs of defense.

S-15

TABLE OF CONTENTS

We are dependent on a third party for the continued development and maintenance of our Cryoport™ software.

Our proprietary Cryoport™ is a logistics platform software used by our customers, business partners and client care team to automate the entry of orders, prepare customs documentation and facilitate status and location monitoring of shipped orders while in transit. The continued development of the Cryoport™ platform is contracted with an outside software development company. If this developer becomes unable or unwilling to continue work on scheduled projects, and an alternative software development company cannot be secured, we may not be able to implement needed enhancements to the system. Furthermore, if we terminate our agreement with our current software developer and cannot reach an agreement or fail to fulfill an agreement for the termination, it is possible we could lose our license to use this software. Failure to proceed with enhancements or the loss of our license for the system would adversely affect our ability to generate new business and serve existing customers, resulting in a reduction in revenue.

Our customers could also become the target of litigation relating to the patent and other intellectual property rights of others.

Any litigation relating to the intellectual property rights of others could trigger technical support and indemnification obligations in licenses or customer agreements that we may enter into. These obligations could result in substantial expenses, including the payment by us of costs and damages relating to claims of intellectual property infringement. In addition to the time and expense required for us to provide support or indemnification to our customers, any such litigation could disrupt the businesses of our customers, which in turn could hurt our relationships with such customers and cause the sale of our products to decrease. No assurance can be given that claims for indemnification will not be made, or that if made, such claims would not have a material adverse effect on our business, operating results or financial conditions.

Our Cryoport™ software platform may be subject to intentional disruption that could adversely impact our reputation and future revenues.

We have implemented our Cryoport™ software platform which is used by our customers and business partners to automate the entry of orders, prepare customs documentation and facilitate status and location monitoring of shipped orders while in transit. Although we believe we have sufficient controls in place to prevent intentional disruptions, we could be a target of cyber-attacks specifically designed to impede the performance of the Cryoport™ software platform. Similarly, experienced computer programmers may attempt to penetrate our Cryoport™ software platform in an effort to search for and misappropriate proprietary or confidential information or cause interruptions of our services. Because the techniques used by such computer programmers to access or sabotage networks change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. Our activities could be adversely affected and our reputation, brand and future sales could be harmed if such intentionally disruptive efforts were successful.

Regulatory Risks Relating to Our Business

Complying with certain regulations that apply to shipments using our solutions can limit our activities and increase our cost of operations.

We are dependent on a third party for the continued development and maintenance of our Cryoport™ software. 30

Shipments using our solutions and services are subject to various regulations in the various countries in which we operate. For example, shipments using our solutions may be required to comply with the shipping requirements promulgated by the Centers for Disease Control (CDC), the Occupational Safety and Health Organization (OSHA), the DOT as well as rules established by the IATA and the ICAO. Additionally, our data logger may be subject to regulation and certification by the FDA, the FCC, and the FAA. Department of Transportation (DOT) as well as rules established by the IATA and the ICAO. Additionally, our data logger may be subject to regulation and certification by the Food and Drug Administration (FDA), Federal Communications Commission (FCC), and the Federal Aviation Administration (FAA). We will need to ensure that our solutions and services comply with relevant rules and regulations to make our solutions and services marketable, and in some cases

S-16

TABLE OF CONTENTS

compliance is difficult to determine. Significant changes in such regulations could require costly changes to our solutions and services or prevent use of our shippers for an extended period of time while we seek to comply with changed regulations. If we are unable to comply with any of these rules or regulations or fail to obtain any required approvals, our ability to market our solutions and services may be adversely affected. In addition, even if we are able to comply with these rules and regulations, compliance can result in increased costs. In either event, our financial results and condition may be adversely affected. We depend on our business partners and unrelated and frequently unknown third party agents in foreign countries to act on our behalf to complete the importation process and to make delivery of our shippers to the final user. The failure of these third parties to perform their duties could result in damage to the contents of the shipper resulting in customer dissatisfaction or liability to us, even if we are not at fault.

Risks Relating to Ownership of Our Common Stock and Other Securities

Certain of our existing stockholders own and have the right to acquire a substantial number of shares of common stock.

As of March 15, 2017, our directors, executive officers and beneficial owners of 5% or more of our outstanding common stock beneficially owned 2,052,076 shares of common stock (without regard to beneficial ownership limitations contained in certain warrants) assuming their exercise of all outstanding warrants and options that are exercisable within 60 days of March 15, 2017 or approximately 10.6% of our outstanding common stock. As such, the concentration of beneficial ownership of our common stock may have the effect of delaying or preventing a change in control of Cryoport and may adversely affect the voting or other rights of other holders of our common stock.

The sale of substantial shares of our common stock may depress our stock price.

As of March 15, 2017, there were 17,604,283 shares of our common stock outstanding. Substantially all of these shares of common stock are eligible for trading in the public market. The market price of our common stock may decline if our stockholders sell a large number of shares of our common stock in the public market, or the market perceives that such sales may occur. We could also issue up to an additional 13,712,669 shares of our common stock including 6,820,427 shares to be issued upon the exercise of outstanding warrants and 6,892,242 shares upon exercise of outstanding options or reserved for future issuance under our stock incentive plans, as of March 15, 2017.

Our stock price has been and will likely continue to be volatile.

The market price of our common stock has been highly volatile and could fluctuate widely in price in response to various factors, many of which are beyond our control, including, but not limited to:

- technological innovations or new solutions and services by us or our competitors
- additions or departures of key personnel
- sales of our common stock
- our ability to execute our business plan
- our operating results being below expectations
- loss of any strategic relationship
- industry developments

economic and other external factors
period-to-period fluctuations in our financial results

In addition, the securities markets have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These market fluctuations may also materially and adversely affect the market price of our common stock and warrants.

S-17

TABLE OF CONTENTS

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because our stock price and those of other biotechnology and life sciences companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business. We do maintain insurance, but the coverage may not be sufficient and may not be available in all instances.

If equity research analysts do not publish research or reports about our business or if they issue unfavorable commentary or downgrade our common stock and warrants, the price of our common stock and warrants could decline.

The trading market for our common stock and warrants relies in part on the research and reports that equity research analysts publish about us and our business. We do not control these analysts. The price of our common stock and warrants could decline if one or more equity analyst downgrades our stock or if analysts downgrade our stock or issue other unfavorable commentary or cease publishing reports about us or our business.

We have not paid dividends on our common stock in the past and do not expect to pay dividends in the foreseeable future. Any return on investment may be limited to the value of our common stock.

We have never paid cash dividends on our common stock and do not anticipate paying cash dividends in the foreseeable future. The payment of dividends on our common stock will depend on our earnings, financial condition and other business and economic factors affecting us at such time as the Board of Directors of the Company (the Board of Directors) may consider the payment of any such dividends. If we do not pay dividends, our common stock may be less valuable because a return on your investment will only occur if the price of our common stock appreciates.

We need additional capital, and the sale of additional shares of common stock or other equity securities could result in additional dilution to our stockholders.

Our current cash and cash equivalents and anticipated cash flow from operations are insufficient to meet our cash needs. We require additional cash resources to fund our operations and may require additional funds in the future due to changed business conditions or other future developments, including any investments or acquisitions we may decide to pursue. The sale of additional equity securities, or debt securities convertible into equity securities, could result in additional dilution to our stockholders. The incurrence of indebtedness would result in increased debt service obligations and could result in operating and financing covenants that would restrict our operations.

While warrants to purchase our common stock are outstanding, it may be more difficult to raise additional equity capital.

