CytRx CORPORATION

CREATING TOMORROW, TODAY.

Corporate Overview

July 2017

NASDAQ: CYTR

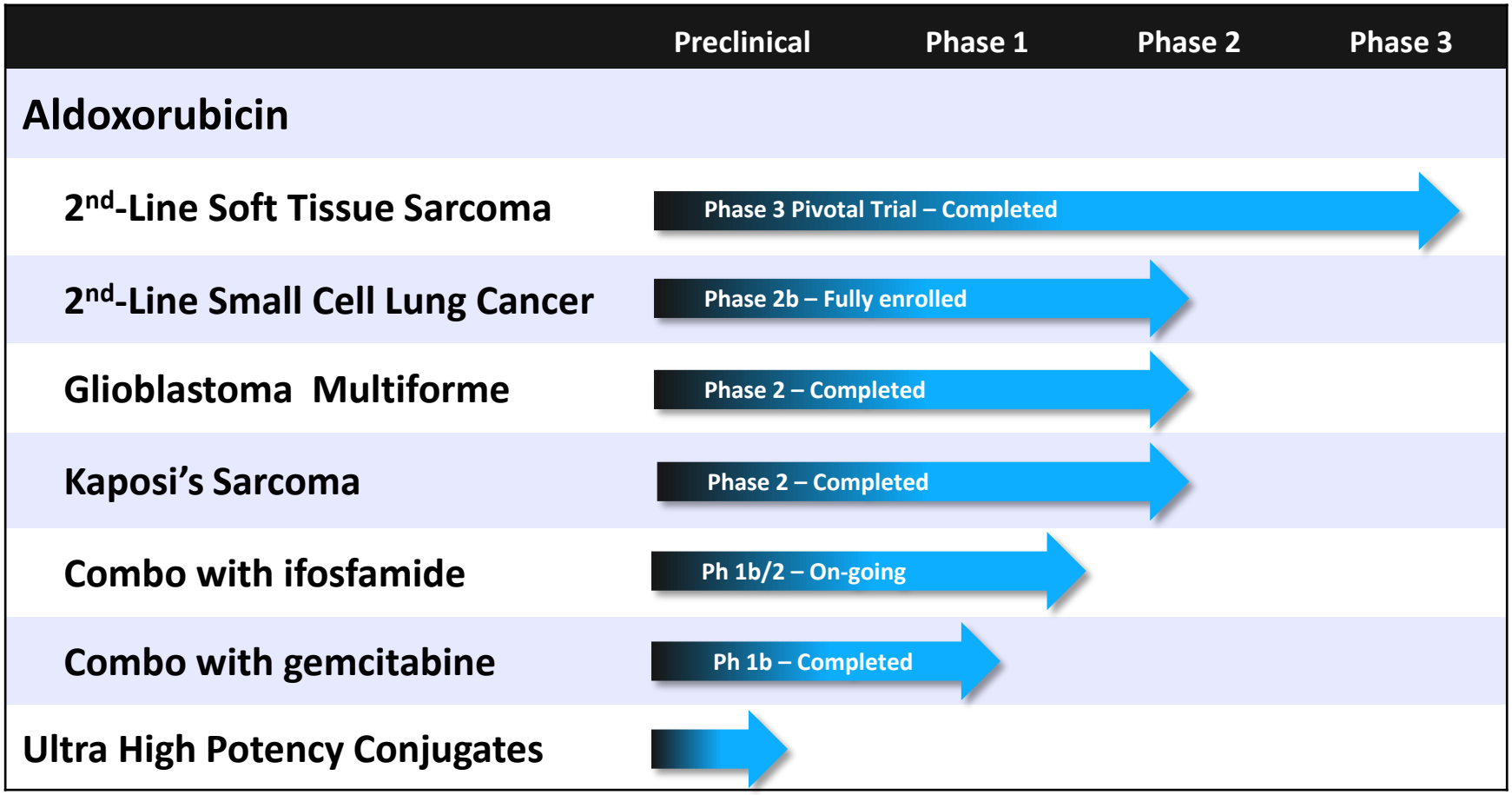
CytRx Safe Harbor Statement

THIS PRESENTATION CONTAINS FORWARD-LOOKING STATEMENTS THAT INVOLVE CERTAIN RISKS AND UNCERTAINTIES. ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE PROJECTED IN THE FORWARD-LOOKING STATEMENTS AS A RESULT OF THE RISK FACTORS DISCUSSED IN CYTRX REPORTS ON FILE WITH THE U.S. SECURITIES AND EXCHANGE COMMISSION INCLUDING, BUT NOT LIMITED TO, THE REPORTS ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2016 AND ON FORM 10-Q FOR THE QUARTER ENDED MARCH 31, 2017.

