



CREATING TOMORROW, TODAY.

OTCQB: CYTR

Corporate Overview 4th Quarter 2020

Non-Confidential

CytRx Safe Harbor Statement

THIS PRESENTATION CONTAINS FORWARD-LOOKING STATEMENTS THAT INVOLVE CERTAIN RISKS AND UNCERTAINTIES. ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE EXPRESSED OR IMPLIED IN THESE FORWARD-LOOKING STATEMENTS AS A RESULT OF VARIOUS RISKS AND UNCERTAINTIES, INCLUDING THOSE RISK FACTORS DISCUSSED IN THE ANNUAL AND QUARTERLY REPORTS THAT CYTRX FILES WITH THE U.S. SECURITIES AND EXCHANGE COMMISSION.

CytRx Highlights

- CytRx's milestone and royalty agreement with Orphazyme for arimoclomol represents potential near term payments to CytRx
- Orphazyme has filed a New Drug Application (NDA) with the FDA for arimoclomol for NPC, which is currently under Priority Review with a target action date of March 17, 2021.
- It also recently submitted a Marketing Authorisation Application with EMEA authorities for arimoclomol for NPC.
- ImmunityBio has initiated a Phase 2 registrational-intent study for first-line and second-line treatment of locally advanced or metastatic pancreatic cancer, which includes aldoxorubicin
- Centurion BioPharma is a private oncology company focused on oncology treatment and has completed extensive pre-clinical work for its ultra high potency **LADR™** drug candidates and accompanying albumin companion diagnostic (ACDx)

CytRx has potential milestone/royalty payments and a subsidiary called Centurion BioPharma

Orphazyme Milestones and Royalties

Orphazyme: \$120M in potential milestones + royalties on arimoclomol

ImmunityBio Milestones and Royalties

ImmunityBio: \$343M in potential milestones + royalties on aldoxorubicin

Centurion BioPharma Pipeline

Oncology personalized medicine: companion diagnostic + treatment

Centurion BioPharma is a subsidiary of CytRx

CytRx may receive milestones and royalties from Orphazyme for Arimoclomol

Orphazyme Milestones and Royalties

Orphazyme: up to \$120M in milestones
+ royalties on arimoclomol

Niemann-Pick disease ("NPC")

- Orphazyme filed a NDA with the FDA which was accepted, with Priority Review, with a target action date of March 17, 2021, and also submitted a MAA with the EMA, both for arimoclomol for Niemann-Pick disease Type C (NPC).
- Orphazyme has also received Breakthrough Therapy Designation.
- Orphazyme launched an Early Access Program for NPC in January 2020 to further accelerate access to treatment with arimoclomol for people living with NPC.
- Expected price range is \$300,000 - \$600,000.
- Total worldwide patients numbering approximately 3,000.
- Go to market in US H1 2021 and EU/RoW H2 2021.

WHAT IS NPC? Niemann-Pick Disease Type C

NPC IS A RARE, INHERITED, PROGRESSIVE, AND OFTEN FATAL NEURODEGENERATIVE DISEASE

NPC is a lysosomal storage disorder caused by genetic mutations that often lead to misfolded variants of NPC proteins. Misfolded NPC protein does not function properly and is subject to rapid degradation.



1-2000
people are diagnosed with
NPC in the USA and EU



MANIFESTATIONS

The disease affects the brain, liver, spleen and lungs. Often patients succumb to the disease before reaching the end of their teens.

The disease is progressive and patients gradually loses:

Motor function and coordination

Speech

Cognition

Memory



20 years
is the average life expectancy

95% have mutations
in the **NPC1** gene



**ONLY
1 DRUG**

is currently approved
to treat NPC
(Zavesca).



DIAGNOSIS

Difficult to diagnose,
NPC is often diagnosed
by ruling out other
diseases, which may
take years.



There is **NO CURE** for NPC

Orphazyme – other indications

Sporadic Inclusion Body Myositis (sIBM)

- Phase I 24 patient pilot trial results where 83% of arimoclomol treated patients were stabilized versus 25% on placebo. 4 months of continuous treatment resulted in a 60% reduction in progression, and at 8 months, there was a 75% reduction in progression.
- Phase II/III trial is fully enrolled. Study completion expected by end of 2020. Results are expected in H1 2021 and regulatory submission in H2 2021.
- Estimated 40,000 patients in US/EU.