As of March 15, 2017, we have outstanding options and warrants for the purchase of up to 13,712,669 shares of our common stock, including 6,820,427 shares to be issued upon the exercise of outstanding warrants and 6,892,242 shares upon exercise of outstanding options or reserved for future issuance under our stock incentive plans, as of March 15, 2017. We may find it more difficult to raise additional equity capital while some or all of these warrants are outstanding. At any time during which these warrants are likely to be exercised, we may not be able to obtain financing on favorable terms, or at all. If we are unable to obtain financing, our business, results of operations, or financial condition could be materially and adversely affected, and we could be forced to curtail or cease operations.

S-18

TABLE OF CONTENTS

Our Articles of Incorporation allows our Board of Directors to issue up to 2,500,000 shares of blank check preferred stock.

Our Articles of Incorporation allows our board of directors to issue up to 2,500,000 shares of blank check preferred stock, without action by our stockholders. We have designated 800,000 shares as Class A Preferred Stock and 585,000 shares as Class B Preferred Stock, none of which are currently issued and outstanding. Accordingly, our board of directors will have discretion to issue up to 1,115,000 shares on terms determined by them. Without limiting the foregoing, (i) such shares of preferred stock could have liquidation rights that are senior to the liquidation preference applicable to our common stock and Preferred Stock, (ii) such shares of preferred stock could have voting or conversion rights, which could adversely affect the voting power of the holders of our common stock and Preferred Stock and (iii) the ownership interest of holders of our common stock will be diluted following the issuance of any such shares of preferred stock. In addition, the issuance of such shares of blank check preferred stock could have the effect of discouraging, delaying or preventing a change of control of our Company.

Provisions in our bylaws and Nevada law might discourage, delay or prevent a change of control of our Company or changes in our management and, as a result, may depress the trading price of our common stock.

Provisions of our bylaws and Nevada law may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. The relevant bylaw provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions include advance notice requirements for stockholder proposals and nominations, and the ability of our Board of Directors to make, alter or repeal our bylaws.

Absent approval of our Board of Directors, our bylaws may only be amended or repealed by the affirmative vote of the holders of at least a majority of our outstanding shares of capital stock entitled to vote.

In addition, Section 78.438 of the Nevada Revised Statutes prohibits a publicly-held Nevada corporation from engaging in a business combination with an interested stockholder (generally defined as a person which together with its affiliates owns, or within the last three years has owned, 10% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder) unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and other potential anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

Even though we are not incorporated in California, we may become subject to a number of provisions of the California General Corporation Law.

Section 2115(b) of the California Corporations Code imposes certain requirements of California corporate law on corporations organized outside California that, in general, are doing more than 50% of their business in California and have more than 50% of their outstanding voting securities held of record by persons residing in California. While we

Our Articles of Incorporation allows our Board of Directors to issue up to 2,500,000 shares of blank check preferred

are not currently subject to Section 2115(b), we may become subject to it in the future.

The following summarizes some of the principal differences which would apply if we become subject to Section 2115(b).

Under both Nevada and California law, cumulative voting for the election of directors is permitted. However, under Nevada law cumulative voting must be expressly authorized in the Articles of Incorporation and our Amended and Restated Articles of Incorporation do not authorize cumulative voting. If we become subject to Section 2115(b), we may be required to permit cumulative voting if any stockholder properly requests to cumulate his or her votes.

S-19

TABLE OF CONTENTS

Under Nevada law, directors may be removed by the stockholders only by the vote of two-thirds of the voting power of the issued and outstanding stock entitled to vote. However, California law permits the removal of directors by the vote of only a majority of the outstanding shares entitled to vote. If we become subject to Section 2115(b), the removal of a director may be accomplished by a majority vote, rather than a vote of two-thirds, of the stockholders entitled to vote.

Under California law, the corporation must take certain steps to be allowed to provide for greater indemnification of its officers and directors than is provided in the California Corporation Code. If we become subject to Section 2115(b), our ability to indemnify our officers and directors, to the extent permitted in our Articles of Incorporation, Bylaws and under Nevada law, may be limited by California law.

Nevada law permits distributions to stockholders as long as, after the distribution, (i) the corporation would be able to pay its debts as they become due and (ii) the corporation's total assets are at least equal to its liabilities and preferential dissolution obligations. Under California law, distributions may be made to stockholders as long as the corporation would be able to pay its debts as they mature and either (i) the corporation's retained earnings equal or exceed the amount of the proposed distributions, or (ii) after the distributions, the corporation's tangible assets are at least 125% of its liabilities and the corporation's current assets are at least equal to its current liabilities (or, 125% of its current liabilities if the corporation's average operating income for the two most recently completed fiscal years was less than the average of the interest expense of the corporation for those fiscal years). If we become subject to Section 2115(b), we will have to satisfy more stringent financial requirements to be able to pay dividends to our stockholders. Additionally, stockholders may be liable to the corporation if we pay dividends in violation of California law.

California law permits a corporation to provide supermajority vote provisions in its Articles of Incorporation, which would require specific actions to obtain greater than a majority of the votes, but not more than 66 2/3 percent. Nevada law does not permit supermajority vote provisions. If we become subject to Section 2115(b), it is possible that our stockholders would vote to amend our Articles of Incorporation and require a supermajority vote for us to take specific actions.

Under California law, in a disposition of substantially of all the corporation's assets, if the acquiring party is in control of or under common control with the disposing corporation, the principal terms of the sale must be approved by 90 percent of the stockholders. Although Nevada law does contain certain rules governing interested stockholder business combinations, it does not require similar stockholder approval. If we become subject to Section 2115(b), we may have to obtain the vote of a greater percentage of the stockholders to approve a sale of our assets to a party that is in control of, or under common control with, us.

California law places certain additional approval rights in connection with a merger if all of the shares of each class or series of a corporation are not treated equally or if the surviving or parent party to a merger represents more than 50 percent of the voting power of the other corporation prior to the merger. Nevada law does not require such approval. If we become subject to Section 2115(b), we may have to obtain the vote of a greater percentage of the stockholders to approve a merger that treats shares of a class or series differently or where a surviving or parent party to the merger represents more than 50% of the voting power of the other corporation prior to the merger.

California law requires the vote of each class to approve a reorganization or a conversion of a corporation into another entity. Nevada law does not require a separate vote for each class. If we become subject to Section 2115(b), we may have to obtain the approval of each class if we desire to reorganize or convert into another type of entity.

California law provides greater dissenters' rights to stockholders than Nevada law. If we become subject to Section 2115(b), more stockholders may be entitled to dissenters' rights, which may limit our ability to merge with another

Even though we are not incorporated in California, we may become subject to a number of provisions of the California

entity or reorganize.

S-20

TABLE OF CONTENTS

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results, and current and potential stockholders may lose confidence in our financial reporting.

We are required by the SEC to establish and maintain adequate internal control over financial reporting that provides reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. We are likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses in those internal controls.

As described in Item 9A of our Form 10-K, no material weaknesses were identified and we determined that our internal control over financial reporting was effective as of December 31, 2016.

However, any failure to maintain such internal controls in the future could adversely impact our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis as required by the SEC and NASDAQ, we could face severe consequences from those authorities. In either case, there could result a material adverse effect on our business. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

Our publicly-filed SEC reports are reviewed by the SEC from time to time and any significant changes required as a result of any such review may result in material liability to us and have a material adverse impact on the trading price of our common stock.

The reports of publicly-traded companies are subject to review by the SEC from time to time for the purpose of assisting companies in complying with applicable disclosure requirements and to enhance the overall effectiveness of companies' public filings, and reviews of such reports are now required at least every three years under the Sarbanes-Oxley Act of 2002. SEC reviews may be initiated at any time, and we could be required to modify or reformulate information contained in prior filings as a result of an SEC review. Any modification or reformulation of information contained in such reports could be significant and could result in material liability to us and have a material adverse impact on the trading price of our common stock.

The requirements of being a U.S. public company may strain our resources and divert management's attention.

