CYTRX CORP
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June 08, 2016
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As filed with the Securities and Exchange Commission on June 8, 2016

Reg. No. 333-208803

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1

to

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

CYTRX CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	58-1642750
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

CytRx Corporation

11726 San Vicente Boulevard, Suite 650

Los Angeles, California 90049

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Steven A. Kriegsman

Chairman and Chief Executive Officer

CytRx Corporation

11726 San Vicente Boulevard, Suite 650

Los Angeles, California 90049

(310) 826-5648

(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:

Dale E. Short

TroyGould PC

1801 Century Park East, Suite 1600

Los Angeles, California 90067

Telephone: (310) 789-1259

Facsimile: (310) 789-1459

Approximate date of commencement of proposed sale to public: From time to time after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. ¨

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. ¨

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. ¨

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

Large accelerated filer ¨	Accelerated filer x
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

Pursuant to Rule 429(a) under the Securities Act of 1933, as amended (the Act), the prospectus included in this registration statement relating to the registrant s primary offering is a combined prospectus relating to $171,221,250 of securities of the registrant, $71,221,250 of which were registered and remain unsold under the registrant s prior registration statement on Form S-3 (Reg. No. 333-193064) declared effective on December 23, 2013. Pursuant to Rule 429(b) under the Act, this post-effective amendment, upon effectiveness, also constitutes a post-effective amendment to the prior registration statement, which post-effective amendment shall become effective concurrently with the effectiveness of this post-effective amendment and in accordance with Section 8(c) of the Act. If securities previously registered under the prior registration statements are offered and sold before the effective date of this post-effective amendment, the amount of previously registered securities so sold will not be included in the combined prospectus herein.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

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EXPLANATORY NOTE

This Registration Statement contains two prospectuses, as described below:

- a shelf registration prospectus relating to the primary offering of up to $171,221,250 of securities of the registrant that the registrant may offer and sell in one or more transactions utilizing the shelf registration process described in the shelf registration prospectus; and

- a November 2013 warrants prospectus relating to the secondary offering of up to 250,000 shares of common stock of the registrant that the selling security holder may offer for sale as described in the November 2013 warrants prospectus.

The two prospectuses are substantively identical, except for the following principal differences:

- they contain different outside front covers and back covers;

- the shelf registration prospectus refers throughout to the registrant s offer and sale of its securities in the primary offering described in the shelf registration prospectus, while the November 2013 warrants prospectus refers throughout to the selling security holder s offer for sale of shares of common stock issuable upon exercise of outstanding November 2013 warrants held by the selling security holder;

- the shelf registration prospectus contains an abbreviated Risk Factors section, while the November 2013 warrants prospectus contains a complete Risk Factors discussion;

- the shelf registration prospectus contains no Dilution or Selling Security Holder section, as does the November 2013 warrants prospectus;

- the two prospectuses contain different Use of Proceeds sections;

- the shelf registration prospectus contains a Financial Ratio section, while the November 2013 warrants prospectus does not;

- the two prospectuses contain different Plan of Distribution sections; and

- the shelf registration prospectus contains The Securities That We May Offer, Description of Capital Stock, Description of Warrants and Description of Units sections, while the November 2013 warrants prospectus contains only a Description of Capital Stock section.

The registrant has included in this registration statement, after the shelf registration prospectus, the November 2013 warrants prospectus, which November 2013 warrants prospectus reflects the foregoing principal differences from the shelf registration prospectus.

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The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission becomes effective. This prospectus is not an offer to sell these securities, and it is not a solicitation of an offer to buy these securities, in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, June 8, 2016

PROSPECTUS

$171,221,250

We may offer and sell from time to time up to $171,221,250 in the aggregate of shares of our common stock, shares of our preferred stock and warrants in amounts, at prices and on terms that we will decide at the time of the offering. These securities may be offered and sold separately, together or as units with other securities. Each share of our common stock to be offered and sold is accompanied by one Series A Junior Participating Preferred Stock Purchase Right that trades with our common stock.

We will provide the specific terms of these offers and sales in supplements to this prospectus. This prospectus may not be used to sell securities unless accompanied by a prospectus supplement. You should read this prospectus and the prospectus supplement carefully before you invest. We may offer securities directly to investors or through agents, underwriters or dealers. If any agents, underwriters or dealers are involved in the sale of any of our securities, their names and any applicable purchase prices, fees, commissions or discount arrangements will be set forth in the prospectus supplement.

Our common stock is traded on The NASDAQ Capital Market under the symbol CYTR. On June 7, 2016, the last sale price of our common stock as reported on The NASDAQ Capital Market was $2.56.

An investment in our securities involves significant risks. Before purchasing any securities, you should consider carefully the risks referred to under Risk Factors on page 12 of this prospectus and in the prospectus supplement.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED THAT THIS PROSPECTUS IS COMPLETE OR ACCURATE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2016

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement (Reg. No. 333-208803) utilizing the shelf registration process that we filed with the Securities and Exchange Commission, or the SEC, to permit us to offer and sell the securities described in this prospectus in one or more transactions. The plan of distribution of the securities is described in this prospectus under the heading Plan of Distribution.

As permitted by the rules and regulations of the SEC, the registration statement filed by us includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC s web site or at the SEC s offices described below under the heading Where You Can Find More Information.

This prospectus provides you with a general description of the securities we may offer. Each time securities are sold, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and the prospectus supplement, together with additional information described in this prospectus under the heading Where You Can Find More Information.

You should rely only on the information provided in this prospectus and in the prospectus supplement, including any information incorporated by reference. For more details on information incorporated herein by reference, you should review the discussion contained under the heading Incorporation of Certain Documents by Reference. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus and in the prospectus supplement. We are offering the securities only in jurisdictions where offers are permitted. You should not assume that the information in this prospectus or the prospectus supplement is accurate at any date other than the date indicated on the cover page of these documents.

NOTE ON FORWARD-LOOKING STATEMENTS

Some of the statements contained or incorporated by reference in this prospectus or in the prospectus supplement may include forward-looking statements that reflect our current views with respect to our research and development activities, business strategy, business plan, financial performance and other future events. These statements include forward-looking statements both with respect to us, specifically, and the biotechnology sector, in general. We make these statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements that include the words expect, intend, plan, believe, project, estimate, may, should, anticip similar statements of a future or forward-looking nature identify forward-looking statements for purposes of the federal securities laws or otherwise.

