



CREATING TOMORROW, TODAY.

OTCQB: CYTR

Corporate Overview 1st 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 agreement with Orphazyme for arimoclomol represents potential near-term milestone and royalty payments to CytRx
- Orphazyme preparing to file NDA for arimoclomol in NPC with the FDA and EMEA authorities in 2020
- NantCell/ImmunityBio* provided an update to its studies of aldoxorubicin in phase 1b/2 studies in combination with immunotherapy in multiple cancer indications, including a complete response in metastatic pancreatic cancer and two in TNBC, at J.P. Morgan Healthcare Conference

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

Orphazyme Milestones and Royalties

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

NantCell / ImmunityBio Milestones and Royalties

NantCell/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 plans a regulatory filing with the FDA in H1 2020 and a regulatory filing with the EMA in H2 2020, both for arimoclomol for Niemann-Pick disease Type C (NPC).
- 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 with Arimoclomol

- **Amyotrophic Lateral Sclerosis (ALS)**

- Enrollment completed in P3 trial last July 2019.
- Announcement of P3 results in ALS in H1 2021.
- Regulatory submission in H2 2021.

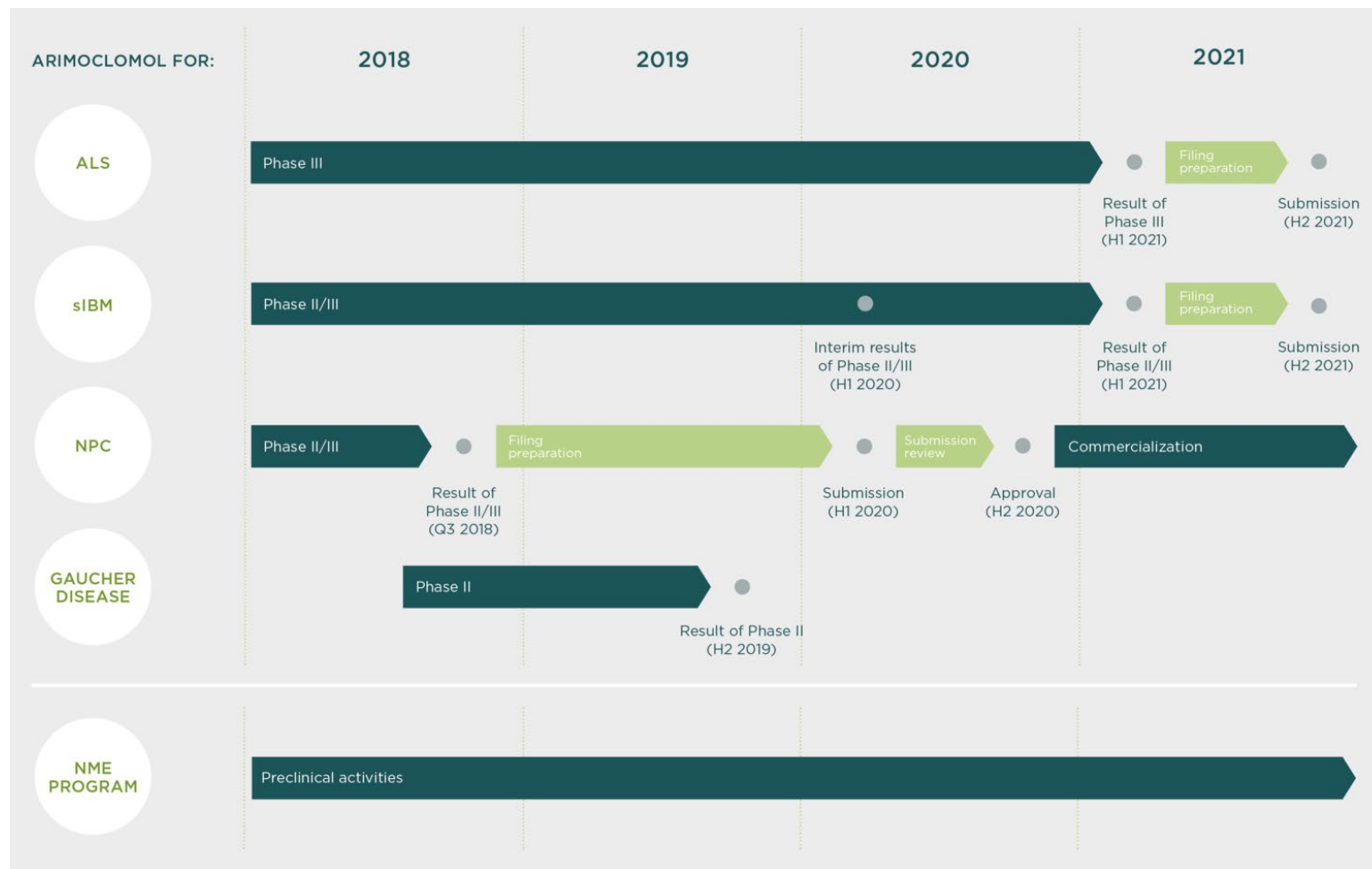
- **Gaucher Disease**

- Announcement of results of P2 trial H1 2020

- **Parkinson's Disease**

- Commenced pre-clinical work with arimoclomol

Orphazyme development programs for arimoclomol



CytRx may receive milestones and royalties from NantCell/ImmunityBio for aldoxorubicin

NantCell / ImmunityBio Milestones and Royalties

NantCell/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
- NantCell/ImmunityBio is studying aldoxorubicin in phase 1b/2 studies in combination with immunotherapy in pancreatic cancer, head and neck cancer, triple negative breast cancer (TNBC) and colorectal cancer
- Results from P1b study in TNBC presented at San Antonio Breast Cancer Symposium
- 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 NantCell/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 1b/2 – On-going			
Squamous Cell Carcinoma	Ph 1b/2 – On-going			
Triple-Negative Breast Cancer	Ph 1b/2 – On going			
Colorectal Cancer	Ph 1b/2 – On going			

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 NantCell/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

- 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-15RαFc (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.
- It is expected that this patient's progress as well as report data from the full 11 metastatic pancreatic patients enrolled will be announced in 2020.
- NantKwest indicated they plan to initiate 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™**

Recent and Upcoming Catalysts

2019-2021

- ✓ **2019:** Reduce cash burn rate to ~\$385,000 per month
- **1H 2020:** Orphazyme to file for FDA approval for arimoclomol in Niemann-Pick Type C disease
- **2H 2020:** Orphazyme to file for EMEA (Europe) approval for arimoclomol in Niemann-Pick Type C disease
- **2020-2021:** Upon approval, CytRx is to receive a \$10 million milestone payment if both the US and Europe are approved (\$6 million for US and \$4 million for Europe)
- **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 (12/31/2019)	\$16.1M
▪ No Debt	
▪ Shares Outstanding	33.6M
▪ Options Weighted-average strike price: \$3.32	7.7M
▪ Warrants	
▪ Weighted-average strike price: \$8.60	0.2M
▪ Fully-Diluted Share Count (12/31/2019)	41.5M

Summary

- Orphazyme could deliver milestones + royalties
- ImmunityBio could deliver milestones + royalties
- Reduction in cash burn rate to ~\$385k per month
- Potential to selectively leverage our cash reserve for new business opportunities