As a U.S. public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the Exchange Act), the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, certain listing requirements, and other applicable securities rules and regulations. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming, or costly, and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual and current reports with respect to our business and operating results. As a result of disclosure of information in this prospectus and in filings required of a public company, our business and financial condition is more visible, which we believe may result in threatened or actual litigation, including by competitors and

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately

other third parties. If such claims are successful, our business and operating results could be harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert resources of our management and harm our business and operating results.

Risks Related to this Offering

Management will have broad discretion in determining how to use the proceeds of this offering.

Our management will have broad discretion over the use of proceeds from this offering, and we could use the proceeds from this offering in ways our stockholders may not agree with or that do not yield a favorable return, if at all. We intend to use the proceeds from this offering for business growth, including as working capital and for other general corporate purposes. However, our use of these

S-21

TABLE OF CONTENTS

proceeds may differ substantially from our current plans. If we do not invest or apply the proceeds of this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could have an adverse effect on the market price of our common stock.

If you purchase shares of our common stock in this offering, you will incur immediate and substantial dilution.

Since the public offering price for our common stock in this offering is substantially higher than the net tangible book value per share of our common stock, you will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase in this offering. See the section entitled *Dilution* for a more detailed discussion of the dilution you will incur if you purchase shares of our common stock in this offering.

Future sales of shares of our common stock may depress the price of our shares and be dilutive to our existing stockholders.

We cannot predict whether future issuances of shares of our common stock or the availability of shares for resale in the open market will decrease the market price per share of our common stock. As of March 15, 2017, there were 17,604,283 shares of our common stock outstanding. Substantially all of these shares of common stock are eligible for trading in the public market. The market price of our common stock may decline if our stockholders sell a large number of shares of our common stock in the public market, or the market perceives that such sales may occur.

We could also issue up to an additional 13,712,669 shares of our common stock, including 6,820,427 shares to be issued upon the exercise of outstanding warrants and 6,892,242 shares upon exercise of outstanding options or reserved for future issuance under our stock incentive plans, as of March 15, 2017. The exercise of any options or warrants, the issuance of our common stock in connection with acquisitions and other issuances of our common stock could have an adverse effect on the market price of the shares of our common stock.

To the extent that we raise additional funds through the sale of equity or convertible debt securities, the issuance of such securities will result in dilution to our stockholders. Investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering. In addition, if the holders of our outstanding options or warrants exercise such securities, you may incur further dilution.

S-22

TABLE OF CONTENTS

USE OF PROCEEDS

We estimate that the net proceeds from this offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$ million (or approximately \$ million if the underwriters exercise their over-allotment option to purchase additional shares in full).

We intend to use the proceeds from this offering for business growth, including as working capital and for other general corporate purposes. We have broad discretion in determining how the proceeds from this offering will be used, and our discretion is not limited by the aforementioned possible uses. See **Risk Factors** **Risks Related to this Offering** Management will have broad discretion in determining how to use the proceeds of this offering.

S-23

TABLE OF CONTENTS**PRICE RANGE OF OUR COMMON STOCK**

The Company's common stock is currently listed on the NASDAQ Capital Market and is traded under the symbol CYRX. Prior to July 29, 2015, the Company's common stock was quoted on the OTCQB. The quarterly high and low reported closing sale prices for our common stock as quoted on the OTCQB or the high and low closing sales prices on the NASDAQ Capital Market, as applicable, for the periods indicated are as follows:

	High ⁽¹⁾	Low ⁽¹⁾
Transition Period ended December 31, 2016:		
Third Quarter Ended December 31, 2016	\$ 3.49	\$ 1.83
Second Quarter Ended September 30, 2016	\$ 2.27	\$ 1.97
First Quarter Ended June 30, 2016	\$ 2.92	\$ 1.51
Year Ended March 31, 2016:		
Fourth Quarter Ended March 31, 2016	\$ 2.16	\$ 1.07
Third Quarter Ended December 31, 2015	\$ 3.02	\$ 2.00
Second Quarter Ended September 30, 2015	\$ 7.20	\$ 2.25
First Quarter Ended June 30, 2015	\$ 8.88	\$ 5.51

(1) Adjusted for the Company's 1-for-12 reverse stock split of outstanding shares in May 2015.

DIVIDENDS

No dividends on common stock have been declared or paid by the Company. The Company intends to employ all available funds for the development of its business and, accordingly, does not intend to pay any cash dividends in the foreseeable future.

S-24

TABLE OF CONTENTS**CAPITALIZATION**

The following table sets forth our capitalization as of December 31, 2016:

on a pro forma basis to give effect to the sale of the _____ shares of common stock offered by us in this offering after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. You should read this table in conjunction with our audited consolidated financial statements and the related notes thereto appearing in our Form 10-K, which are incorporated by reference herein.

	As of December 31, 2016	
	Actual	Pro forma
Cash and cash equivalents	\$4,524,529	\$
Debt:		
Related-party notes payable and accrued interest, net of discount of \$6,100	651,934	651,934
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, par value \$0.001 per share; 50,000,000 shares authorized; 17,604,283 shares issued and outstanding, actual; _____ shares issued and outstanding, pro forma	17,604	
Additional paid-in capital	129,196,680	
Accumulated deficit	(123,533,882)	
Total stockholders' equity	5,680,402	
Total capitalization	6,332,336	

S-25

TABLE OF CONTENTS**DILUTION**

If you invest in our shares of common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the public offering price per share and the pro forma net tangible book value per share of our common stock after this offering.

Our net tangible book value as of December 31, 2016 was approximately \$5.7 million, or \$0.32 per share of common stock. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of our shares of common stock outstanding as of December 31, 2016. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of shares in this offering at a public offering price of \$ per share, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma net tangible book value as of December 31, 2016 would have been approximately \$ million, or \$ per share. This represents an immediate increase in net tangible book value of \$ per share to existing stockholders and immediate dilution in net tangible book value of \$ per share to new investors participating in this offering. The following table illustrates this dilution on a per share basis:

Public offering price per share	\$
Net tangible book value per share as of December 31, 2016	\$ 0.32
Increase in net tangible book value per share attributable to this offering	
Pro forma net tangible book value per share after this offering	
Dilution per share to new investors participating in this offering	\$

If the underwriters exercise their over-allotment option to purchase additional shares in full, the pro forma net tangible book value per share of our common stock after giving effect to this offering would be \$ per share, and the dilution in net tangible book value per share to investors purchasing common stock in this offering would be \$ per share.

The above table excludes an aggregate of up to 13,712,669 additional shares of common stock reserved and available for future issuance (i) upon the exercise of all outstanding stock options and warrants to purchase common stock, and (ii) under the Cryoport, Inc. 2015 Omnibus Equity Incentive Plan as of March 15, 2017.

S-26

TABLE OF CONTENTS**UNDERWRITING**

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of our common stock set forth opposite its name below. Cowen and Company, LLC and Needham & Company, LLC are the representatives of the underwriters.

Underwriter	Number of Shares
Cowen and Company, LLC	
Needham & Company, LLC.	
Total	

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased, other than those shares covered by the overallotment option described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act of 1933, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Overallotment Option to Purchase Additional Shares. We have granted to the underwriters an option to purchase up to additional shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days. The underwriters may exercise this option solely for the purpose of covering overallotments, if any, made in connection with the sale of common stock offered hereby. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table above.

Discounts and Commissions. The following table shows the public offering price, underwriting discount and proceeds, before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

We estimate that the total expenses of the offering, excluding underwriting discount, will be approximately \$ and are payable by us. We have agreed to reimburse the underwriters up to \$125,000 for fees, costs, disbursements and out-of-pocket expenses incurred by the underwriters, including fees and costs of underwriters counsel, in connection with the offering.

