Corporate Overview
2nd 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 prepares to file arimoclomol for approval 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, at Bank of America Healthcare Conference
- Centurion BioPharma is a private oncology company focused on oncology treatment and has completed the pre-clinical phase for its ultra high potency LADR™ drug candidates and accompanying albumin companion diagnostic (ACDx)

*NantCell is now called ImmunityBio
**CytRx has potential milestone/royalty payments and a subsidiary called Centurion BioPharma**

<table>
<thead>
<tr>
<th>Company</th>
<th>Milestones and Royalties</th>
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<tbody>
<tr>
<td>Orphazyme</td>
<td>$120M in potential milestones + royalties on arimoclomol</td>
</tr>
<tr>
<td>ImmunityBio</td>
<td>$343M in potential milestones + royalties on aldoxorubicin</td>
</tr>
<tr>
<td>Centurion BioPharma</td>
<td>Oncology personalized medicine: companion diagnostic + treatment</td>
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Centurion BioPharma is a subsidiary of CytRx
CytRx may receive milestones and royalties from Orphazyme for Arimoclomol

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.
Niemann-Pick Disease Type C (NPC)

**WHAT IS NPC?**

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

20 years is the average life expectancy

95% have mutations in the NPC1 gene

There is NO CURE for NPC

**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 lose:
  - Motor function and coordination
  - Speech
  - Cognition
  - Memory

**DIAGNOSIS**

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

**ONLY 1 DRUG**

is currently approved to treat NPC (Zavesca).
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

- Announcement of results of P2 trial H1 2020

Parkinson’s Disease

- Commenced pre-clinical work with arimoclomol
# Orphazyme development programs for arimoclomol

<table>
<thead>
<tr>
<th>Neuropathic lysosomal diseases</th>
<th>Orphan Drug</th>
<th>Fast Track</th>
<th>Breakthrough Therapy</th>
<th>Key milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niemann-Pick disease Type C*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Ph 2/3 (data reported)</td>
</tr>
<tr>
<td>Neurological Gaucher disease</td>
<td></td>
<td></td>
<td></td>
<td>Ph 2</td>
</tr>
<tr>
<td>GCase-Parkinson's disease**</td>
<td></td>
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<td>Pre-clinical</td>
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| Neuromuscular disorders        |             |            |                       |               |
| Sporadic Inclusion Body Myositis | ✓          | ✓          |                       | Ph 2/3        | Ph 2/3 results H1 2021 |
| Amyotrophic Lateral Sclerosis  | ✓           |            |                       | Ph 3          | Ph 3 results H1 2021 |

*Arimoclomol has been granted Rare Pediatric Disease Designation by the FDA for NPC, **Glucocerebrosidase (GCase)*

Source: www.orphazyme.com
CytRx may receive milestones and royalties from ImmunityBio for aldoxorubicin

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

<table>
<thead>
<tr>
<th>Aldoxorubicin</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tbody>
<tr>
<td>2nd-Line Soft Tissue Sarcoma</td>
<td></td>
<td>Ph 3 – Completed; NantCell has IND</td>
<td></td>
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<tr>
<td>2nd-Line Small Cell Lung Cancer</td>
<td></td>
<td>Ph 2 – Fully enrolled; NantCell has IND</td>
<td></td>
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<tr>
<td>Combo with ifosfamide – STS</td>
<td></td>
<td>Ph 1b/2 – NantCell has IND</td>
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<tr>
<td>Combination Trials with Immunotherapy</td>
<td></td>
<td>Ph 2 – Enrolling</td>
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<tr>
<td>Pancreatic Cancer</td>
<td></td>
<td>Ph 1b/2 – On-going</td>
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<tr>
<td>Squamous Cell Carcinoma</td>
<td></td>
<td>Ph 1b/2 – On-going</td>
<td></td>
<td></td>
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<tr>
<td>Triple-Negative Breast Cancer</td>
<td></td>
<td>Ph 1b/2 – On going</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal Cancer</td>
<td></td>
<td>Ph 1b/2 – On going</td>
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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 indicated enrollment expected to begin in June 2020.
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.
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

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**

1. **Drug-linker conjugate is infused**

2. **Rapid and specific binding to circulating albumin**

3. **Albumin transports drug to the tumor and surrounding microenvironment**

4. **Linker dissolves in the acidic (low pH) environment, releasing the drug payload**
Recent and Upcoming Catalysts

✓ **2020**: 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 $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

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Position (3/31/2020)</td>
<td>$15.3M</td>
</tr>
<tr>
<td>No Debt</td>
<td></td>
</tr>
<tr>
<td>Shares Outstanding</td>
<td>33.6M</td>
</tr>
<tr>
<td>Options Weighted-average strike price: $3.32</td>
<td>7.7M</td>
</tr>
<tr>
<td>Warrants Weighted-average strike price: $8.60</td>
<td>0.2M</td>
</tr>
<tr>
<td>Fully-Diluted Share Count (03/31/2020)</td>
<td>41.5M</td>
</tr>
</tbody>
</table>
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