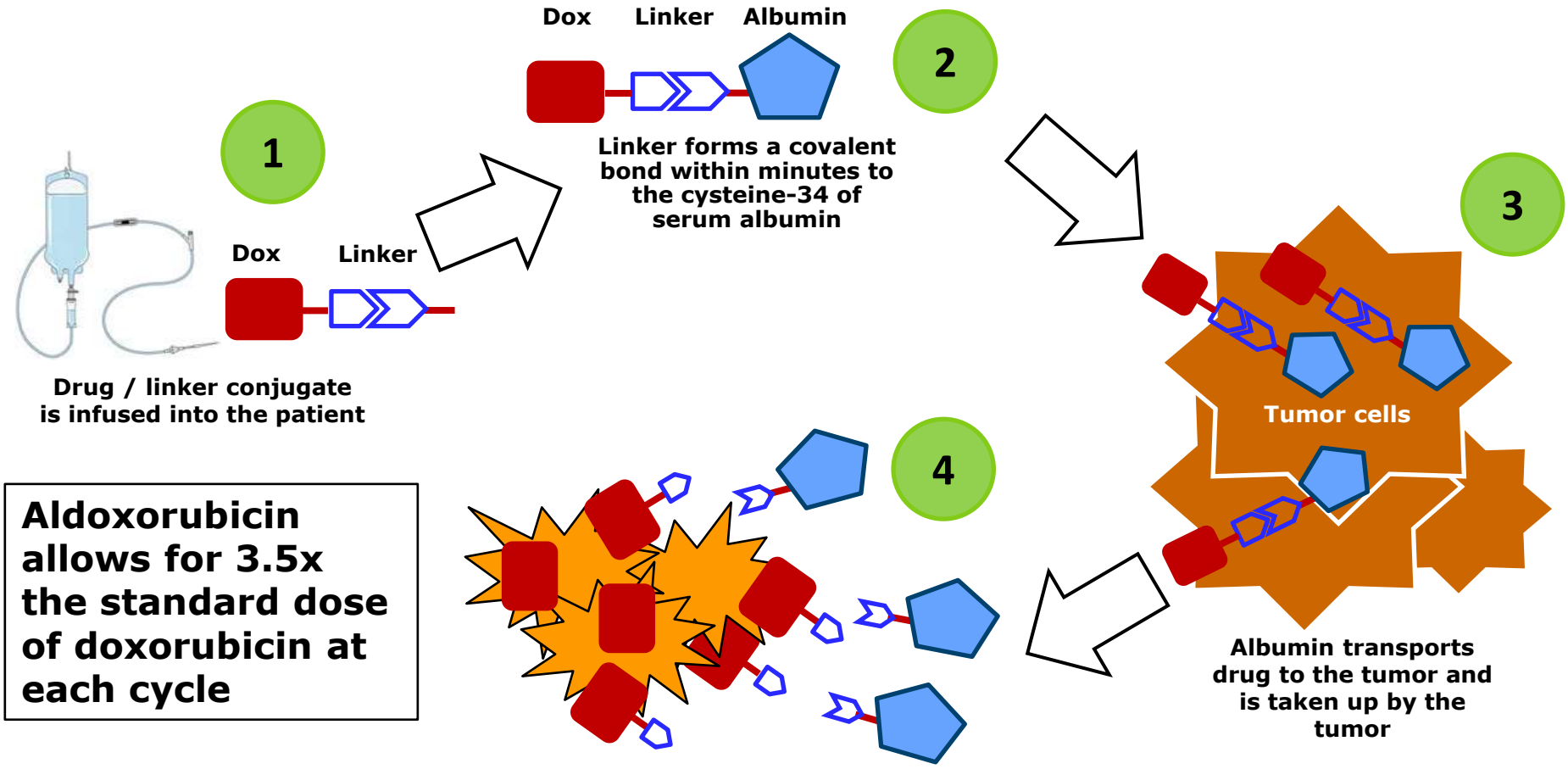
CytRx Investment Highlights

- **Late-stage, technology-validating lead drug candidate**
  - Reached agreement with FDA on a New Drug Application (NDA) filing strategy for aldoxorubicin as a treatment for patients with soft tissue sarcomas (STS)
  - Potential commercial launch in STS in 2018
  - Strategic alliance negotiations actively on-going
- **Proprietary *L*ADR™ Drug Generation Platform**
  - *L*ADR™ (Linker-Activated Drug Release) Technology concentrates drug release at the tumor, potentially minimizing systemic exposure
  - Create novel oncology therapies utilizing *L*ADR™ technology with Ultra High Potency drug payloads previously only used with two approved antibody-drug conjugates