Total Per Share	Without Over- Allotment	With Over Allotment
-----------------------	----------------------------	------------------------

Public offering price

Underwriting discount

Proceeds, before expenses, to us

The underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus. The underwriters may offer the shares of common stock to securities dealers at the public offering price less a concession not in excess of \$ per share. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms.

S-27

TABLE OF CONTENTS

Discretionary Accounts. The underwriters do not intend to confirm sales of the shares to any accounts over which they have discretionary authority.

Stabilization. In connection with this offering, the underwriters may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids and purchases to cover positions created by short sales.

Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.

Overallotment transactions involve sales by the underwriters of shares of common stock in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriters may close out any short position by exercising their overallotment option and/or purchasing shares in the open market.

Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the overallotment option. If the underwriters sell more shares than could be covered by exercise of the overallotment option and, therefore, have a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.

Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by that syndicate member is purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on the NASDAQ Capital Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Lock-Up Agreements. Pursuant to certain lock-up agreements, we and our executive officers and directors have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic consequence of ownership of, directly or indirectly, or make any demand or request or exercise any right with respect to the registration of, or file with the SEC a registration statement under the Securities Act relating to, any common stock or securities convertible into or exchangeable or exercisable for any common stock without the prior written consent of Cowen and Company, LLC, for a period of 90 days after the date of the pricing of the offering.

TABLE OF CONTENTS

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions permit us, among other things and subject to restrictions, to: (a) issue common stock or options pursuant to employee benefit plans, (b) issue common stock upon exercise of outstanding options or warrants, or (c) file registration statements on Form S-8. The exceptions permit parties to the lock-up agreements, among other things and subject to restrictions, to: (a) make certain gifts, (b) if the party is a corporation, partnership, limited liability company or other business entity, make transfers to any shareholders, partners, members of, or owners of similar equity interests in, the party, or to an affiliate of the party, if such transfer is not for value, and (c) if the party is a corporation, partnership, limited liability company or other business entity, make transfers in connection with the sale or transfer of all of the party's capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the party's assets, in any such case not undertaken for the purpose of avoiding the restrictions imposed by the lock-up agreement. In addition, the lock-up provision will not restrict broker-dealers from engaging in market making and similar activities conducted in the ordinary course of their business.

Cowen and Company, LLC, in its sole discretion, may release our common stock and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release our common stock and other securities from lock-up agreements, Cowen and Company, LLC will consider, among other factors, the holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time of the request.

Canada. The common stock may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

United Kingdom. Each of the underwriters has represented and agreed that:

it has not made or will not make an offer of the securities to the public in the United Kingdom within the meaning of section 102B of the Financial Services and Markets Act 2000 (as amended) (FSMA) except to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities or otherwise in circumstances which do not require the publication by us of a prospectus pursuant to the Prospectus Rules of the Financial Services Authority (FSA);

TABLE OF CONTENTS

it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 or in circumstances in which section 21 of FSMA does not apply to us; and

it has complied with and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

Switzerland. The securities will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

European Economic Area. In relation to each Member State of the European Economic Area (the "EEA") which has implemented the European Prospectus Directive (each, a "Relevant Member State"), an offer of our shares may not be made to the public in a Relevant Member State other than:

to any legal entity which is a qualified investor, as defined in the European Prospectus Directive; to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the European Prospectus Directive), subject to obtaining the prior consent of the relevant dealer or dealers nominated by us for any such offer, or;

in any other circumstances falling within Article 3(2) of the European Prospectus Directive, provided that no such offer of our shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the European Prospectus Directive or supplement prospectus pursuant to Article 16 of the European Prospectus Directive.

For the purposes of this description, the expression an "offer to the public" in relation to the securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the expression may be varied in that Relevant Member State by any measure implementing the European Prospectus Directive in that member state, and the expression "European Prospectus Directive" means Directive 2003/71/EC (and amendments hereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State. The expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Israel. In the State of Israel this prospectus shall not be regarded as an offer to the public to purchase shares of common stock under the Israeli Securities Law, 5728 - 1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728 - 1968, including, inter alia, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions (the "Addressed Investors"); or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728 - 1968, subject to certain conditions (the "Qualified Investors"). The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. The company has not and will not take any action that would require it to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728 - 1968. We have not and will not distribute this prospectus or make, distribute or direct an offer to subscribe for our common stock to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

TABLE OF CONTENTS

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728 1968. In particular, we may request, as a condition to be offered common stock, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728 1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728 1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728 1968 and the regulations promulgated thereunder in connection with the offer to be issued common stock; (iv) that the shares of common stock that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728 1968: (a) for its own account; (b) for investment purposes only; and (c) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728 1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investors may have to submit written evidence in respect of their identity and may have to sign and submit a declaration containing, inter alia, the Addressed Investor's name, address and passport number or Israeli identification number.

We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on our behalf, other than offers made by the underwriters and their respective affiliates, with a view to the final placement of the securities as contemplated in this document. Accordingly, no purchaser of the shares, other than the underwriters, is authorized to make any further offer of shares on our behalf or on behalf of the underwriters.

Electronic Offer, Sale and Distribution of Shares. A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other Relationships. Certain of the underwriters and their affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees.

S-31

TABLE OF CONTENTS

LEGAL MATTERS

Certain legal matters with respect to the legality of the issuance of the securities offered by this prospectus will be passed upon for us by Snell & Wilmer L.L.P., Costa Mesa, California. Proskauer Rose LLP, New York, New York, has acted as counsel for the underwriters in connection with certain legal matters related to this offering.

EXPERTS

The consolidated financial statements of the Company as of December 31, 2016 and March 31, 2016 and for the nine month period ended December 31, 2016 and the year ended March 31, 2016, appearing in the Company's Transition Report on Form 10-K, have been audited by KMJ Corbin & Company LLP, an independent registered public accounting firm, as stated in their report (which report expresses an unqualified opinion and includes an explanatory paragraph regarding the Company's ability to continue as a going concern) incorporated by reference herein, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's website at <http://www.sec.gov>.

This prospectus supplement and the accompanying prospectus are only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act and therefore omit certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus supplement and the accompanying prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the public reference room or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

We also maintain a website at <http://www.cryoport.com>, through which you can access our SEC filings. The information set forth on our website is not part of this prospectus supplement or the accompanying prospectus.

S-32

TABLE OF CONTENTS

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with the SEC. This permits us to disclose important information to you by referring to these filed documents. Any information referred to in this way is considered part of this prospectus supplement. The information incorporated by reference is an important part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the following documents that have been filed with the SEC (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K and all exhibits related to such items):

our Transition Report on Form 10-K for the transition period from April 1, 2016 to December 31, 2016 filed with the SEC on March 13, 2017;

the description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on July 22, 2015 (File No. 001-34632), including any amendment or report filed for the purpose of updating such description; and

all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus supplement and the accompanying prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

We will provide, upon written or oral request, without charge to each person, including any beneficial owner, to whom a copy of this prospectus supplement and the accompanying prospectus is delivered, a copy of any or all of the information incorporated herein by reference (exclusive of exhibits to such documents unless such exhibits are specifically incorporated by reference herein). You may request in writing or orally a copy of these filings, at no cost, by writing or telephoning us at: Cryoport, Inc., 17305 Daimler St., Irvine, California, 92614, Attn: Chief Financial Officer, or (949) 470-2300.

S-33

TABLE OF CONTENTS

PROSPECTUS

CRYOPORT, INC.

\$50,000,000 of Shares of Common Stock/Preferred Stock/Warrants/Units/Subscription Rights

Cryoport, Inc., a Nevada corporation (**we**, **us**, **Cryoport** or the **Company**), may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, any combination of the securities described in this prospectus, up to an aggregate amount of \$50,000,000.