All forward-looking statements involve inherent risks and uncertainties, and there are or will be important factors that could cause actual results to differ materially from those indicated in these statements. We believe that these factors include, but are not limited to, those factors set forth under the caption Risk Factors in this prospectus and in any prospectus supplement and under the captions Business, Legal Proceedings, Management s Discussion and Analysis of Financial Condition and Results of Operations, Quantitative and Qualitative Disclosures About Market Risk and Controls and Procedures in our most recent Annual Report on Form 10-K and our most recent Quarterly Report on Form 10-Q, all of which you should review carefully. Please consider our forward-looking statements in light of those risks as you read this prospectus and the prospectus supplement. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise.

If one or more of these or other risks or uncertainties materializes, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we anticipate. All subsequent written and oral forward-looking statements attributable to us or individuals acting on our behalf are expressly qualified in their entirety by this Note. Before purchasing any of our securities, you should consider carefully all of the factors set forth or referred to in this prospectus and in the prospectus supplement that could cause actual results to differ.

INDUSTRY DATA

Unless otherwise indicated, information contained or incorporated by reference in this prospectus concerning our industry, including our general expectations and market opportunity, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry s future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those referred to under Risk Factors on page 12 of this prospectus. These and other factors could cause our future performance to differ materially from our assumptions and estimates.

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TRADEMARKS

CytRx is one of our trademarks used in this prospectus. This prospectus also includes trademarks, trade names and service marks that are the property of other organizations. Solely for convenience, trademarks and trade names referred to in this prospectus sometimes appear without the ® and symbols, but those references are not intended to indicate that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and trade names.

ABOUT CYTRX

Company Overview

CytRx Corporation (we, us, our or the company) is a biopharmaceutical research and development company specializing in oncology. We currently are focused on the clinical development of aldoxorubicin (formerly known as INNO-206), our modified version of the widely-used chemotherapeutic agent, doxorubicin. We have reported positive top-line efficacy results (median progression-free survival, progression-free survival at six months, overall response rates, hazard ratios and overall survival) from our completed, global Phase 2b clinical trial with aldoxorubicin as a treatment for soft tissue sarcoma, or STS. Hazard ratios the likelihood that the study endpoint (in this case tumor progression) will be reached during a given period are an important measure of the reliability and uniformity of the absolute data for progression-free survival, or PFS. The trial investigated the efficacy and safety of aldoxorubicin compared with doxorubicin in subjects with first-line metastatic, locally advanced or unresectable STS. Aldoxorubicin combines the chemotherapeutic agent doxorubicin with a novel linker-molecule that binds specifically to albumin in the blood to allow for delivery of higher amounts of doxorubicin (3 ½ to 4 times) without the major dose-limiting toxicities seen with administration of doxorubicin alone.

In the first quarter of 2014, we initiated a pivotal Phase 3 trial of aldoxorubicin as a therapy for patients with STS whose tumors have progressed following treatment with chemotherapy, and we have received approval from the FDA to continue dosing patients with aldoxorubicin until disease progression in that clinical trial. The Phase 3 trial is being conducted under a Special Protocol Assessment, or SPA, granted by the U.S. Food and Drug Administration, or FDA. The SPA means that the FDA agrees that the design and analyses proposed in the Phase 3 trial protocol are acceptable to support regulatory approval of the product candidate with respect to effectiveness of the indication studied, and will not subsequently change its perspective on these matters, unless previously unrecognized public or animal health concerns were to arise or we were to subsequently modify the protocol. Thus, if the study demonstrates an acceptable benefit-risk profile as determined by the FDA, it would suffice as the single pivotal trial to demonstrate effectiveness and would support registration of aldoxorubicin for this indication. The clinical trial has completed its target enrollment of 400 patients at approximately 79 clinical sites in the U.S., Europe, Canada, Latin America and Australia. We expect to report the top-line results on PFS the trial s primary endpoint, **[by mid-July]** 2016.

We are currently evaluating aldoxorubicin in a global Phase 2b clinical trial in small cell lung cancer, a Phase 2 clinical trial in HIV-related Kaposi s sarcoma, a Phase 2 clinical trial in patients with late-stage glioblastoma (brain cancer), a Phase 1b trial in combination with ifosfamide in patients with soft tissue sarcoma, and a Phase 1b trial in combination with gemcitabine in subjects with metastatic solid tumors. We have completed a global Phase 2b clinical trial with aldoxorubicin as a first-line therapy for STS, a Phase 1b/2 clinical trial primarily in the same indication, a Phase 1b clinical trial of aldoxorubicin in combination with doxorubicin in patients with advanced solid tumors and a Phase 1b pharmacokinetics clinical trial in patients with metastatic solid tumors.

In addition to aldoxorubicin, we are currently completing pre-clinical development for DK049, a novel anti-cancer drug conjugate that utilizes our Linker Activated Drug Release (LADRTM) technology. DK049 was created at our

laboratory facility in Freiburg, Germany, and employs a proprietary linker that is both pH sensitive and requires a specific enzyme for the release of the cytotoxic payload. DK049 has demonstrated significant anti-tumor activity in multiple animal models implanted with human tumors, including non-small cell lung, ovarian and pancreatic cancers. We anticipate filing an Investigational New Drug Application (IND) in the second half of 2016 prior to initiating a Phase 1 clinical trial.

We plan to expand our pipeline of oncology candidates utilizing our LADRTM technology by creating both albumin-binding drug conjugates and antibody-drug conjugates. This technology allows for targeting to the tumor either by albumin or antibodies and can deliver anti-cancer agents that are 10-1000 times more potent than traditional chemotherapies.

We are a Delaware corporation, incorporated in 1985. Our corporate offices are located at 11726 San Vicente Boulevard, Suite 650, Los Angeles, California 90049, and our telephone number is (310) 826-5648.

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Technology	Product candidate	Indication(s)	Stage of Development
Doxorubicin conjugate	Aldoxorubicin	Soft Tissue Sarcoma	Pivotal Global Phase 3 ongoing
		Small-Cell Lung Cancer	Global Phase 2b ongoing
		Glioblastoma Multiforme	Phase 2 ongoing
		Kaposi s Sarcoma	Phase 2 ongoing
		Combination with ifosfamide	Phase 1b ongoing
		Combination with gemcitabine	Phase 1b ongoing
LADR™	DK049	To be announced	Pre-clinical
LADR™ for albumin-binding drug conjugates	To be announced	To be announced	Pre-clinical
LADR™ for antibody-drug conjugates	To be announced	To be announced	Pre-clinical

Our Clinical Development Programs

Our current clinical development programs are discussed below.