Orphazyme – other indications

Amyotrophic Lateral Sclerosis (ALS)

- Enrollment completed in P3 trial last July 2019.
- Fast Track Designation from the FDA received in May 2020.
- Announcement of P3 results in ALS in H1 2021.
- Regulatory submission in H2 2021.

Gaucher Disease

- Top line data reported in H1 2020
- Next steps to be determined

Parkinson's Disease

- Commenced pre-clinical work with arimoclomol
- Orphazyme announced they are collaborating with the Michael J. Fox Foundation

Orphazyme development programs for arimoclomol

| | Designations | | | | Key milestone |
|----------------------------------|--------------|------------|-----------------------|---------------------------|------------------------------------|
| | Orphan Drug | Fast Track | Break-through Therapy | | |
| Neuropathic lysosomal diseases | | | | | |
| Niemann-Pick disease type C | ✓ | ✓ | ✓ | Ph II/III (data reported) | File US H1 2020/ Europe H2 2020 |
| Neurological Gaucher disease | | | | Ph II | Ph II results H1 2020 |
| GCase-Parkinson's disease* | | | | Pre-clinical | |
| Neuromuscular disorders | | | | | |
| Sporadic inclusion body myositis | ✓ | ✓ | | Ph II/III | Ph II/III results H1 2021 |
| Amyotrophic lateral sclerosis | ✓ | | | Ph III | Ph III results H1 2021 |

CytRx may receive milestones and royalties from ImmunityBio for aldoxorubicin

ImmunityBio Milestones and Royalties

ImmunityBio: up to \$343M in milestones
+ royalties on aldoxorubicin

- NantCell is now called ImmunityBio and is a privately held company involved in late stage clinical development
- ImmunityBio announces initiation of a phase 2 registrational-intent study using aldoxorubicin in combination with immunotherapy in metastatic pancreatic cancer
- Results from P1b study in TNBC presented at San Antonio Breast Cancer Symposium and at Bank of America Healthcare Conference
- Early safety and efficacy data from a portion of the studies was presented at Society for Immunotherapy of Cancer's (SITC) 33rd Annual Meeting
- CytRx is entitled to increasing double-digit royalties on aldoxorubicin for soft tissue sarcomas and increasing single-digit royalties for all other indications

CytRx partnered Pipeline with ImmunityBio - aldoxorubicin

| Aldoxorubicin | Preclinical | Phase 1 | Phase 2 | Phase 3 |
|--|---|---------|---------|---------|
| 2 nd -Line Soft Tissue Sarcoma | Ph 3 – Completed; NantCell has IND | | | |
| 2 nd -Line Small Cell Lung Cancer | Ph 2 – Fully enrolled; NantCell has IND | | | |
| Combo with ifosfamide – STS | Ph 1b/2 – NantCell has IND | | | |
| Combination Trials with Immunotherapy | | | | |
| Pancreatic Cancer | Ph 2 – Enrolling | | | |
| Triple-Negative Breast Cancer | Ph 1b2 – On-going | | | |

Update from NantKwest/ImmunityBio at the Bank of America Healthcare Conference

Metastatic Pancreatic Cancer QUILT-88: IND Approved March 2020

- Initiation of a **Registrational-Intent** Phase 2 randomized, two-cohort, open-label study for first and second-line treatment of locally advanced or metastatic pancreatic cancer
- Received FDA authorization and will initially enroll 268 subjects across both cohorts. They have started enrolling for this registrational-intent study.
- They recently announced the addition of a third cohort to this Phase 2 study, which will enable pancreatic cancer patients who have failed all approved standards of care to participate in the study.
- Former Senate Majority Leader Harry Reid's stage IV pancreatic cancer is now in "complete remission" after receiving this experimental combination immunotherapy that included aldoxorubicin.