At no time will the Company issue shares of common stock (whether upon conversion or exercise of warrants, preferred stock, units or subscription rights) in a transaction other than a public offering if such transaction would result in the issuance of more than 19.999% of the amount of common stock of the Company issued and outstanding for less than the greater of book or market value of the common stock unless (i) the Company's stockholders have approved the issuance of shares of common stock in excess of 20%, or (ii) NASDAQ has provided a waiver of Listing Rule 5635(d). Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities in a public primary offering with a value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75,000,000. We have not sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus.

This prospectus may not be used to sell securities unless accompanied by a prospectus supplement, which will describe the method and the terms of the offering. We will provide you with specific amount, price and terms of the applicable offered securities in one or more supplements to this prospectus. You should carefully read this prospectus and the applicable prospectus supplement, as well as the documents incorporated or deemed to be incorporated by reference in this prospectus, before you purchase any of the securities offered hereby.

These securities may be offered and sold in the same offering or in separate offerings; to or through underwriters, dealers, and agents; or directly to purchasers. The names of any underwriters, dealers, or agents involved in the sale of our securities, their compensation and any over-allotment options held by them will be described in the applicable prospectus supplement. See **Plan of Distribution**.

Our common stock and certain warrants are listed on The NASDAQ Capital Market under the symbols **CYRX** and **CYRXW**, respectively. We will provide information in any applicable prospectus supplement regarding any listing of securities other than shares of our common stock and such warrants on any securities exchange.

Investing in our securities involves significant risks. Prior to making an investment decision, you should carefully review the information under the heading **Risk Factors beginning on page 7 of this prospectus.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities to be issued under this prospectus or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is February 9, 2017.

TABLE OF CONTENTS

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>PROSPECTUS SUMMARY</u>	<u>2</u>
<u>INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS</u>	<u>6</u>
<u>RISK FACTORS</u>	<u>7</u>
<u>USE OF PROCEEDS</u>	<u>7</u>
<u>DESCRIPTION OF CAPITAL STOCK</u>	<u>7</u>
<u>DESCRIPTION OF WARRANTS</u>	<u>9</u>
<u>DESCRIPTION OF UNITS</u>	<u>10</u>
<u>DESCRIPTION OF SUBSCRIPTION RIGHTS</u>	<u>11</u>
<u>PLAN OF DISTRIBUTION</u>	<u>12</u>
<u>LEGAL MATTERS</u>	<u>14</u>
<u>EXPERTS</u>	<u>14</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>14</u>
<u>INFORMATION INCORPORATED BY REFERENCE</u>	<u>15</u>

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the United States Securities and Exchange Commission (the SEC), using a shelf registration process. Under this shelf process, we may, from time to time, offer or sell any combination of the securities described in this prospectus in one or more offerings up to a total amount of \$50,000,000.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add to, update or change information contained in the prospectus and, accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement.

The prospectus supplement to be attached to the front of this prospectus may describe, as applicable: the terms of the securities offered; the initial public offering price; the price paid for the securities; net proceeds; and the other specific terms related to the offering of the securities.

You should rely only on the information contained or incorporated by reference in this prospectus and any prospectus supplement or issuer free writing prospectus relating to a particular offering. No one has been authorized to provide you with information that is different from that contained or incorporated by reference in this prospectus, any accompanying prospectus supplement and any related issuer free writing prospectus in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither this prospectus nor any prospectus supplement nor any related issuer free writing prospectus shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits.

You should read the entire prospectus and any prospectus supplement and any related issuer free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement or any related issuer free writing prospectus, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement or any issuer free writing prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement or issuer free writing prospectus is correct as of any date subsequent to the date hereof or of such prospectus supplement or issuer free writing prospectus, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

TABLE OF CONTENTS

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information you should consider in making your investment decision. You should read this entire prospectus carefully (including the documents incorporated herein by reference), especially the section of this prospectus entitled Risk Factors beginning on page Z, and our consolidated financial statements and notes to those consolidated financial statements, before making an investment decision. Cryoport, Inc. is referred to throughout this prospectus as Cryoport, we or us.

General Overview

We provide cryogenic logistics solutions to the life sciences industry through a combination of proprietary packaging, information technology and specialized cold chain logistics knowhow. We view our solutions as disruptive to the older technologies of dry ice and liquid nitrogen, in that our solutions are comprehensive and combine our competencies in configurations that are customized to our clients' requirements. We provide comprehensive, reliable, economic alternatives to all existing logistics solutions and services utilized for frozen shipping in the life sciences industry (e.g., personalized medicine, cell therapies, stem cells, cell lines, vaccines, diagnostic materials, semen, eggs, embryos, cord blood, bio-pharmaceuticals, infectious substances, and other commodities that require continuous exposure to cryogenic or frozen temperatures). As part of our services we provide the ability to monitor, record and archive crucial information for each shipment that can be used for scientific and regulatory purposes.

Our Cryoport Express® Solutions include a sophisticated cloud-based logistics operating platform, which is branded as the Cryoport™. The Cryoport™ supports the management of the entire shipment and logistics process through a single interface, including initial order input, document preparation, customs clearance, courier management, shipment tracking, issue resolution, and delivery. In addition, it provides unique and incisive information dashboards and validation documentation for every shipment. The Cryoport™ records and retains a fully documented chain-of-custody and, at the client's option, chain-of-condition for every shipment, helping ensure that quality, safety, efficacy, and stability of shipped commodities are maintained throughout the process. This recorded and archived information allows our clients to meet exacting requirements necessary for scientific work and for proof of regulatory compliance during the logistics phase.

The branded packaging for our Cryoport Express® Solutions includes our liquid nitrogen dry vapor shippers, the Cryoport Express® Shippers. The Cryoport Express® Shippers are cost-effective and reusable cryogenic transport containers (our standard shipper is a patented vacuum flask) utilizing an innovative application of dry vapor liquid nitrogen (LN₂) technology. Cryoport Express® Shippers are International Air Transport Association (IATA) certified and validated to maintain stable temperatures of minus 150° C and below for a 10-day dynamic shipment period. The Company currently features three Cryoport Express® Shippers: the Standard Dry Shipper (holding up to 75 2.0 ml vials), the High Volume Dry Shipper (holding up to 500 2.0 ml vials) and the recently introduced Cryoport Express® CXVC1 Shipper (holding up to 1,500 2.0 ml vials). In addition, we assist clients with internal secondary packaging (e.g., vials, canes, straws and plates).

Our most used solution is the turnkey solution, which can be accessed directly through our cloud-based Cryoport™ or by contacting Cryoport Client Care for order entry. Once an order is placed and cleared, we ship a fully charged Cryoport Express® Shipper to the client who conveniently loads its frozen commodity into the inner chamber of the

Cryoport Express® Shipper. The customer then closes the shipper package and reseals the shipping box displaying the next recipient's address for pre-arranged carrier pick up. Cryoport arranges for the pick-up of the parcel by a shipping service provider, which is designated by the client or chosen by Cryoport, for delivery to the client's intended recipient.

The recipient simply opens the shipper package and removes the frozen commodity that has been shipped. The recipient then reseals the package, displaying the nearest Cryoport Staging Center address, making it ready for pre-arranged carrier pick-up. When the Cryoport Staging Center receives the Cryoport Express® Shipper, it is cleaned, put through quality assurance testing, and returned to inventory for reuse.

TABLE OF CONTENTS

In late 2012, we shifted our focus to become a comprehensive cryogenic logistics solutions provider. Recognizing that clients in the life sciences industry have varying requirements, we unbundled our technologies, established customer facing solutions and took a consultative approach to the market. Today, in addition to our standard Turn-key Solution, described above, we also provide the following customer facing, value-added solutions to address our various clients needs:

Customer Staged Solution, designed for clients making 50 or more shipments per month. Under this solution, we supply an inventory of our Cryoport Express® Shippers to our customer, in an uncharged state, enabling our customer (after training/certification) to charge them with liquid nitrogen and use our Cryoport™ to enter orders with shipping and delivery service providers for the transportation of the package.