CytRx Pipeline

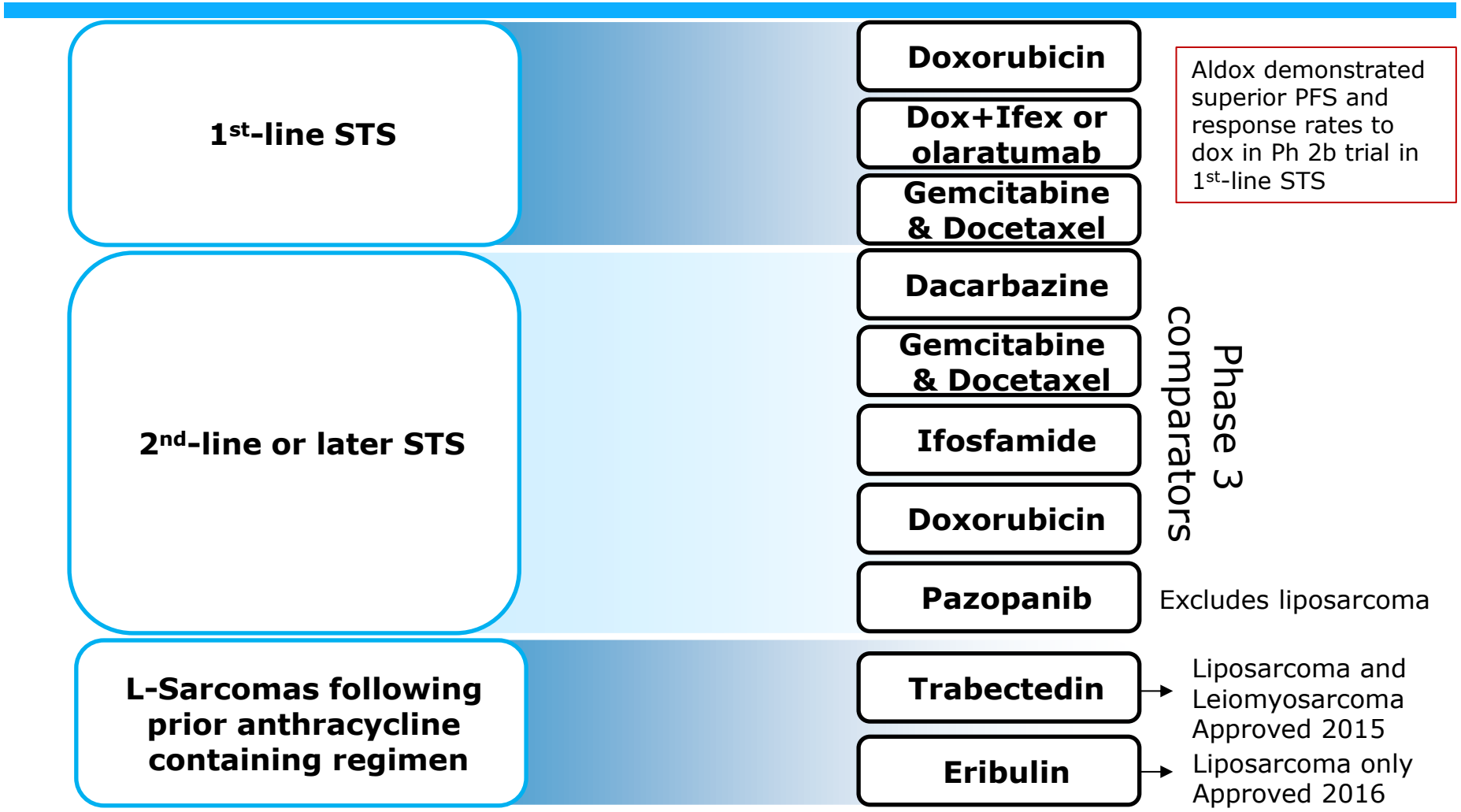


Mechanism of Aldoxorubicin

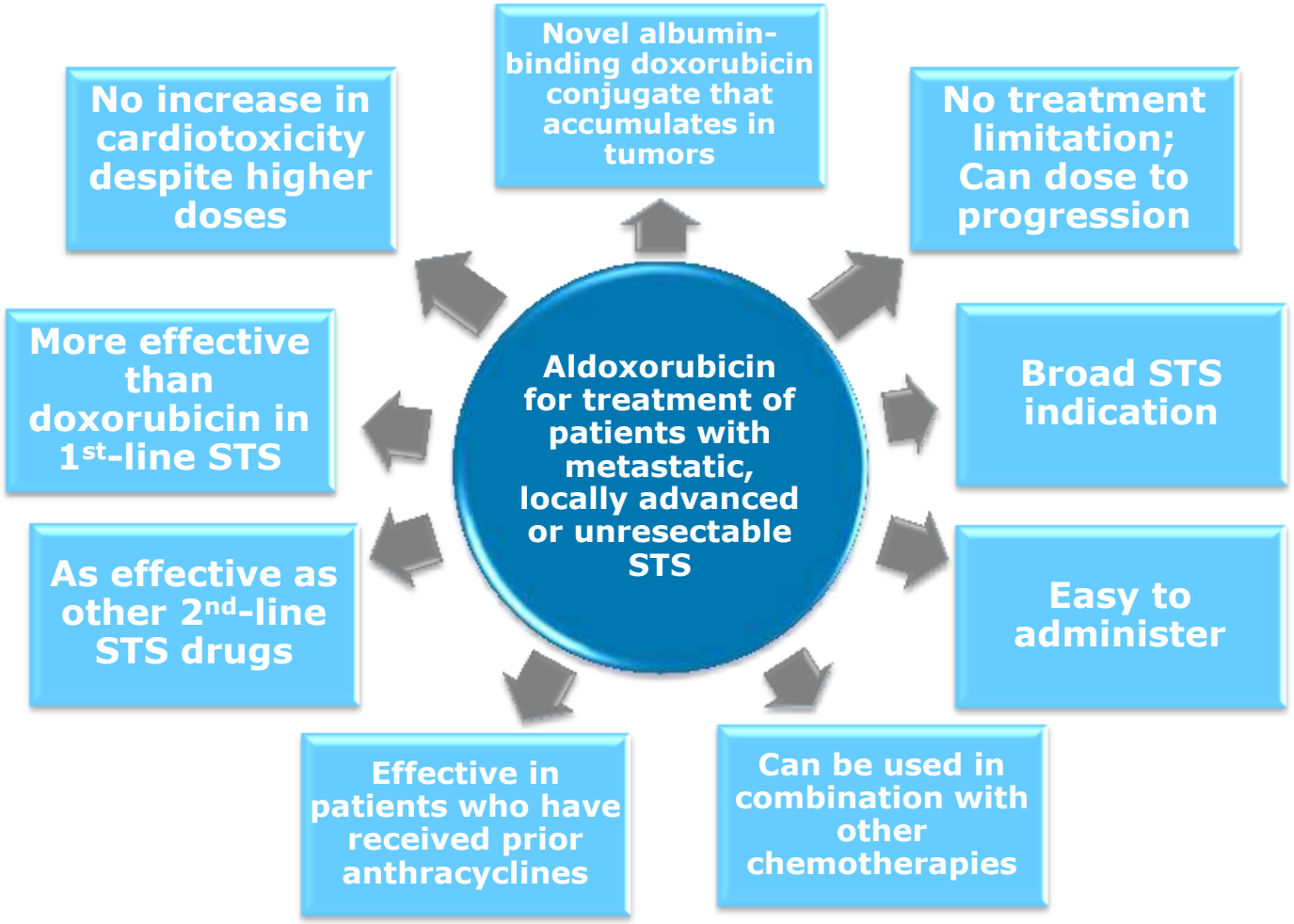


Aldoxorubicin allows for 3.5x the standard dose of doxorubicin at each cycle

Metastatic STS: No Standard of Care



Aldoxorubicin STS Value Proposition



Comments on Aldoxorubicin by Sarcoma Experts at ASCO

"The most important takeaway from this study is that aldoxorubicin has a very favorable toxicity profile compared to doxorubicin. There is a sharp drop in the cardiac toxicity."