Update from NantCell/ImmunityBio at the San Antonio Breast Cancer Symposium

Phase 1b Results in TNBC (triple negative breast cancer)

- In this Phase 1b, single-arm, open-label trial, treatment was administered in 3-week cycles of low-dose chemotherapy (aldoxorubicin, cyclophosphamide, cisplatin, nab-paclitaxel, 5-FU/L), antiangiogenic therapy (bevacizumab), engineered allogeneic high affinity CD-16 NK-92 cells (haNK), IL-15RαFc (N803), adenoviral vector-based CEA, MUC1, Brachyury, HER2 vaccine, yeast vector-based RAS, Brachyury and CEA vaccine, and an IgG1 PD-L1 inhibitor, avelumab plus cetuximab. All patients in both trials received aldoxorubicin. The primary endpoint is incidence of treatment-related adverse events (AEs). Secondary endpoints include overall response rate (ORR), disease control rate (DCR), progression-free survival (PFS), and overall survival (OS). This immunotherapy includes aldoxorubicin as part of its innovative chemoradiation therapy.
- The data highlights include of the nine patients treated efficacy results include a disease control rate of 78% (7/9 patients) and an overall response rate of 67% (6/9 patients). 2 out of 9 patients to date have ongoing complete responses with durations from 8 to 11 months, with a 3rd patient demonstrating a partial response (near complete response) in the target lesion after initiation of targeted and endocrine therapy off-study. To date, 7 patients are alive with durations of responses ranging from 2 to 12 months with 4 patients remaining on study. Median progression-free survival rate is 13.7 months. All patients were treated in an outpatient setting with treatment generally safe and well tolerated and no observed cytokine release syndrome.
- NantKwest indicated they plan to initiate a registration trial in TNBC.

Update from ImmunityBio at the J.P. Morgan Healthcare Conference in January 2020

Complete Response in one Patient in its Phase 1b Trial in Metastatic Pancreatic Cancer and the start of a Phase 2 study

- Based on the safety and efficacy of this Phase 1b in 11 patients who had received 3-week cycles of low-dose chemotherapy (aldoxorubicin, cyclophosphamide, oxaliplatin, nab-paclitaxel, 5-FU/L), antiangiogenic therapy (bevacizumab), engineered allogeneic high affinity CD-16 NK-92 cells (haNK), IL-15R α Fc (N-803), adenoviral vector-based CEA vaccine, yeast vector-based RAS vaccine, and an IgG1 PDL1 inhibitor, avelumab, an expanded regime trial was authorized to study a patient with metastatic pancreatic cancer who had failed standard of care. After five infusions of this treatment, a complete response was confirmed. All metastatic pancreatic cancer patients received aldoxorubicin. The primary endpoint is incidence of treatment-related AEs. Secondary endpoints include ORR, DCR, PFS, and OS.
- This patient's progress as well as report data from the full 11 metastatic pancreatic patients enrolled has been announced in 2020.
- NantKwest have initiated a registration trial in pancreatic cancer patients that failed standard of care