Aldoxorubicin

Aldoxorubicin is a conjugate of the commonly prescribed chemotherapeutic agent doxorubicin that binds to circulating albumin in the bloodstream and is believed to concentrate the drug at the site of tumors. Specifically, it is comprised of (6-maleimidocaproyl) hydrazine, an acid-sensitive molecule that is conjugated to doxorubicin. In the first quarter of 2014, we initiated under an SPA granted by the FDA a pivotal, global Phase 3 trial of aldoxorubicin as a therapy for patients with STS whose tumors have progressed following treatment with chemotherapy.

Aldoxorubicin for the Treatment of Cancer. Anthracyclines are a class of drugs that are among the most commonly used agents in the treatment of cancer. Doxorubicin, the first anthracycline to gain FDA approval, has demonstrated efficacy in a wide variety of cancers, including breast cancer, lung cancer, ovarian cancer, sarcomas, and lymphomas. However, due to the uptake of doxorubicin by various parts of the body, it is associated with side effects such as cumulative cardiotoxicity, myelosuppression (decreased production of blood cells by bone marrow), gastrointestinal disorders, mucositis (inflammation of the mucous membranes lining the mouth and digestive tract), stomatitis (inflammation of soft tissue of the mouth), and necrotizing extravasation (damage due to the leakage of intravenous drugs from the vein into the surrounding tissue).

We believe aldoxorubicin has attributes that may improve on doxorubicin, alone, which we sometimes refer to as native doxorubicin, including the potential to increase the total doxorubicin dose, reduce certain adverse events associated with native doxorubicin, achieve increased drug concentration at tumor sites and improve efficacy.

Our postulated mechanism of action for aldoxorubicin is as follows:

after administration, aldoxorubicin rapidly forms a covalent bond to circulating albumin through an acid-sensitive linker;

circulating albumin preferentially accumulates in tumors, bypassing concentration in other non-tumor sites, including the heart, liver and gastrointestinal tract due to a mechanism called Enhanced Permeability and

Retention by Solid Tumors ;

once albumin-bound aldoxorubicin is taken up by the tumor, the acidic environment within the tumor and in the cancer cells themselves causes cleavage of the acid-sensitive linker; and

free doxorubicin is then released in the tumor.

Pre-clinical data

In a variety of preclinical models, aldoxorubicin was superior to doxorubicin at equitoxic doses in its ability to allow an increase in the total doxorubicin dose, its antitumor efficacy and its safety, including a reduction in cardiotoxicity. Animal studies conducted by aldoxorubicin inventor Dr. Felix Kratz demonstrated statistically significant efficacy compared to both placebo and native doxorubicin against breast, ovarian, pancreatic and small cell lung cancers growing in immunodeficient mice.

We have also announced additional data from a study of aldoxorubicin in immunodeficient mice transplanted with human glioblastoma cells in their brain that showed those animals treated with aldoxorubicin had a median survival rate of more than 63 days,

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compared with approximately 25 days for animals treated with doxorubicin or saline. The data, published in the journal Neoplasia in October 2014, also indicated evidence of drug concentration inside tumors growing in the brain, but not in normal brain tissue, and significant tumor regression in aldoxorubicin-treated animals, while doxorubicin did not appear to enter the tumor or brain to any significant degree and showed little or no efficacy in the progression of these brain tumors. Aldoxorubicin significantly reduced the number of dividing cells within the brain tumors in this trial and showed a statistically relevant increased expression of apoptosis or cell death markers.

Clinical data

A Phase 1 study of aldoxorubicin that demonstrated safety and objective clinical responses in several tumor types was completed in 2005, presented at the March 2006 Krebskongress meeting in Berlin, Germany, and published in Clinical Cancer Research in August 2007. In this study, doses were administered every three weeks at up to six times the standard dose of doxorubicin without an increase in the types of side effects compared with those historically observed with native doxorubicin. Of 35 evaluable patients, 23 had either an objective clinical (partial) response or stable disease. Objective clinical responses were observed in patients with STS, breast and small cell lung cancers.

We completed a Phase 1b/2 clinical trial with aldoxorubicin in patients with advanced solid tumors who had either relapsed or failed to respond to their prior chemotherapy and presented favorable data at the American Society for Clinical Oncology Meeting in June 2012. In that Phase 1b/2 clinical trial, clinical benefit (defined as partial response or stable disease of more than four months) was shown in ten of 13 (76.9%) evaluable patients with relapsed or refractory STS. The median number of cycles of aldoxorubicin administered at the maximum tolerable dose was eight. The results of this clinical trial were published in February 2015 in the peer-reviewed journal Cancer (Cancer, 2015 Feb 15; 121(4); 570-9).

In addition, best responses for the 13 evaluable STS trial subjects included the following: five (38.5%) achieved partial response, as defined as shrinkage of target tumors of more than 30%; six (46%) showed prolonged stable disease (defined as tumor shrinkage <30% from baseline or tumor growth <20% from the nadir); eight (61.5%) had tumor shrinkage; and five of eight patients (62.5%) who demonstrated either partial responses or prolonged stable disease after treatment with aldoxorubicin had been previously treated with doxorubicin and had failed to respond. There were no observed cardiac toxicities and no drug-related patient deaths. The most common adverse event, neutropenia, also observed with doxorubicin treatment, resolved prior to the start of the next treatment. Final observed median PFS for advanced STS patients in the trial was 11.25 months, and median overall survival was 21.71 months (Publication in Cancer, 2015 Feb 15). In addition, following 8 cycles of aldoxorubicin, two patients experienced no progression of disease for 23 and 15 months, respectively, despite no further treatment.

In connection with our Phase 1b pharmacokinetics clinical trial evaluating the pharmacokinetics and safety of aldoxorubicin in patients with metastatic solid tumors who have either relapsed or not responded to treatment with standard therapies, we announced data demonstrating that aldoxorubicin has a distribution half-life of approximately 20 to 24 hours, with a narrow volume of distribution to healthy tissue and slow clearance from the circulation. These characteristics distinguish aldoxorubicin from doxorubicin, which has a distribution half-life of about five minutes according to its package insert. Complete details from this Phase 1b trial were published online in the journal Investigational New Drugs in November 2014 (Publication in Invest New Drugs, 2015 Apr 15; (33(2):341-8).