Aldoxorubicin "has a great deal of value and should potentially replace doxorubicin as a next-generation anthracycline"

– Vinod Ravi, MD, Dept. of Sarcoma Medical Oncology, University of Texas, MD Anderson Cancer Center

"aldoxorubicin may be a superior anthracycline for treating advanced soft tissue sarcoma"

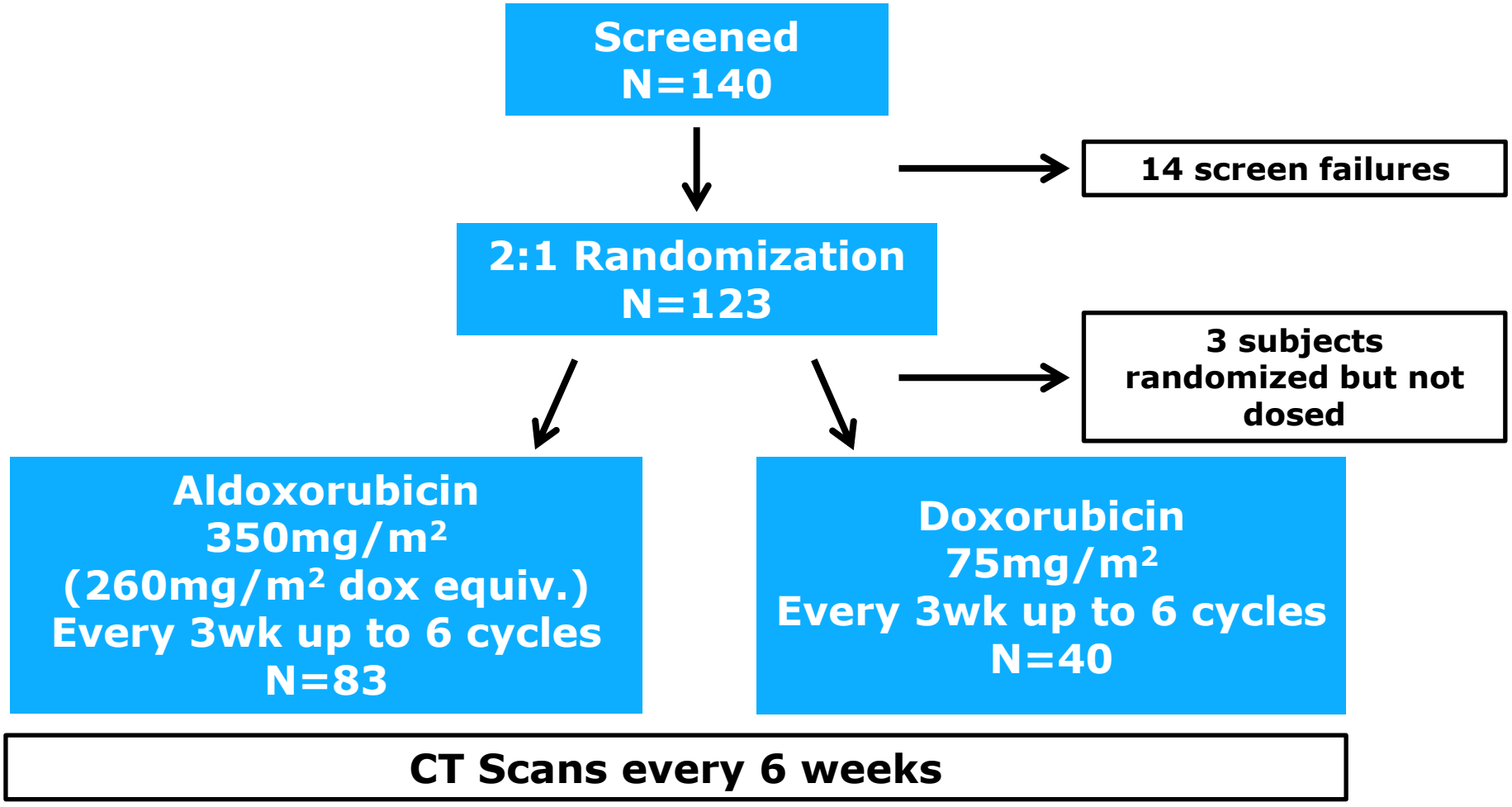
"Toxicity is expected ... [although] we were surprised patients did not lose their hair following 20 cycles of aldoxorubicin."