Customer Managed Solution, a limited customer implemented solution, whereby we supply our Cryoport Express® Shippers to clients in a fully charged state, but leaving it to the client to manage the shipping, including the selection of the shipping and delivery service provider and the return of the shipper to us.

powered by CryoportSM, available to providers of shipping and delivery services who seek to offer a branded cryogenic logistics solution as part of their service offerings, with powered by CryoportSM appearing prominently on the offering software interface and packaging. This solution can also be private labeled upon meeting certain requirements, such as minimum required shipping volumes.

Integrated Solution, which is our total outsource solution. It is our most comprehensive solution and involves our management of the entire cryogenic logistics process for our client, including Cryoport employees at the client's site to manage the client's cryogenic logistics function in total.

Regenerative Medicine Point-of-Care Repository Solution, designed for allogeneic therapies. In this solution we supply our Cryoport Express® Shipper to ship and store cryogenically preserved life science products for up to six days (or longer periods with supplementary shippers) at a point-of-care site, with the Cryoport Express® Shipper serving as a temporary freezer/repository enabling the efficient and effective distribution of temperature sensitive allogeneic cell-based therapies without the expense, inconvenience, and potential costly failure of an on-site, cryopreservation device.

Personalized Medicine and Cell-based Immunotherapy Solution, designed for autologous therapies. In this solution our Cryoport Express® Shipper serves as an enabling technology for the safe transportation for the manufactured autologous cellular-based immunotherapy market by providing a comprehensive logistics solution for the verified chain of custody and condition transport from, (a) the collection of the patient's cells in a hospital setting, to (b) a central processing facility where they are manufactured into a personalized medicine, to (c) the safe, cryogenically preserved return of these irreplaceable cells to a point-of-care treatment facility. If required, the Cryoport Express® Shipper can then serve as a temporary freezer/repository to allow the efficient distribution of this personalized medicine to the patient when and where the medical provider needs it most without the expense, inconvenience, and potential costly failure of an on-site, cryopreservation device.

Cryoport is continuously expanding its solutions offerings in response to its customers' needs. In June 2016, Cryoport announced a new Laboratory Relocation Service, for transport of complete laboratories. The Laboratory Relocation Service manages the safe, secure and proper transportation of materials that are stored in labs as well as lab equipment and instruments. Relocation projects can range in size from the relocation of a fully equipped lab to the move of a single freezer.

Also in June 2016, Cryoport further broadened its capabilities and solutions offerings beyond cryogenic logistics and transportation services to include temperature-controlled storage solutions that include cGMP compliant biorepositories at controlled temperatures and climatized systems. Cryoport Biostorage services

TABLE OF CONTENTS

feature extensive management and monitoring, including controlled access to commodities, periodic temperature and activity reports, as well as 21 CFR, Part 11 compliant monitoring with 24/7/365 alarm response.

Our Corporate Information

We are a Nevada corporation originally incorporated under the name G.T.5-Limited (**GT5**) on May 25, 1990. In connection with a Share Exchange Agreement, on March 15, 2005 we changed our name to Cryoport, Inc. and acquired all of the issued and outstanding shares of common stock of Cryoport Systems, Inc., a California corporation, in exchange for 200,901 shares of our common stock (which represented approximately 81% of the total issued and outstanding shares of common stock following the close of the transaction). Cryoport Systems, Inc., which was originally formed in 1999 as a California limited liability company, and subsequently reorganized into a California corporation on December 11, 2000, remains the operating company under Cryoport, Inc. Our principal executive offices are located at 17305 Daimler Street, Irvine, CA 92614. The telephone number of our principal executive offices is (949) 470-2300, and our main corporate website is *www.cryoport.com*.

The Company became public by a reverse merger with a shell company in May 2005. Over time the Company has transitioned from being a development company to a fully operational public company, providing cold chain logistics solutions to the life sciences industry globally.

TABLE OF CONTENTS

The Offering

We may offer up to \$50,000,000 of common stock, preferred stock, warrants, units and/or subscription rights in one or more offerings and in any combination. This prospectus provides you with a general description of the securities we may offer. A prospectus supplement, which we will provide each time we offer securities, will describe the specific amounts, prices and terms of the securities we determine to offer.

We may sell the securities to or through underwriters, dealers or agents or directly to purchasers or as otherwise set forth below under Plan of Distribution. We and any agents acting on our behalf, reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. Each prospectus supplement will set forth the names of any underwriters, dealers, agents or other entities involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

Common Stock

We may offer shares of our common stock, par value \$0.001 per share, either alone or underlying other registered securities convertible or exercisable into our common stock. Subject to the preferential rights of any outstanding preferred stock, each holder of common stock is entitled to receive ratable dividends, if any, as may be declared by our board of directors out of funds legally available for the payment of dividends. Holders of common stock are entitled to one vote for each share held of record. The holders of our common stock have no preemptive, subscription, conversion or redemption rights. Upon our liquidation, dissolution or winding-up, the holders of our common stock are entitled to receive our assets pro rata.

Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue from time to time the preferred stock in one or more series, to fix the number of shares constituting such series and the designation of such series, the voting powers, if any, of the shares of such series, and the preferences and relative, participating, optional or other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series.

Each series of preferred stock will be more fully described in the particular prospectus supplement that will accompany this prospectus. Each series of preferred stock, if issued, will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or winding up, voting rights and rights to convert into common stock. We have no present plans to issue any shares of preferred stock nor are any shares of our preferred stock presently outstanding.

Warrants

We may issue warrants for the purchase of common stock, preferred stock or units. We may issue warrants independently or together with other securities.

Units

We may issue units comprised of one or more of the other classes of securities issued by us as described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit.

Subscription Rights

We may issue subscription rights to purchase common stock, preferred stock or other securities described in this prospectus or any combination thereof. These subscription rights may be issued independently or together with any other security offered by us and may or may not be transferable by the securityholder receiving the subscription rights in such offering. In connection with any offering of subscription rights, we may enter into a standby arrangement with one or more underwriters or other investors pursuant to which the underwriters or other investors may be required to purchase any securities remaining unsubscribed for after such offering.

TABLE OF CONTENTS

INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical fact contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as may, will, should, expects, plans, anticipates, could, intends, target, projects, contemplates, believes, estimates, predicts, potential, negative of these terms or other similar words. These statements are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. We discuss many of the risks in greater detail under the heading Risk Factors. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus. Forward-looking statements in this prospectus include, but are not necessarily limited to, those relating to:

- our intention to introduce new products or services;
- our expectations about securing strategic relationships with global couriers or large clinical research organization;
- our future capital needs;
- results of our research and development efforts; and
- approval of our patent applications.

Forward-looking statements are subject to risks and uncertainties, certain of which are beyond our control. Actual results could differ materially from those anticipated as a result of the factors described in Risk Factors in this prospectus and detailed in our other SEC filings, including among others:

- the effect of regulation by United States and foreign governmental agencies;
- research and development efforts, including delays in developing, or the failure to develop, our products;
- the development of competing or more effective products by other parties;
- uncertainty of market acceptance of our products;
- errors in business planning attributable to insufficient market size or segmentation data;
- problems that we may face in manufacturing, marketing and distributing our products;
- problems that we may encounter in further development of Cryoport Express® Solutions, which includes the cloud-based logistics management software branded as Cryoportal™;
- our inability to raise additional capital when needed;
- delays in the issuance of, or the failure to obtain, patents for certain of our products and technologies;
- problems with important suppliers and strategic business partners; and
- difficulty or delays in establishing marketing relationships with international couriers.