We completed our global Phase 2b clinical trial to evaluate the preliminary efficacy and safety of aldoxorubicin as a first-line therapy in patients with advanced STS who are ineligible for surgery, which was initiated in December 2011. The Phase 2b clinical trial provided the first direct clinical trial comparison of aldoxorubicin and native doxorubicin, which is dose-limited due to toxicity, as a first-line therapy.

The Phase 2b clinical trial with aldoxorubicin in patients with STS was an international trial in 31 treatment centers under the direction of Sant P. Chawla, M.D., F.R.A.C.P., Director of the Sarcoma Oncology Center in Santa Monica, California. The Phase 2b clinical trial s primary objectives were to measure the PFS, tumor response and overall survival of patients with advanced STS treated with aldoxorubicin. This clinical trial also assessed the safety of aldoxorubicin compared to doxorubicin in this patient population through a number of indicators, including the frequency and severity of adverse events.

In our 123-subject clinical trial, subjects with advanced STS were administered either 350 mg/m2 of aldoxorubicin (83 subjects) or 75 mg/m2 of doxorubicin (40 subjects) every three weeks for up to six cycles. Subjects were followed every six weeks with CT scans to monitor tumor size. The primary endpoint was PFS as determined by a blinded radiology review performed at an independent central radiology laboratory. Secondary endpoints included overall response rates (complete and partial) and PFS at six months for each group, and overall survival. The results from this trial were published in the Journal of the American Medical Association (JAMA) Oncology in September 2015 (JAMA Oncol. 2015 Sep 17:1-9.).

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The central radiology review, as well as the investigators own assessments, showed an 80% to 100% improvement in PFS among patients treated with aldoxorubicin. In an intent-to-treat analysis, the investigator-assessed median PFS was 8.3 months for aldoxorubicin patients versus 4.6 months for doxorubicin patients (p=0.0006), while the blinded central radiology review indicated that median PFS for aldoxorubicin patients was 5.6 months versus 2.7 months for doxorubicin patients (p=0.0228). Per investigators, 68.1% of aldoxorubicin patients had not progressed at six months, compared with 33.0% of doxorubicin-treated patients (p=0.008). By blinded central radiology review, 45.7% of aldoxorubicin patients had not progressed at six months, compared with 22.9% of doxorubicin patients (p=0.02).

The overall response rate as determined by the investigators was 22.9% for aldoxorubicin subjects (2.0% complete response and 21.3% partial response) versus 5.0% for doxorubicin subjects (0% complete response and 5.0% partial response). As assessed by blinded central radiology review, 25.0% of aldoxorubicin subjects had a partial response while none of the doxorubicin subjects exhibited any objective response.

Additional analysis determined hazard ratios for the primary endpoint of PFS by both investigators at study sites and by the blinded radiology review. The hazard ratio for investigator-read scans is 0.37 (95% confidence interval, range of 0.212 to 0.643) (p=0.0004), reflecting a 63% reduction in the risk of disease progression for patients treated with aldoxorubicin; and the hazard ratio for central lab scans is 0.586 (95% confidence interval, range of 0.358 to 0.960) (p=0.034), reflecting a 41% reduction in the risk of disease progression for the aldoxorubicin-treated patients. Hazard ratios are an important measure of the reliability and uniformity of the data for PFS, and where the upper limit is less than one indicates that there is a significant difference between the two study groups.

We also reported that a Kaplan-Meier analysis of the trial results, which analysis describes the time it takes for tumors to progress in individual patients, showed significant improvement in subjects treated with aldoxorubicin versus subjects treated with doxorubicin.

The overall survival results from the clinical trial demonstrated a 27 percent reduction in the risk of death compared to patients treated with doxorubicin (HR 0.73: 95% confidence interval 0.44-1.20), the current standard-of-care in this indication. In addition, aldoxorubicin-treated patients demonstrated a 41% likelihood of surviving more than 2 years, a 2-fold increase, compared to a 20% probability for doxorubicin-treated patients. Median overall survival was 15.8 months (95% confidence interval 13.1-not reached) for aldoxorubicin-treated patients versus 14.3 months (95% confidence interval 8.6-20.6) for doxorubicin treated patients (p=0.21). For treatment-naive patients, representing 90% of the patients in the clinical trial, median overall survival was 15.8 months (95% confidence interval 13.0-not reached) for aldoxorubicin-treated patients versus 13.8 months (95% confidence interval 8.6-19.8) for doxorubicin treated patients (p=0.14).

In the Phase 2b clinical trial, aldoxorubicin was found to be relatively safe and well-tolerated. Subjects treated with aldoxorubicin had an approximately two-fold increase in severe neutropenia compared with doxorubicin-treated subjects, but there was no difference in the incidence of febrile neutropenia (indicating an infection may be present) between the two groups. All adverse events in subjects treated with aldoxorubicin were consistent with the known side effects of doxorubicin, usually resolved before the administration of the next dose and did not require treatment discontinuation. There were no treatment-related deaths in the aldoxorubicin group.

In the first quarter of 2014, we initiated a pivotal global Phase 3 clinical trial to evaluate the efficacy and safety of aldoxorubicin as a second-line treatment for patients with STS under a Special Protocol Assessment with the FDA. This multicenter, randomized, open-label Phase 3 clinical trial is designed to enroll approximately 400 patients with metastatic, locally advanced or unresectable soft tissue sarcomas who have either not responded to, or have progressed following treatment with, one or more systemic regimens of non-adjuvant chemotherapies. Trial patients will be randomized 1:1 to be treated with aldoxorubicin or the investigator s choice of an approved chemotherapeutic regimen,

including doxorubicin, ifosfamide dacarbazine, pazopanib (Votrient®), or gemcitabine plus docetaxel, with up to three comparator regimens to be selected by the investigator at each clinical site. The primary endpoint of the study is progression-free survival (PFS), and secondary endpoints include overall survival, response rates and safety. In January 2014, the Company announced it has received approval from the FDA to amend the Phase 3 protocol to continue dosing patients with aldoxorubicin until disease progression (defined as an increase in the size of measurable tumors by 20% or the development of a new tumor lesion), which creates the potential for substantially improved Phase 3 efficacy results.

Following discussions with the FDA, the Phase 3 protocol was agreed upon under a Special Protocol Assessment (SPA). As part of that assessment, the FDA agreed that, barring unrecognized public or human health concerns, the design and planned analysis of the study adequately addresses the objectives necessary to support a regulatory submission for approval.