– Sant Chawla, MD, FRACP, Director of Sarcoma Oncology Center and Principal Investigator for aldoxorubicin's global Phase 2b and 3 clinical trial

Regulatory Strategy

- **Proposed Indication: treatment of soft tissue sarcomas**
- **Seeking approval in USA under 505(b)(2) regulatory pathway**
  - Pathway successfully used by oncology drugs Abraxane®, Doxil® and Onivyde®
- **Met with FDA in March 2017 to clarify path for NDA submission**
- **No additional clinical trials requested**
- **Orphan Drug Designation granted for the treatment of STS in the USA (7 year exclusivity) and Europe (10 year exclusivity); Not yet filed in Japan (10 year exclusivity)**

Phase 2b Trial Design in 1st-line STS



Phase 2b STS Trial: PFS Results

	All Subjects Intent-to-treat	P Value
Scans Read by Investigator		
Aldoxorubicin	**8.3 months**	**P=0.0006**
Doxorubicin	**4.6 months**	
Improvement over dox	3.7 mos. (80%)	
Hazard ratio	**0.44** (0.27-0.71)	**P=0.0007**
Scans Read by Central Lab		
Aldoxorubicin	**5.6 months**	**P=0.0228**
Doxorubicin	**2.7 months**	
Improvement over dox	2.9 mos. (107%)	
Hazard ratio	**0.60** (0.38-0.93)	**P=0.0228**

Results published in JAMA Oncology in September 2015

Phase 2b: Secondary Endpoint Results

	Aldoxorubicin	Doxorubicin
Overall Response Rate[1]	23.8%	0%
PFS at 6 months[1]	45.7%	22.9%
Overall Survival		
Median Survival months [95% CI]	15.8 [13.1-Not Reached]	14.3 [8.6-20.6]
Hazard Ratio [95%CI]	0.73 [0.44-1.20]	
% of patients surviving ≥2 years	41%	20%

[1]Blinded, central lab assessment

Phase 2b: Safety Data

- Adverse events were consistent with known doxorubicin toxicities
- Certain grade 3 or 4 AEs such as neutropenia, mucositis, nausea/vomiting and leukopenia, were higher in aldoxorubicin-treated subjects but were not treatment limiting
- Aldoxorubicin treated subjects had no evidence of clinically relevant decreased left ventricular ejection fraction (LVEF)
- ~9% of doxorubicin patients had clinically significant cardiotoxicity

Phase 3 Pivotal Trial in 2nd-Line STS

- **Randomized, Comparative Trial Design**
  - Protocol allows for dosing until disease progression
- **Patient Population**
  - 433 STS patients that have progressed following ≥1 treatment with chemotherapy
  - Up to five prior cycles or 375mg/m^2 of doxorubicin or liposomal doxorubicin equivalents allowed
  - Pre-specified analyses per statistical analysis plan based on sarcoma histopathology and geography
- **Endpoints**
  - Primary: Progression-Free Survival
  - Secondary: Overall survival, response rates, disease control rate, safety, etc.