CytRx subsidiary Centurion BioPharma has an oncology preclinical pipeline

Centurion BioPharma Pipeline

Oncology personalized medicine: companion diagnostic + treatment

LADR™ (linker activated drug release) albumin binding drug conjugates

LADR-7

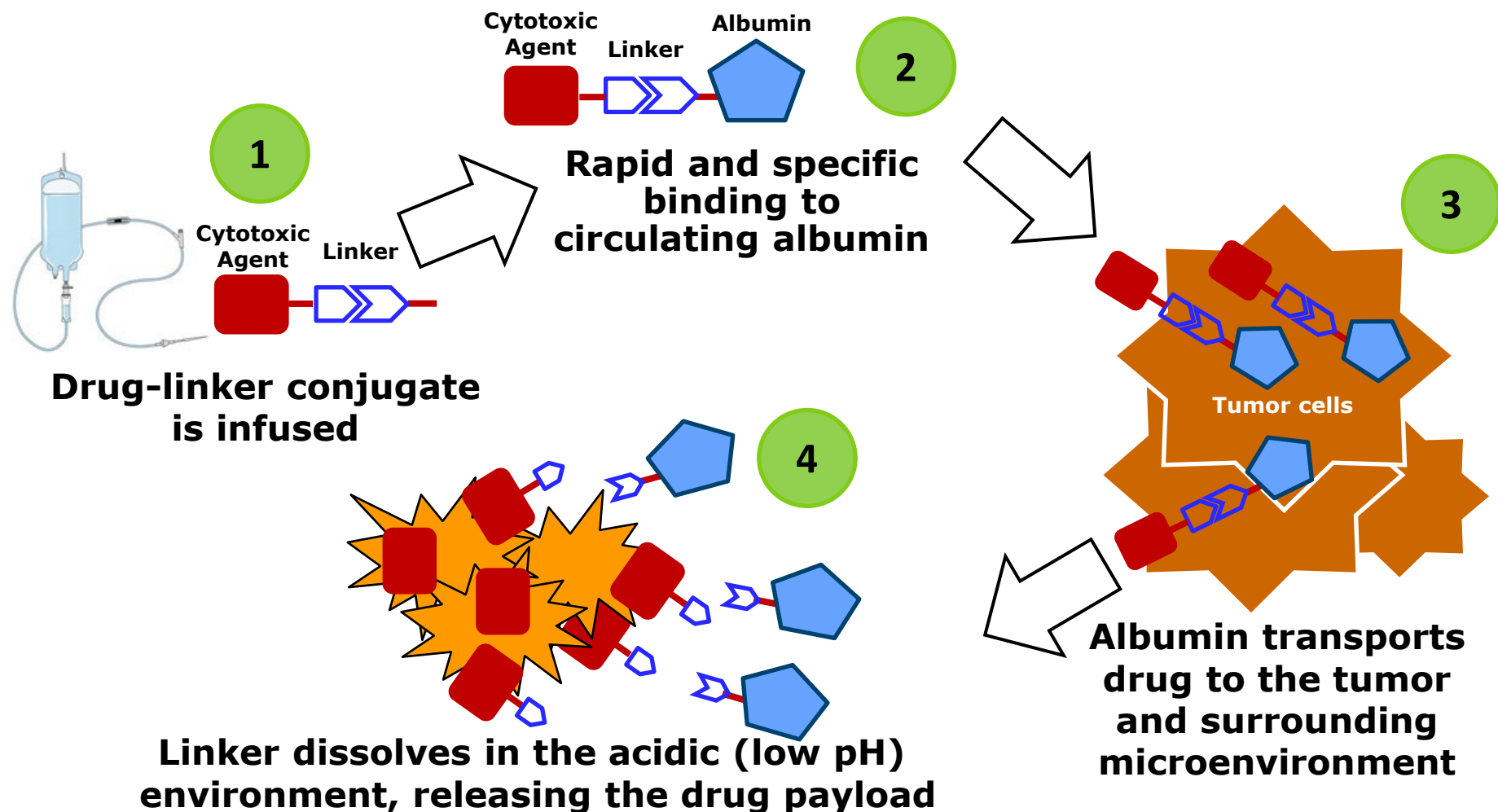
LADR-8

LADR-9

LADR-10

Albumin companion diagnostic (ACDx)
identifies tumors eligible for treatment with **LADR™**

LADR™ Mechanism of Action



Recent and Upcoming Catalysts

2020-2021

- ✓ **1H 2020:** Orphazyme filed for FDA approval for arimoclomol in Niemann-Pick Type C disease with a target action date of 03/17/21
- **2H 2020:** Orphazyme has submitted for EMEA (Europe) approval for arimoclomol in Niemann-Pick Type C disease
- **2020-2021:** Upon approval, CytRx is to receive a \$12 million milestone payment if the US, Europe and Japan are approved (\$6 million for US, \$4 million for Europe and \$2 million for Japan)
- **1H 2021:** Orphazyme to announce top line results from the full analysis of phase 3 clinical trial of arimoclomol in amyotrophic lateral sclerosis (ALS)
- **1H 2021:** Orphazyme to announce results of sIBM phase 2/3 clinical trial

Financial Summary

| | |
|--|----------------|
| ▪ Cash Position (9/30/2020) | \$12.6M |
| ▪ No Debt | |
| ▪ Shares Outstanding | 36.5M |
| ▪ Options Weighted-average strike price: \$7.71 | 3.2M |
| ▪ Warrants | |
| ▪ Weighted-average strike price: \$8.60 | 0.2M |
| ▪ Fully-Diluted Share Count (09/30/2020) | 39.9M |

Summary

- Orphazyme could deliver milestones + royalties
- ImmunityBio could deliver milestones + royalties
- Cash burn rate is ~\$423k per month
- Potential to selectively leverage our cash reserve for new business opportunities