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The clinical trial has completed its target enrollment of 400 patients at approximately 79 clinical sites in the U.S., Europe, Canada, Latin America and Australia. CytRx expects to report the top-line results on progression-free survival, the trial s primary endpoint, in the first half of 2016.

In September 2014, we initiated a global Phase 2b clinical trial evaluating aldoxorubicin compared to topotecan in subjects with extensive-stage small cell lung cancer (SCLC) who have relapsed or were refractory to prior chemotherapy. The open-label Phase 2b clinical trial is expected to enroll approximately 132 patients (1:1 randomization). The primary endpoint is PFS and the secondary endpoints are OS, overall response rates (partial and complete) and the safety of aldoxorubicin compared to topotecan in this population. The study is expected to involve approximately 40 clinical trial sites in the U.S., Spain and Hungary.

We are conducting a Phase 2 clinical trial to evaluate the preliminary efficacy and safety of aldoxorubicin in patients with unresectable glioblastoma whose tumors have progressed following prior treatment with surgery, radiation and with the drug temozolomide. The clinical trial has enrolled its target of 28 patients at sites including the John Wayne Cancer Center in Santa Monica, California, City of Hope in Duarte, California, and the LSU Medical Center in New Orleans, Louisiana.

We are conducting a Phase 2 clinical trial evaluating the preliminary efficacy of aldoxorubicin in patients with AIDS-related Kaposi s sarcoma, a tumor usually associated with HIV infection in the U.S. The current standard-of-care for severe dermatological and systemic Kaposi s sarcoma is liposomal doxorubicin (Doxil); however, a significant proportion of patients exhibit minimal or no clinical response to this agent, and the drug s toxicity often prevents continued therapy. The Phase 2 trial is expected to enroll up to 30 patients and is being conducted at the LSU Medical Center in New Orleans, Louisiana.

We are also conducting a Phase 1b trial in combination with ifosfamide in patients with STS, and a Phase 1b trial in combination with gemcitabine in subjects with metastatic solid tumors. Since most chemotherapy agents are administered in combination with other chemotherapeutics, these studies will demonstrate the dose of aldoxorubicin that can be safely combined with two other chemotherapies that are commonly used to treated patients with sarcomas, pancreatic cancer, ovarian cancer and lung cancer.

Drug Discovery Laboratory

Our laboratory, located in Freiburg, Germany, is conducting discovery and translational research to create drug candidates that utilize our LADR technologies to couple cytotoxic agents and proteins either inside the body or externally, and then concentrate drug in tumors. Led by Felix Kratz, Ph.D., Vice President of Drug Discovery and inventor of aldoxorubicin, and Andre Warnecke, Ph.D., Senior Director of Drug Discovery, the discovery team is working to expand our novel albumin-binding anti-cancer drug pipeline and using LADR linkers to create unique antibody-drug conjugates. We recently announced the development of DK049, a novel anti-cancer drug conjugate that utilizes our LADR technology, and anticipate filing an IND for DK049 in the second half of 2016 prior to initiating a Phase 1 clinical trial.

Disposition of Molecular Chaperone Assets

Until 2011, we owned the rights to two drug candidates, arimoclomol and iroxanadine, based on molecular chaperone regulation technology that were designed to repair or degrade mis-folded proteins associated with disease. On May 13, 2011, we sold all pre-clinical and clinical data, intellectual property rights and other assets relating to those compounds to Orphazyme ApS in exchange for a cash payment of $150,000 and the right to receive various future payments that are contingent upon the achievement of specified regulatory and business milestones, as well as royalty

payments based on a specified percentage of any eventual net sales of products derived from the assets.

Innovive Acquisition Agreement

On September 19, 2008, we completed our merger acquisition of Innovive Pharmaceuticals, Inc., or Innovive, and its clinical-stage cancer product candidates, including aldoxorubicin and tamibarotene. Under the merger agreement by which we acquired Innovive, we agreed to pay the former Innovive stockholders up to approximately $18.3 million of future earnout merger consideration, subject to our achievement of specified net sales under the Innovive license agreements. The earnout merger consideration, if any, will be payable in shares of our common stock, subject to specified conditions, or, at our election, in cash or by a combination of shares of our common stock and cash. Our common stock will be valued for purposes of any future earnout merger consideration based upon the trading price of our common stock at the time the earnout merger consideration is paid. The earnout will be accrued if and when earned.

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Research and Development

Expenditures for research and development activities related to continuing operations were $43.4 million and $36.7 million for the years ended December 31, 2015 and 2014, respectively, and $8.2 million for the three months ended March 31, 2016, or approximately 68%, 74% and 67%, respectively, of our total expenses.

Manufacturing

We do not have the facilities or expertise to manufacture clinical supplies of aldoxorubicin or any of our other product candidates, and we lack the resources and capability to manufacture any of our product candidates on a commercial scale. Accordingly, we are dependent upon third-party manufactures, or potential future strategic alliance partners, to manufacture these supplies. We have manufacturing supply arrangements in place with respect to a portion of the clinical supplies needed for the clinical development programs for aldoxorubicin. In September, 2015, we entered into an agreement with a supplier to purchase doxorubicin hydrochloride both on a clinical as well as a commercial scale. However, we currently have no other supply arrangements for the commercial manufacture of aldoxorubicin or any manufacturing supply arrangements for any other potential product candidates, and we may not be able to secure needed supply arrangements on attractive terms, or at all. Our failure to secure these arrangements as needed could have a material adverse effect on our ability to complete the development of our products or to commercialize them.

Commercialization and Marketing

We recently hired Olivia Ware as our Chief Commercial Officer and have initiated activities to build our sales, marketing and commercial product distribution capabilities in preparation for the US launch of aldoxorubicin. If aldoxorubicin is approved, we expect to commercialize it in the U.S. with a small internal commercial group and an outsourced specialty field sales force.

We intend to commercialize aldoxorubicin outside the US starting in the EU-5 countries. Our commercial strategy may include the use of strategic partners, distributors, a contract sales force or the establishment of our own sales force. We plan to further evaluate these alternatives as we approach approval for aldoxorubicin.

As additional product candidates advance through our pipeline, our commercial plans may change. In particular, some of our pipeline assets target potentially large solid tumor indications. Factors such as clinical data, the size of the development programs, the size of the target market, the size of a commercial infrastructure, and manufacturing needs may influence our strategies in the U.S., the European Union, and other territories.