Phase 3 Trial Design: 2nd-line STS

STS patients that have relapsed or are refractory to prior chemotherapy
1:1 Randomization
N=433

Aldoxorubicin
350mg/m²
(260mg/m² dox equiv.)
Every 3weeks until disease progression
N=218

Physicians Choice:
Doxorubicin
Ifosfamide
Dacarbazine
Pazopanib
Gemcitabine+docetaxel
N=215

CT Scans every 6 weeks

Phase 3 Trial Efficacy Results

Phase 3 Aldoxorubicin Efficacy Results				
	N	**Aldoxorubicin**	**Investigator's Choice**	**P Value**
All patients with Leiomyosarcoma and Liposarcoma (PFS in months)	**246**	**5.32**	**2.96**	**0.007**
		HR = 0.62 (95% CI 0.44-0.88)		
North American[1] patients (PFS in months)	**312**	**4.21**	**2.96**	**0.023**
		HR = 0.71 (95% CI 0.53-0.96)		
Disease Control Rate (DCR)[2]		32.9%	19.2%	0.007
Objective Response Rate (ORR)		8.7%	3.3%	0.058
All patients (PFS in months)	**433**	**4.11**	**2.96**	**0.087**
		HR = 0.81 (95% CI 0.64-1.03)		
Disease Control Rate (DCR)[2]		29.4%	20.5%	0.030

[1]Per trial statistical analysis plan, North America is defined as United States(n=296), Canada (n=8) and Australia (n=8) and comprises 72% of total trial patients

[2]DCR=ORR + stable disease for ≥4 months

All responses determined by an independent, blinded central lab assessment of scans.

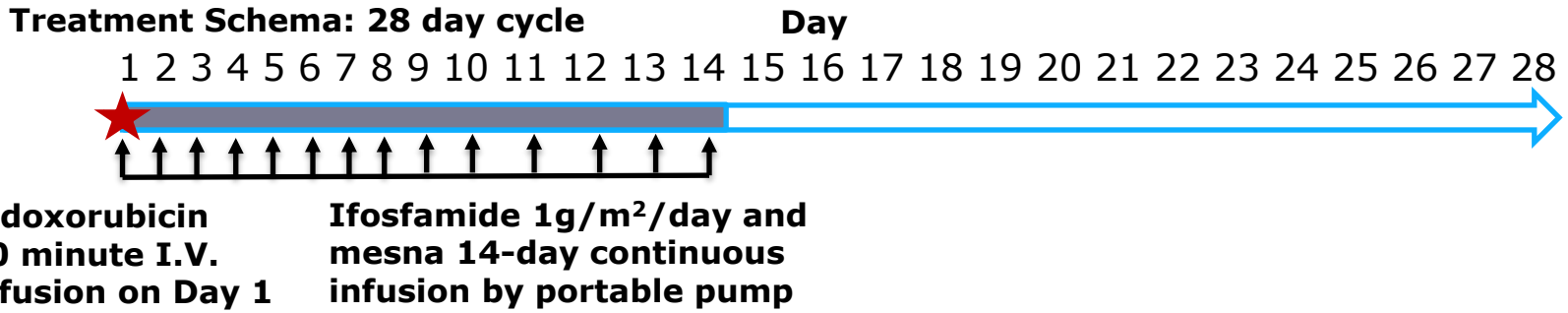
Phase 3 Trial Safety Results

- **Aldoxorubicin did not cause clinically significant cardiac, renal or hepatic toxicities**
- **Aldoxorubicin at 350mg/m^2 per cycle showed no clinically significant cardiotoxicity up to 40 cycles**
- **Most common Grade ≥3 adverse events (≥10%) were neutropenia, anemia, febrile neutropenia, stomatitis and decreased white blood cell count**
- **Grade ≥3 adverse events manageable with supportive care**

Phase 3 Aldoxorubicin Cardiac Safety Results		
	Aldoxorubicin	Investigator's Choice
LVEF below 50% of expected values	4.2%	19.1%
≥20% decrease in LVEF from baseline	3.8%	8.5%

Aldoxorubicin Combination Trial with Ifosfamide in Sarcoma

- Ifosfamide + doxorubicin have been used to treat STS for >30 years
- Greater tumor shrinkage achieved with combo but at the expense of increased toxicity to the patient
- Phase 1b/2 trial designed to evaluate safety and efficacy of aldoxorubicin + ifosfamide in advanced sarcomas
  - Treatment until disease progression or unacceptable toxicity
  - Maximum of six cycles of ifosfamide; aldoxorubicin continued to disease progression



- Updated data presented at ASCO Annual Meeting, June 2017

Aldoxorubicin Combination Trial Data with Ifosfamide in Sarcoma

Target Lesion Best Response	
Partial Response (PR)	16 of 44 (36%)
Stable Disease (SD) ≥ 4 Months	20 of 44 (45%)
Progressive Disease	1 of 44 (3%)
Clinical Benefit (PR + SD≥ 4 Months)	**36 of 44 (82%)**
Serious Adverse Events (SAEs)	
Febrile neutropenia	14%
Anemia	5%
Thrombocytopenia	2%
Stomatitis	2%
Pyrexia	2%

Trial has been expanded and continues to enroll sarcoma patients at the 250mg/m^2 dose of aldoxorubicin with ifosfamide and mesna.

