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Progenics: Targeting and Treating Cancer

• Building an oncology company with a portfolio of therapeutics and diagnostics
• Near-term opportunity with late-stage program in ultra-orphan indication
• PSMA-targeted pipeline: potential to transform clinical practice in prostate cancer
• Strong financial position: $108.4 M as of 3/31/2015

<table>
<thead>
<tr>
<th>AZEDRA</th>
<th>1404</th>
<th>PSMA ADC</th>
<th>1095</th>
<th>RELISTOR®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pivotal trial</td>
<td>More sensitive in detecting cancer vs. MRI in Phase 2</td>
<td>Demonstrated activity, tolerability in Phase 2</td>
<td>Potent activity in advanced cancer, MSKCC to start Phase 1</td>
<td>Marketed by Salix/Valeant in US for OIC</td>
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<tr>
<td>under SPA for Pheochromocytoma</td>
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## Pipeline

<table>
<thead>
<tr>
<th>Clinical Phase</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Reg. Filing</th>
<th>Market</th>
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<tbody>
<tr>
<td><strong>Oncology</strong></td>
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<tr>
<td>1404 Diagnostic Imaging Agent</td>
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<tr>
<td>Prostate Cancer</td>
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<td>PSMA ADC</td>
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<td>Therapeutic Prostate Cancer</td>
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<tr>
<td>AZEDRA</td>
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<tr>
<td>Theranostic Pheochromocytoma</td>
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<tr>
<td><strong>1095</strong> Small Molecule Therapeutic Prostate Cancer</td>
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<tr>
<td><strong>Oncology Supportive Care</strong></td>
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<tr>
<td>RELISTOR® Opioid-induced constipation</td>
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<tr>
<td>Subcutaneous (AI)</td>
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<tr>
<td>RELISTOR® Subcutaneous (CP) (US)</td>
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<tr>
<td>RELISTOR® Subcutaneous (CP) (EMA)</td>
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<tr>
<td>RELISTOR® Subcutaneous (AI) Japan</td>
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<tr>
<td>RELISTOR® Oral</td>
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AZEDRA
Theranostic for Pheochromocytoma & Paraganglioma
AZEDRA: Ultra-Orphan Theranostic

- Novel, targeted radiotherapy candidate
- Phase 2b pivotal trial under SPA for malignant pheochromocytomas and paragangliomas
- FDA Fast Track Status
- Pheochromocytoma and paraganglioma are rare tumors found primarily in the adrenal glands
  - Results in the release of excess hormones that control heart rate, metabolism and blood pressure
  - Left untreated, tumors most often lead to death due to high blood pressure, heart failure, stroke or metastatic disease
  - No currently approved therapies in the U.S.
- Potential utility in treating neuroblastoma and other neuroendocrine diseases
- Plan to commercialize independently
## Pivotal Phase 2 Trial Under SPA

<table>
<thead>
<tr>
<th>Study Design</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of patients</strong></td>
<td>58 planned</td>
</tr>
<tr>
<td><strong>Dosing regimen</strong></td>
<td>Patients receive 2 therapy doses, 3 months apart</td>
</tr>
<tr>
<td><strong>Primary endpoint under SPA</strong></td>
<td>25% of study patients respond (&gt;50% reduction in anti-hypertensive medication)</td>
</tr>
<tr>
<td><strong>Secondary objectives</strong></td>
<td>Proportion of subjects with PR by RECIST criteria</td>
</tr>
</tbody>
</table>

**Next Steps** Restarted trial in January; expect to complete enrollment by year-end
AZEDRA Phase 2 Tumor Response Rates
85% had measurable decrease in tumor size

Response Rates Measured by RECIST
Best change in sum of target lesion diameters from baseline at any time point

- Progressive Disease
- Stable Disease
- Moderate Response
- Partial Response

Presented at ISP September 2014
AZEDRA Phase 2 Survival Data

- **Median survival** as of June 2014 is **43.3 months** for patients that have received 2 doses
- Long-term follow-up continues

![Graph showing survival rates over time with different curves for 1 dose, 2 doses, and combined. P < 0.0001, n=34 for 2 doses, and n=7 for 1 dose.](image)

Presented at ISP September 2014
PSMA Targeted Pipeline

1404 Diagnostic Imaging Agent Prostate Cancer

PSMA ADC Therapeutic Prostate Cancer

1095 Small Molecule Therapeutic Prostate Cancer
1404 Diagnostic Imaging Agent

• Radiopharmaceutical product candidate targeting PSMA
• Positive Phase 2 data: higher detection rate vs. MRI
• Potential to transform clinical practice with improved detection and monitoring

“New molecular imaging modalities are urgently needed.”

-Jonathan W. Simons, MD
President and CEO of the Prostate Cancer Foundation
# 1404 Phase 2 Study Design

**Patient Population**
- Biopsy confirmed adenocarcinoma of the prostate gland
- At high-risk for metastatic disease, clinically localized
- Prior neo-adjuvant therapy for prostate cancer was not excluded

**N**
- 104 evaluable patients

**Primary Endpoint**
- Detection of disease; gland level disease vs. histopathology

**Secondary Endpoint**
- Location, extent of disease within gland; lymph nodes/regions vs. histopathology; comparison to MRI (gland & lymph nodes)

Surgeons and pathologists blinded to 1404 results

<table>
<thead>
<tr>
<th>MRI/ Bone Scan</th>
<th>( ^{99m} \text{Tc-MIP-1404 Dosing} )</th>
<th>SPECT/ CT Imaging</th>
<th>Prostatectomy with EPLND</th>
<th>Histopathology of prostate &amp; LN</th>
</tr>
</thead>
</table>
Detecting Prostate Cancer in the Gland