Patents and Proprietary Technology

We actively seek patent protection for our technologies, processes, uses, and ongoing improvements and consider our patents and other intellectual property to be critical to our business. We regularly evaluate the patentability of new inventions and improvements developed by us or our collaborators, and, whenever appropriate, will endeavor to file U.S. and international patent applications to protect these new inventions and improvements. We cannot be certain that any of the current pending patent applications we have filed or licensed, or any new patent applications we may file or license, will ever be issued in the U.S. or any other country. There also is no assurance that any issued patents will be effective to prevent others from using our products or processes. It is also possible that any patents issued to us, as well as those we have licensed or may license in the future, may be held invalid or unenforceable by a court, or third parties could obtain patents that we would need to either license or to design around, which we may be unable to do. Current and future competitors may have licensed or filed patent applications or received patents, and may acquire additional patents and proprietary rights relating to compounds, products or processes that may be competitive with

ours.

In addition to patent protection, we attempt to protect our proprietary products, processes and other information by relying on trade secrets and non-disclosure agreements with our employees, consultants and certain other persons who have access to such products, processes and information. Under the agreements, all inventions conceived by employees are our exclusive property, but there is no assurance that these agreements will afford significant protection against misappropriation or unauthorized disclosure of our trade secrets and confidential information.

As of December 31, 2015, we held rights in four granted U.S. patents, 55 granted foreign patents, three pending U.S. applications, and twenty-two pending foreign patent applications covering aldoxorubicin and related technologies. Our intellectual property holdings relating to aldoxorubicin and related technologies include an exclusive license from KTB Tumorforschungs GmbH, or KTB, to U.S. and foreign patents and patent applications. Patents and applications that cover pharmaceutical compositions of aldoxorubicin, processes for their production, and their use in treatment methods (e.g., cancer (including glioblastoma), viral diseases, autoimmune diseases, and acute or chronic inflammatory diseases) have unextended patent terms expiring between June 2020 and June 2034. Additionally, we have three pending U.S. provisional patent applications covering our LADR technology and DK049.

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License Agreements

Aldoxorubicin

We have an agreement with KTB for the license of patent rights held by KTB for the worldwide development and commercialization of aldoxorubicin. The license is exclusive and applies to all products that may be subject to the licensed intellectual property in all fields of use. We may sublicense the intellectual property in our sole discretion. Pursuant to an amendment to the license agreement entered into in March 2014, we also have a non-exclusive worldwide license to any additional technology that is claimed or disclosed in the licensed patents and patent applications for use in the field of oncology.

Under the agreement, we must make payments to KTB in the aggregate of up to $7.5 million upon meeting clinical and regulatory milestones, and up to and including the product s second final marketing approval. We also agreed to pay:

- commercially reasonable royalties based on a percentage of net sales (as defined in the agreement);
- a percentage of any non-royalty sub-licensing income (as defined in the agreement); and
- milestones of $1 million for each additional final marketing approval that we obtain.

Pursuant to the March 2014 license amendment, we agreed to make a $500,000 milestone payment upon first dosing of a patient in a first phase I clinical trial for each product using the additional technology. In the event that by February 28, 2017, no such payment has become due, we have agreed to pay KTB $500,000, which payment can be made, in our discretion, in cash or in shares of our common stock. If we elect to make the payment in shares of common stock, our shares will be valued at the volume-weighted average price (VWAP) over the preceding 60 trading days, to be calculated on February 28, 2017.

In the event that we must pay a third party in order to exercise our rights to the intellectual property under the agreement, we are entitled to deduct a percentage of those payments from the royalties due KTB, up to an agreed upon cap.

Under the agreement with KTB, we must use commercially reasonable efforts to conduct the research and development activities we determine are necessary to obtain regulatory approval to market aldoxorubicin in those countries that we determine are commercially feasible. Under the agreement, KTB is to use its commercially reasonable efforts to provide us with access to suppliers of the active pharmaceutical ingredient, or API, of aldoxorubicin, on the same terms and conditions as may be provided to KTB by those suppliers.

The agreement will expire on a product-by-product basis upon the expiration of the subject patent rights. We have the right to terminate the agreement on 30 days notice, provided we pay a cash penalty to KTB. KTB may terminate the agreement if we are in breach and the breach is not cured within a specified cure period, or if we fail to use diligent and commercial efforts to meet specified clinical milestones.

Competition

Aldoxorubicin is a conjugate of doxorubicin, a widely used anti-cancer drug. Doxorubicin is part of the anthracycline class of chemotherapy agents. Anthracyclines, many of which, including doxorubicin are generic, have been used throughout the world to treat various cancers for several decades. Due to their track record of broad anti-cancer activity, new types of anthracyclines and modified or reformulated versions continue to be developed to overcome toxicities which limit the use of these drugs.

Aldoxorubicin is a chemically modified version of doxorubicin that incorporates an acid sensitive linker technology to improve concentration in the tumor. We believe that the albumin-binding ability of aldoxorubicin will allow the compound to overcome many of the side effect issues typically associated with anthracyclines. We also believe that using albumin as a targeted carrier will allow for higher dosing, greater concentration of the drug in tumors and greater efficacy.

STS patients are typically treated with surgery followed by radiation therapy. For patients ineligible for surgery, radiation or both, chemotherapy is the only option. Doxorubicin is the only approved first-line drug for treating STS patients who are ineligible for surgery and is often used in combination with radiation. The National Comprehensive Cancer Network also includes the use of ifosfamide, epirubicin, gemcitabine, gemcitabine with docetaxel, dacarbazine and liposomal doxorubicin marketed in the United States as Doxil® by Johnson & Johnson. GlaxoSmithKline s pazopanib (Votrient®) was approved in the United States and Europe in 2012 for the treatment of certain types of advanced STS following prior chemotherapy. In October 2015, the Janssen unit of Johnson & Johnson received approval for trabectedin (Yondelis®) for the treatment of patients with leiomyosarcoma and liposarcoma,that have previously received an anthracycline and ifosfamide or an anthracycline followed by another chemotherapy. In January 2016,

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the FDA approved Eisai s eribulin (Halaven®) as a treatment for patients with unresectable or metastatic liposarcoma who have received a prior anthracycline. Eli Lilly is conducting a Phase 3 clinical trial with olaratumab in combination with doxorubicin in first-line STS. Eli Lilly stated in October 2015 that they plan to submit a rolling new drug application based on the Phase 2 clinical trial results in STS. There are other approaches to treating STS in clinical development, including Morphotek s ontuxizumab in combination with chemotherapy,and Tracon Pharmaceuticals TRC-105 in combination with pazopanib.