*L*ADR™ Technology: A Potential Breakthrough in Cancer Drugs

Targeting Ability
Active and passive tumor targeting strategies

Cleavable Linker
Chemistries for controlled extra- or intra-cellular release of drug

Drug Payload
Ultra-high potency cytotoxic agents

Cancer Drug Shortcomings	*L*ADR™ Technology Advantages
Limited therapeutic index	▪ Prolonged drug exposure
Off-target toxic effects	▪ Allows drug to accumulate in the tumor ▪ Linker reduces release in healthy cells
Limited efficacy	▪ Ability to deliver drug payloads that are 10-1000x more potent than standard anti-cancer agents
Drug resistance	▪ *L*ADR™ conjugates can evade traditional drug resistance mechanism

LADR™ Conjugates vs. Antibody Drug Conjugates

CytRx's Solution: Novel, high-potency small molecules

Albumin transport for broad tumor selection + ***LADR*™ for controlled drug release** + **Ultra high potency payloads**

Potential breakthrough approach for treating many types of cancer

- **Antibody Drug Conjugates**
  - ✓ **Known target protein and delivery rationale**
  - ✓ **Validated approach (Only Two Marketed Products: Adcetris®, Kadcyla®)**
  - **Limitations:**
    - Requires cell surface antigen
    - Requires endocytosis → Low internalization of drug payloads
    - Few payload options; require pM activity

Recent and Upcoming Catalysts

2016

- ✓ **1Q16: Enrollment in Phase 3 STS trial - Completed ahead of schedule in Q4 2015**
- ✓ **2Q16: Presented data on DK049 at the AACR Annual Meeting in April**
- ✓ **2Q16: Presented clinical trial updates at ASCO on GBM, Kaposi's sarcoma and gemcitabine combination with aldoxorubicin**
- ✓ **July 2016: Interim Phase 3 STS PFS data**
- ✓ **2H16: GBM OS data reported at ASCO**
- ✓ **4Q16: Presented Phase 1b/2 results of aldoxorubicin with ifosfamide in advanced sarcomas at ESMO and CTOS**
- ✓ **4Q16: Announced updated Phase 3 STS data**

2017 2018

- ✓ **1Q17: Met with the FDA for aldoxorubicin as a treatment for STS**
- ✓ **2Q17: Oral presentation of aldoxorubicin Phase 3 STS data at ASCO**
- ✓ **2Q17: Present updated Phase 1b/2 results from combination trial of aldoxorubicin and ifosfamide in advanced sarcomas at ASCO**
- ▪ **2017: Select ultra-high potency drug conjugate for clinical development**
- ▪ **3Q17: Potential global strategic alliance with aldoxorubicin**
- ▪ **4Q17: Initiate rolling NDA with FDA for aldoxorubicin in STS**
- ▪ **2H18: Commercialization of aldoxorubicin in STS projected**

Financial Summary

- **Cash Position**
  - Cash (3/31/17): $48.0M
  - May equity financing: $13.9M
  - Warrant proceeds: $ 1.9M
- **Long term debt:** $25.0M

- **Shares Outstanding (5/10/15)** **152.0M**
- **Options** Weighted-average strike price: $2.35 **17.1M**
- **Warrants**
  - Weighted-average strike price: $2.29 **1.9M**
  - Strike price $0.5055, expiring July 2018 **17.8M**
- **Fully-Diluted Share Count** **188.8M**
  - Would bring in ~$13.3M in additional capital

Conclusion

- **Late-stage, technology-validating lead drug candidate**
- **Met with FDA in March 2017 to clarify NDA submission strategy for aldoxorubicin in STS**
- **Potential global strategic alliance for aldoxorubicin**
- **Novel *LADR*™ technology platform with broad applicability**
- **Next generation of *LADR*™ derived oncology drugs in development including Ultra-High Potency conjugates**