MRI

Gleason 4+5 Lesion
Detecting Prostate Cancer in the Gland

1404 SPECT/CT

Gleason 4+5 Lesion
Detecting Prostate Cancer in the Gland Histopathology

Gleason 4+5 Lesion
1404 Detecting Prostate Cancer in the Gland

MRI

1404 SPECT/CT

Gleason 4+5 Lesion

HISTOPATHOLOGY
**Phase 2 Results:**

**1404 Has Higher Detection Rate vs. MRI**

1404 detected cancer in the prostate gland with a high degree of sensitivity:

- Higher detection rate than matched MRI
- Identified 8 more patients with cancer than MRI

1404 readers identified 14 (19%) more patients with suspicious lymph node sites than MRI

<table>
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<tr>
<th></th>
<th>Sensitivity</th>
<th>90% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR Reader</td>
<td>86% (84/98)</td>
<td>(0.79-0.90)</td>
</tr>
<tr>
<td>SPECT/CT Readers</td>
<td>94% (92/98)</td>
<td>(0.88-0.97)</td>
</tr>
</tbody>
</table>
1404 Uptake Correlates with Gleason Score
Opportunity for 1404 at Multiple Points in the Treatment Path

1404: Potential for Broad Utility

- Improve Detection
  - Build on Phase 2 data demonstrating higher detection rate than standard of care
  - Detecting cancer missed on biopsies
- Guide Biopsy
- Determine Staging
- Develop Treatment Plan
  - Discriminate between indolent and clinically significant disease
  - Pursuing a software toolkit
- Enable Active Surveillance
- Assess Biochemical Relapse
PSMA ADC: First-in-Class Targeted Therapeutic

Targets PSMA
Fully human antibody to PSMA linked to MMAE

Highly Active
Robust and potent activity with favorable tolerability profile in Phase 2

Biomarkers Identified
Low NE and High PSMA
CTC reductions of greater than or equal to 50% in greater than 75% of patients
PSMA ADC: CTC Responses in Chemo-Naïve Patients

CTC reductions of greater than or equal to 50% in **89%** of patients
Biomarkers Correlate CTC Response to PSMA ADC

Evaluable chemo-naïve patients (≥5 CTCs at baseline)

<table>
<thead>
<tr>
<th></th>
<th>&gt;50% Decline</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with low NE (7)</td>
<td>100% (7)</td>
<td>71% (5)</td>
</tr>
<tr>
<td>Patients with high PSMA intensity on CTC’s (9)</td>
<td>89% (8)</td>
<td>56% (5)</td>
</tr>
<tr>
<td>Patients with both biomarkers (3)</td>
<td>100% (3)</td>
<td>100% (3)</td>
</tr>
</tbody>
</table>
PSMA ADC: Best Overall Radiologic Response*

* At any time point, includes responses where repeat imaging is not available to confirm durability; tumors measured and followed by RECIST 1.1/PCWG2

<table>
<thead>
<tr>
<th>Response</th>
<th>Total Evaluable Patients n=91</th>
<th>Chemotherapy Naïve Patients n=29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Response</td>
<td>1 (1%)</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>Partial Response</td>
<td>5 (5%)</td>
<td>4 (14%)</td>
</tr>
<tr>
<td>Stable Disease</td>
<td>72 (79%)</td>
<td>22 (76%)</td>
</tr>
<tr>
<td>Progressive Disease</td>
<td>13 (14%)</td>
<td>2 (7%)</td>
</tr>
</tbody>
</table>
1095: PSMA Targeted Small Molecule Theranostic for Prostate Cancer

- Targeted small molecule radiotherapeutic that selectively binds to PSMA
- Delivers lethal dose of radiation directly to prostate cancer cells with minimal impact on surrounding healthy tissue
- Compassionate use study in advanced prostate cancer
- Primary study site for Phase 1: Memorial Sloan Kettering, the Coordinating Center for the Prostate Cancer Clinical Trials Consortium (PCCTC)
- 1095 markedly reduced PSA levels in a heavily pretreated group of 25 evaluable patients, and reduced bone pain

Best PSA Response in 25 patients

Progenics Pharmaceuticals

RELISTOR
Opioid-induced constipation
• Marketed by Valeant
• Subcutaneous formulation approved for patients with insufficient response to laxatives with:
  • OIC in advanced illness who are receiving palliative care
  • OIC in chronic, non-cancer pain
  • All patients with OIC (Europe)
• Valeant to file NDA for RELISTOR Oral by end of 2Q15

• Royalty scale based on WW net sales, ranging from 15%-19%
• Commercial milestones totaling up to $200M, including $10M on first $100M in sales
• Entitled to receive 60% of revenues received by Valeant from ex-U.S. sub-licensees
• $50M milestone upon U.S. approval of RELISTOR Oral
Recent and Upcoming Milestones

✓ Restart pivotal Phase 2 AZEDRA Trial
✓ Meet with FDA to determine next steps for 1404
✓ Present Data from Phase 2 PSMA ADC Trial (Chemo Naïve Cohort)

- NDA Filing for RELISTOR Oral (Valeant)

- Initiate Phase 1 Trial for 1095
- Initiate Pivotal Trial for 1404

- Complete enrollment in pivotal Phase 2 AZEDRA trial

Q1 2015

Q2 2015

2H 2015

4Q 2015
Targeting and Treating Cancer
Mark R. Baker, Chief Executive Officer
Jefferies Healthcare Conference
June 2015