Patients with glioblastoma multiforme, or GBM, generally undergo invasive brain surgery, although disease progression following surgery is nearly 100%. The front-line therapy for GBM following surgery is radiation in combination with temozolomide (Temodar®). Bevacizumab (Avastin®) has been approved for the treatment of GBM in patients progressing after prior therapy. Drugs in development to treat GBM include nivolumab by Bristol-Myers Squibb, DCVax by Northwest Biotherapeutics, DelMar Pharmaceuticals VAL-083, TRC-105 from Tracon Pharmaceuticals, veliparib by AstraZeneca and buparlisib by Novartis.

Treatment for newly diagnosed SCLC typically consists of cisplatin or carboplatin in combination with etoposide. Radiation may also be given for extensive-stage disease. While first-line treatment can yield overall response rates of 50-80%, the duration of response is often less than 90 days. For recurrent SCLC, topotecan (Hycamtin®) is standard therapy. SCLC patients who are sensitive to first-line treatment may receive topotecan or the generic chemotherapeutic drugs irinotecan, taxanes, gemcitabine or vinorelbine. Drugs in development for second-line SCLC include Bristol-Myers Squibb s nivolumab (Opdivo®) and ipilumimab (Yervoy®) and SC16LD6.5 by Stem CentRx, Inc.

Kaposi s sarcoma is generally treated with radiation, surgery and/or liposomal doxorubicin. Liposomal daunorubicin (DaunoXome®, Galen US), with or without paclitaxel, is also recommended as treatment for advanced disease. Other drugs in development for Kaposi s sarcoma include selumetinib by AstraZeneca and pomalidamide by Celgene.

Many companies, including large pharmaceutical and biotechnology firms with financial resources, research and development staffs, and facilities that may be substantially greater than those of ours or our strategic partners or licensees, are engaged in the research and development of pharmaceutical products that could compete with our potential products. To the extent that we seek to acquire, through license or otherwise, existing or potential new products, we will be competing with numerous other companies, many of which will have substantially greater financial resources, large acquisition and research and development staffs that may give those companies a competitive advantage over us in identifying and evaluating these drug acquisition opportunities. Any products that we acquire will be competing with products marketed by companies that in many cases will have substantially greater marketing resources than we have. The industry is characterized by rapid technological advances and competitors may develop their products more rapidly and such products may be more effective than those currently under development or that may be developed in the future by our strategic partners or licensees. Competitive products for a number of the disease indications that we have targeted are currently being marketed by other parties, and additional competitive products are under development and may also include products currently under development that we are not aware of or products that may be developed in the future.

Government Regulation

The U.S. and other developed countries extensively regulate the preclinical and clinical testing, manufacturing, labeling, storage, record-keeping, advertising, promotion, export, marketing and distribution of drugs and biologic products. The FDA, under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations, regulates pharmaceutical and biologic products.

To obtain approval of our product candidates from the FDA, we must, among other requirements, submit data supporting safety and efficacy for the intended indication as well as detailed information on the manufacture and composition of the product candidate. In most cases, this will require extensive laboratory tests and preclinical and clinical trials. The collection of these data, as well as the preparation of applications for review by the FDA involve significant time and expense. The FDA also may require post-marketing testing to monitor the safety and efficacy of approved products or place conditions on any approvals that could restrict the therapeutic claims and commercial applications of these products. Regulatory authorities may withdraw product approvals if we fail to comply with regulatory standards or if we encounter problems at any time following initial marketing of our products.

The first stage of the FDA approval process for a new drug involves completion of preclinical studies and the submission of the results of these studies to the FDA. These data, together with proposed clinical protocols, manufacturing information, analytical data and other information submitted to the FDA, in an investigational new drug application, or IND, must become effective before human clinical trials may commence. Preclinical studies generally involve FDA regulated laboratory evaluation of product characteristics and animal studies to assess the efficacy and safety of the product candidate.

After the IND becomes effective, a company may commence human clinical trials. These are typically conducted in three sequential phases, but the phases may overlap. Phase 1 trials consist of testing of the product candidate in a small number of patients

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or healthy volunteers, primarily for safety at one or more doses. Phase 2 trials, in addition to safety, evaluate the efficacy of the product candidate in a patient population somewhat larger than Phase 1 trials. Phase 3 trials typically involve additional testing for safety and clinical efficacy in an expanded population at multiple test sites. A company must submit to the FDA a clinical protocol, accompanied by the approval of the Institutional Review Boards at the institutions participating in the trial, prior to commencement of each clinical trial.

To obtain FDA marketing authorization, a company must submit to the FDA the results of the preclinical and clinical testing, together with, among other things, detailed information on the manufacture and composition of the product candidate, in the form of a new drug application, or NDA.

The amount of time taken by the FDA for approval of an NDA will depend upon a number of factors, including whether the product candidate has received priority review, the quality of the submission and studies presented, the potential contribution that the compound will make in improving the treatment of the disease in question, and the workload at the FDA.

The FDA may, in some cases, confer upon an investigational product the status of a fast-track product. A fast-track product is defined as a new drug or biologic intended for the treatment of a serious or life-threatening condition that demonstrates the potential to address unmet medical needs for this condition. The FDA can base approval of an NDA for a fast-track product on an effect on a surrogate endpoint, or on another endpoint that is reasonably likely to predict clinical benefit. If a preliminary review of clinical data suggests that a fast-track product may be effective, the FDA may initiate review of entire sections of a marketing application for a fast-track product before the sponsor completes the application.

We anticipate that our products will be manufactured by our strategic partners, licensees or other third parties. Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facilities are in compliance with the FDA s cGMP, which are regulations that govern the manufacture, holding and distribution of a product. Our manufacturers also will be subject to regulation under the Occupational Safety and Health Act, the National Environmental Policy Act, the Nuclear Energy and Radiation Control Act, the Toxic Substance Control Act and the Resource Conservation and Recovery Act. Following approval, the FDA periodically inspects drug and biologic manufacturing facilities to ensure continued compliance with the good manufacturing practices regulations. Our manufacturers will have to continue to comply with those requirements. Failure to comply with these requirements subjects the manufacturer to possible legal or regulatory action, such as suspension of manufacturing or recall or seizure of product. Adverse patient experiences with the product must be reported to the FDA and could result in the imposition of marketing restrictions through labeling changes or market removal. Product approvals may be withdrawn if compliance with regulatory requirements is not maintained or if problems concerning safety or efficacy of the product occur following approval.