Because of these risks and uncertainties, the forward-looking events and circumstances discussed in this prospectus might not transpire. Except for our ongoing obligations to disclose material information as required by the federal securities laws, we undertake no obligation to release publicly any revisions to any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. All of the above factors are difficult to predict, contain uncertainties that may

TABLE OF CONTENTS

materially affect our actual results and may be beyond our control. New factors emerge from time to time, and it is not possible for our management to predict all of such factors or to assess the effect of each factor on our business. You are advised to consult any further disclosures we make on related subjects in the reports we file with the SEC.

This prospectus also contains estimates and other industry and statistical data developed by independent parties and by us relating to market size, growth, and segmentation of markets. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. While we believe the data referred to in this prospectus to be reliable, industry and statistical data is subject to variations and cannot be verified due to limits on the availability and reliability of data inputs, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey. We have not independently verified these estimates generated by independent parties and contained in this prospectus. In addition, projections, assumptions, and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in **Risk Factors** and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before making an investment decision, you should consider carefully the risks discussed below, together with the risks under the heading **Risk Factors** in our Annual Report on Form 10-K for the fiscal year ended March 31, 2016, our Quarterly Reports on Form 10-Q for the quarters ended June 30, 2016 and September 30, 2016, and any subsequent Annual Report on Form 10-K or Quarterly Report on Form 10-Q, which are incorporated by reference into this prospectus, as well as the other information included or incorporated by reference in this prospectus. Our business, prospects, financial condition, or operating results could be harmed by any of these risks, as well as other risks not currently known to us or that we currently consider immaterial. The trading price of our securities could decline due to any of these risks, and, as a result, you may lose all or part of your investment. The prospectus supplement applicable to each offering of securities will contain additional information about risks applicable to an investment in us and the applicable securities.

USE OF PROCEEDS

Unless otherwise indicated in the prospectus supplement, we will use the net proceeds from the sale of securities offered by this prospectus primarily for general corporate purposes, including working capital, capital expenditures, sales and marketing activities, general and administrative matters, and the repayment of indebtedness. We may also use a portion of the proceeds to acquire or invest in complementary products or businesses.

We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes. Accordingly, our management will have broad discretion over the uses of such proceeds. The specific allocations of the proceeds we receive from the sale of our securities will be described in the applicable prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital consists of 50,000,000 shares of common stock, \$0.001 par value per share, of which 17,604,283 shares of common stock were issued and outstanding as of January 20, 2017, and 2,500,000 shares of blank check preferred stock, \$0.001 par value per share, none of which were issued and outstanding as of such date.

The following description is a summary and is qualified in its entirety by our Amended and Restated Articles of Incorporation, as amended to date, and our Amended and Restated Bylaws, as currently in effect, copies of which are referenced as exhibits herein, and the provisions of the Nevada Revised Statutes.

7

TABLE OF CONTENTS

Common Stock

Subject to the preferential rights of any outstanding preferred stock, each holder of common stock is entitled to receive ratable dividends, if any, as may be declared by our board of directors out of funds legally available for the payment of dividends. As of the date of this prospectus, no dividends on common stock have been declared or paid by the Company. The Company intends to employ all available funds for the development of its business and, accordingly, does not intend to pay any cash dividends in the foreseeable future.

Holders of common stock are entitled to one vote for each share held of record. There are no cumulative voting rights in the election of directors. Thus the holders of more than 50% of the outstanding shares of common stock can elect all of our directors if they choose to do so.

The holders of our common stock have no preemptive, subscription, conversion or redemption rights. Upon our liquidation, dissolution or winding-up, the holders of our common stock are entitled to receive our assets pro rata.

Preferred Stock

The following description of preferred stock and the description of the terms of any particular series of preferred stock that we choose to issue hereunder and that will be set forth in the related prospectus supplement are not complete. These descriptions are qualified in their entirety by reference to our certificate of incorporation and any amendments thereto relating to any series of preferred stock. The rights, preferences, privileges and restrictions of the preferred stock of each series will be fixed by the certificate of designation relating to that series. The prospectus supplement also will contain a description of certain United States federal income tax consequences relating to the purchase and ownership of the series of preferred stock that is described in the prospectus supplement.

Our board of directors is empowered, without further action by stockholders, to issue from time to time one or more series of preferred stock, with such designations, rights, preferences and limitations as the board of directors may determine by resolution. The rights, preferences and limitations of separate series of preferred stock may differ with respect to such matters among such series as may be determined by our board of directors, including, without limitation, the rate of dividends, method and nature of payment of dividends, terms of redemption, amounts payable on liquidation, sinking fund provisions (if any), conversion rights (if any) and voting rights. Certain issuances of preferred stock may have the effect of delaying or preventing a change in control of our company that some stockholders may believe is not in their interest.

The prospectus supplement for a series of preferred stock will specify:

the maximum number of shares;
the designation of the shares;

the annual dividend rate, if any, whether the dividend rate is fixed or variable, the date or dates on which dividends will accrue, the dividend payment dates, and whether dividends will be cumulative;

the price and the terms and conditions for redemption, if any, including redemption at our option or at the option of the holders, including the time period for redemption, and any accumulated dividends or premiums;

the liquidation preference, if any, and any accumulated dividends upon the liquidation, dissolution or winding up of our affairs;

any sinking fund or similar provision, and, if so, the terms and provisions relating to the purpose and operation of the fund;

the terms and conditions, if any, for conversion or exchange of shares of any other class or classes of our capital stock or any series of any other class or classes, or of any other series of the same class, or any other securities or assets, including the price or the rate of conversion or exchange and the method, if any, of adjustment;

8

TABLE OF CONTENTS

the voting rights; and
any or all other preferences and relative, participating, optional or other special rights, privileges or qualifications, limitations or restrictions.

The issuance of preferred stock will affect, and may adversely affect, the rights of holders of common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of common stock until our board of directors determines the specific rights attached to that preferred stock. The effects of issuing preferred stock could include one or more of the following:

restricting dividends on the common stock;
diluting the voting power of the common stock;
impairing the liquidation rights of the common stock; or
delaying or preventing changes in control or management of our company.

We have no present plans to issue any shares of preferred stock nor are any shares of our preferred stock presently outstanding. Preferred stock will be fully paid and nonassessable upon issuance.

Nevada Anti-Takeover Law and Charter and Bylaws Provisions

Nevada Revised Statutes sections 78.378 to 78.3793 provide state regulation over the acquisition of a controlling interest in certain Nevada corporations unless the articles of incorporation or bylaws of the corporation provide that the provisions of these sections do not apply. This statute currently does not apply to our Company because in order to be applicable, we would need to have a specified number of Nevada residents as shareholders, and we would have to do business in Nevada directly or through an affiliate.

In addition, our amended and restated articles of incorporation and amended and restated bylaws contain provisions that may make the acquisition of our company more difficult, including, but not limited to, the following:

requiring at least 75% of outstanding voting stock in order to call a special meeting of stockholders;
not allowing stockholders to take action by written consent in lieu of a meeting;
setting forth specific procedures regarding how our stockholders may present proposals or nominate directors for election at stockholder meetings;
requiring advance notice and duration of ownership requirements for stockholder proposals;
permitting our board of directors to issue preferred stock without stockholder approval; and
limiting the rights of stockholders to amend our bylaws.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock or preferred stock or a combination thereof. Warrants may be issued independently or together with common stock or preferred stock and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement. This summary of some provisions of the warrants is not complete. You should refer to the warrant agreement relating to the specific warrants being offered for the complete terms of the warrants.