The labeling, advertising, promotion, marketing and distribution of a drug or biologic product also must be in compliance with FDA and Federal Trade Commission requirements which include, among others, standards and regulations for off-label promotion, industry sponsored scientific and educational activities, promotional activities involving the internet, and direct-to-consumer advertising. We also will be subject to a variety of federal, state and local regulations relating to the use, handling, storage and disposal of hazardous materials, including chemicals and radioactive and biological materials. In addition, we will be subject to various laws and regulations governing laboratory practices and the experimental use of animals. In each of these areas, as above, the FDA has broad regulatory and enforcement powers, including the ability to levy fines and civil penalties, suspend or delay issuance of product approvals, seize or recall products, and deny or withdraw approvals.

We will also be subject to a variety of regulations governing clinical trials and sales of our products outside the U.S. Whether or not FDA approval has been obtained, approval of a product candidate by the comparable regulatory authorities of foreign countries and regions must be obtained prior to the commencement of marketing the product in those countries. The approval process varies from one regulatory authority to another and the time may be longer or shorter than that required for FDA approval. In the European Union, Canada and Australia, regulatory requirements and approval processes are similar, in principle, to those in the U.S.

Employees

As of June 1, 2016, we had 29 employees, ten of whom were engaged in clinical development activities, nine of whom were engaged in preclinical research at our Freiburg, Germany laboratory, and ten of whom were involved in management and administrative operations.

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Corporate Information

We are a Delaware corporation, incorporated in 1985. Our corporate offices are located at 11726 San Vicente Boulevard, Suite 650, Los Angeles, California 90049, and our telephone number is (310) 826-5648. Our web site is located on the worldwide web at http://www.cytrx.com. We do not incorporate by reference into this prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus.

RISK FACTORS

Investing in our securities involves significant risks. The prospectus supplement relating to a particular offering will contain a discussion of risks applicable to an investment in the securities offered. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading Risk Factors in the applicable prospectus supplement together with all of the other information contained in the prospectus supplement or appearing or incorporated by reference in this prospectus.

USE OF PROCEEDS

Unless we state otherwise in the accompanying prospectus supplement, we intend to use the net proceeds from the sale of securities offered by this prospectus for pre-commercialization and, subject to regulatory approval, commercialization activities for aldoxorubicin and for other working capital and general corporate purposes, including the clinical trials of our product candidates. General corporate purposes also may include funding of capital expenditures, payments in connection with possible future acquisitions and strategic investments and repayment of future indebtedness.

We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering. Pending application of the net proceeds as described above, we expect to invest the net proceeds in short-term, interest-bearing, investment-grade securities pursuant to our investment policy.

FINANCIAL RATIOS

The following table sets forth our ratio of earnings, if any, to combined fixed charges and preference dividends for each of the periods presented:

	Year Ended December 31					Three Months Ended March 31,
	2011	2012	2013	2014	2015	2016
Ratio of earnings to combined fixed charges and preference dividends						
Deficiency of earnings available to cover fixed charges and preferred dividends	(a)	(b)	(c)	(d)	(e)	(f)

(a) Earnings in the fiscal year ended December 31, 2011 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately $14.2 million.

(b) Earnings in the fiscal year ended December 31, 2012 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately $17.9 million.
(c) Earnings in the fiscal year ended December 31¸ 2013 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately $47.2 million.
(d) Earnings in the fiscal year ended December 31, 2014 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately $30.0 million.
(e) Earnings in the year ended December 31, 2015 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately $58.6 million.
(f) Earnings in the three months ended March 31, 2016 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately $12.6 million.

The ratio is computed by dividing earnings by combined fixed charges and preference dividends. For this purpose, earnings are calculated as follows: (i) adding (a) net income (loss) from continuing operations before adjustment for any income or loss from any equity investees; (b) fixed charges; (c) amortization of any capitalized interest; (d) any distributed income of any equity investees; and (e) our share of any pre-tax losses of any equity investees for which charges arising from guarantees are included in fixed charges; and (ii) subtracting from such sum (a) any interest capitalized; (b) any preferred security dividend requirements of any consolidated subsidiaries; and (c) any non-controlling interest in the pre-tax income (loss) of any subsidiaries that have not incurred fixed charges. Equity investees, if any, are investments that we account for using the equity method of accounting.

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Fixed charges consist of that portion of rental expense associated with certain facility and equipment leases considered to be a reasonable estimate of the interest factor. We did not pay or accrue any preference dividends for the periods presented.

DIVIDEND POLICY

Our board of directors sets our dividend policy. We have never paid any cash dividends on our common stock and do not intend to declare cash dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business, but we may determine in the future to declare or pay cash dividends on our common stock. Any future determination as to the declaration and payment of dividends will be at the discretion of our board of directors and will be dependent upon our results of operations and cash flows, our financial position and capital requirements, general business conditions, legal, tax, regulatory and any contractual restrictions on the payment of dividends, and any other factors our board of directors deems relevant.

THE SECURITIES THAT WE MAY OFFER

We, directly or through agents, dealers or underwriters designated from time to time, may offer, issue and sell, together or separately, up to $171,221,250 in the aggregate of:

- shares of our common stock, par value $0.001 per share;
- shares of our preferred stock, par value $0.01 per share;
- warrants to purchase our common stock or preferred stock; and
- any combination of the securities listed above, separately or as units, each on terms to be determined at the time of sale.

The common stock, preferred stock, warrants and units collectively are referred to in this prospectus as the securities.

We have summarized below the material terms of the various types of securities that we may offer. We will describe in the applicable prospectus supplement the detailed terms of the securities offered by that supplement. If indicated in the prospectus supplement, the terms of the offered securities may differ from the terms summarized below.

DESCRIPTION OF CAPITAL STOCK

As of March 31, 2016, our authorized capital stock consisted of 250,000,000 shares of common stock, $0.001 par value per share, of which 66,580,065 shares were outstanding, and 5,000,000 shares of preferred stock, $0.01 par value per share, none of which was outstanding.

The following summary of certain provisions of our common and preferred stock does not purport to be complete. You should refer to our amended and restated certificate of incorporation and our restated bylaws, which are filed with or incorporated by reference in the registration statement