The particular terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

the number of shares of common stock or preferred stock purchasable upon the exercise of warrants to purchase such shares and the price at which such number of shares may be purchased upon such exercise;

the designation, stated value and terms (including, without limitation, liquidation, dividend, conversion and voting rights) of the series of preferred stock purchasable upon exercise of warrants to purchase preferred stock;

9

TABLE OF CONTENTS

the date on which the right to exercise the warrants will commence and the date on which the right will expire;
United States Federal income tax consequences applicable to the warrants;
provision for changes to or adjustments in the exercise price; and
any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of equity warrants will not be entitled to:

vote, consent or receive dividends;
receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or

exercise any rights as stockholders of the Company.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other classes of securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The units may be issued under unit agreements to be entered into between us and a unit agent, as detailed in the prospectus supplement relating to the units being offered. The prospectus supplement will describe:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances the securities comprising the units may be held or transferred separately;

a description of the terms of any unit agreement governing the units;

a description of the provisions for the payment, settlement, transfer or exchange of the units;

a discussion of material federal income tax considerations, if applicable; and

whether the units if issued as a separate security will be issued in fully registered or global form.

The descriptions of the units in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable agreements. These descriptions do not restate those agreements in their entirety and may not contain all the information that you may find useful. We urge you to read the applicable agreements because they, and not the summaries, define your rights as holders of the units. For more information, please review the forms of the relevant agreements, which will be filed with the SEC promptly after the offering of units and will be available as described under the heading **Where You Can Find More Information**.

TABLE OF CONTENTS

DESCRIPTION OF SUBSCRIPTION RIGHTS

We may issue subscription rights to purchase common stock, preferred stock or other securities described in this prospectus or any combination thereof. These subscription rights may be issued independently or together with any other security offered by us and may or may not be transferable by the securityholder receiving the subscription rights in such offering. In connection with any offering of subscription rights, we may enter into a standby arrangement with one or more underwriters or other investors pursuant to which the underwriters or other investors may be required to purchase any securities remaining unsubscribed for after such offering.

To the extent appropriate, the applicable prospectus supplement will describe the specific terms of the subscription rights to purchase shares of our securities offered thereby, including the following:

- the date of determining the securityholders entitled to the rights distribution;
- the price, if any, for the subscription rights;
- the exercise price payable for the common stock, preferred stock or other securities upon the exercise of the subscription right;
- the number of subscription rights issued to each securityholder;
- the amount of common stock, preferred stock, depositary shares or other securities that may be purchased per each subscription right;
- any provisions for adjustment of the amount of securities receivable upon exercise of the subscription rights or of the exercise price of the subscription rights;
- the extent to which the subscription rights are transferable;
- the date on which the right to exercise the subscription rights shall commence, and the date on which the subscription rights shall expire;
- the extent to which the subscription rights may include an over-subscription privilege with respect to unsubscribed securities;
- the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of subscription rights;
- any applicable federal income tax considerations; and
- any other terms of the subscription rights, including the terms, procedures and limitations relating to the transferability, exchange and exercise of the subscription rights.

TABLE OF CONTENTS

PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (i) to or through underwriters or dealers, (ii) directly to purchasers, including our affiliates, (iii) through agents, or (iv) through a combination of any these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. The prospectus supplement will include the following information:

the terms of the offering;
the names of any underwriters or agents;
the name or names of any managing underwriter or underwriters;
the purchase price of the securities;
the net proceeds from the sale of the securities;
any delayed delivery arrangements;

any underwriting discounts, commissions or agency fees and other items constituting underwriters' or agents' compensation;

any initial public offering price;
any discounts or concessions allowed or reallocated or paid to dealers; and
any commissions paid to agents.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4). Any at-the-market offering will be through an underwriter or underwriters acting as principal or agent for us.

We may issue to the holders of our common stock on a pro rata basis for no consideration, subscription rights to purchase shares of our common stock or preferred stock. These subscription rights may or may not be transferable by stockholders. The applicable prospectus supplement will describe the specific terms of any offering of our common or preferred stock through the issuance of subscription rights, including the terms of the subscription rights offering, the terms, procedures and limitations relating to the exchange and exercise of the subscription rights and, if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of common or preferred stock through the issuance of subscription rights.

Sale Through Underwriters or Dealers

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

TABLE OF CONTENTS

Direct Sales and Sales Through Agents

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved. Such securities may also be sold through agents designated from time to time. The prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent. Unless otherwise indicated in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in the prospectus supplement.

Delayed Delivery Contracts

If the prospectus supplement indicates, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Market Making, Stabilization and Other Transactions

Unless the applicable prospectus supplement states otherwise, each series of offered securities will be a new issue and will have no established trading market. We may elect to list any series of offered securities on an exchange. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Rule 104 under the Securities Exchange Act. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Derivative Transactions and Hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sale transactions and other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to

facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may effect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others. The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities.

Electronic Auctions

We may also make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you will want to pay particular attention to the description of that system we will provide in a prospectus supplement.

TABLE OF CONTENTS

Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called real-time basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

General Information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act. Our agents, underwriters, and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us, in the ordinary course of business.

The maximum consideration or discount to be received by any Financial Industry Regulatory Authority, or FINRA, member or independent broker dealer may not exceed 8.0% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Certain legal matters will be passed upon for us by Snell & Wilmer L.L.P., Costa Mesa, California. Additional legal matters may be passed upon for us, or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Cryoport, Inc. as of March 31, 2016 and 2015 and for each of the years in the two-year period ended March 31, 2016, incorporated by reference herein, have been audited by KMJ Corbin & Company LLP, an independent registered public accounting firm, as stated in their report (which report expresses an unqualified opinion and includes an explanatory paragraph regarding the Company's ability to continue as a going concern) incorporated by reference herein, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. We have also filed a registration statement on Form S-3, including exhibits, under the Securities Act with respect to the securities offered by this prospectus. This prospectus is part of the registration statement, but does not contain all of the information included in the registration statement or the exhibits. You may read and copy the registration statement and any other document that we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference

Room. Our SEC filings are also available to the public on the internet at a website maintained by the SEC located at <http://www.sec.gov>.

TABLE OF CONTENTS

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference information into this document. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this document, except for any information superseded by information that is included directly in this document or incorporated by reference subsequent to the date of this document.

This prospectus incorporates by reference the documents listed below and any future filings that we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than current reports on Form 8-K furnished under Item 2.02 or Item 7.01 and exhibits filed on such form that are related to such items), until all the securities offered under this prospectus are sold.

Our Annual Report on Form 10-K for the fiscal year ended March 31, 2016, filed with the SEC on June 28, 2016, as amended by Amendment No. 1 on Form 10-K/A for the fiscal year ended March 31, 2016, filed with the SEC on September 23, 2016;

Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, filed with the SEC on August 15, 2016;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, filed with the SEC on November 14, 2016;

Our Current Reports on Form 8-K, filed with the SEC on August 2, 2016, August 12, 2016, August 16, 2016 (as amended by Current Report on Form 8-K/A, filed with the SEC on August 16, 2016), September 23, 2016, October 4, 2016, October 17, 2016, November 3, 2016 (in each case, not including any information furnished under Items 2.02 or 7.01 of Form 8-K, including the related exhibits, which information is not incorporated by reference herein);

Our definitive proxy statement on Schedule 14A filed with the SEC on September 2, 2016, as amended by Amendment No. 1 to our proxy statement on Schedule 14A filed with the SEC on September 15, 2016; and

The descriptions of our common stock, preferred stock and warrants contained in our Registration Statement on Form 8-A, filed with the SEC on July 22, 2015, and any other amendment or report filed for the purposes of updating such descriptions.

Documents incorporated by reference are available from the SEC as described above or from us without charge, excluding any exhibits to those documents unless the exhibit is specifically incorporated by reference as an exhibit in this document. You can obtain documents incorporated by reference in this document by requesting them in writing or by telephone at the following address:

Cryoport, Inc.
17305 Daimler St.
Irvine, CA 92614
Attn: Chief Financial Officer
(949) 470-2300

TABLE OF CONTENTS

Shares

Common Stock

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

Cowen and Company

Needham & Company

, 2017
