Forward-Looking Disclaimer

These slides accompany an oral presentation by NewLink Genetics Corporation, which contains forward-looking statements. The Company’s actual results may differ materially from those suggested here. Additional information concerning factors that could cause such a difference is contained in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2013 and other prior and subsequent regulatory filings.

NASDAQ: NLNK
NewLink Genetics
Building a Fully Integrated Cancer Immunotherapy Company

- Deep pipeline of biologic and small molecule oncology candidates
- Phase 3 product in resected pancreatic cancer
- Collaboration with Genentech for NLG919 and IDO/TDO pipeline
- Ebola vaccine developed by Public Health Agency of Canada
- Founded in 1999; Currently 120+ employees
NewLink Genetics

Targeting Immune Escape

Two distinct, proprietary platforms that harness multiple components of the immune system to combat cancer

HyperAcute™ Vaccines

Inducing Immune Activation

IDO Pathway Inhibitors

Blocking Immunosuppression
# HyperAcute Immunotherapy

## Summary of Significant Near-Term Clinical Trials

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>INDICATION</th>
<th>DESIGN DETAILS</th>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algenpantucel-L</td>
<td>Pancreatic cancer (resected)</td>
<td>IMPRESS: algenpantucel-L + standard of care; randomized</td>
<td></td>
<td></td>
<td>ENROLLMENT COMPLETE*</td>
</tr>
<tr>
<td></td>
<td>Pancreatic cancer (borderline resectable or locally advanced)</td>
<td>PILLAR: algenpantucel-L + chemotherapy; randomized</td>
<td></td>
<td></td>
<td>ENROLLMENT MID 2015</td>
</tr>
<tr>
<td>Tergenpumactucel-L</td>
<td>NSCLC (advanced or metastatic)</td>
<td>Tergenpumactucel-L vs. docetaxel and controlled for follow on chemotherapy; phase 2b/3; randomized</td>
<td></td>
<td></td>
<td>ENROLLMENT 2H 2015</td>
</tr>
</tbody>
</table>

*IMPRESS second interim look expected Q1 2015
HyperAcute Immunotherapy
Educating the Immune System to Attack Cancer

Pre-Existing “HyperAcute” Anti-α-gal Antibody Response

**LEADS TO...**

1. **Cellular Infiltration:**
   - APCs, NK, NK-T cells
   - Eosinophilia, anti-Parasitic-Like

2. **Humoral Immunity:**
   - Anti-Tumor Antibodies

3. **Cellular Immunity:**
   - Tumor-specific T cells
HyperAcute Immunotherapy
Scale-up & Production

- Disease specific yet NOT patient specific (Allogeneic)
- Established, scalable production methodology
- Well characterized identity and potency
Pancreatic Cancer

Epidemiology & Pathophysiology

- 2nd leading cause of cancer death in U.S. by ≈2020*
- All stages, 5 year survival** < 5%
- Stage IIB, resected, 5 year survival** <8%

Resection rate 20-25% U.S.*

Post resection standard of care
  - Chemotherapy +/- Radiotherapy
  - Gemcitabine +/- 5FU Concurrent Radiotherapy

**Annual Incidence in Major Markets**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>U.S.*</th>
<th>Europe</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td>117,000</td>
<td>43,000</td>
<td>45,000</td>
<td>29,000</td>
</tr>
</tbody>
</table>

*AACR Journal (PanCan)
**Bilimoria et al., Cancer; August 15, 2007: Volume 110, Number 4: 738-744
## Algenpantucel-L Phase 2 Results

**Anti-CALR Ab Elevation Correlates with Improved OS**

### Table

<table>
<thead>
<tr>
<th>Anti-CALR Ab</th>
<th>Increased Ab</th>
<th>No Increase</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Median)</td>
<td>31</td>
<td>33</td>
<td>64</td>
</tr>
<tr>
<td>OS (months)</td>
<td>&gt;35</td>
<td>19.2</td>
<td>P &lt; 0.04 (log rank test)</td>
</tr>
<tr>
<td>Survival Rate</td>
<td>55%</td>
<td>21%</td>
<td>P &lt;0.01 (Fisher’s exact test)</td>
</tr>
</tbody>
</table>

### Graph

- **CALR-RESPONDERS**
- **CALR-NON_RESPONDERS**

*P value* 0.0336

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Rossi, G.R. et al, ASCO 2014: Highlights Selected. Poster 3029
Phase 3 Registration Trial - IMPRESS

*Surgically Resected Pancreatic Cancer*

- IMPRESS Trial* (n = 722)
  - Initiated, May 2010 under SPA with the FDA
  - FDA Fast Track and Orphan Drug
  - Open label, 2 arm, randomized study; overall survival primary endpoint
  - Designed to detect ≈20% difference in overall survival at final analysis
  - Post surgical resection patients (adjuvant)
Phase 3 Registration Trial - IMPRESS
*Surgically Resected Pancreatic Cancer*

Accrual Status and Endpoints

- Completed enrollment September 2013 (722 patients)
- Early interim analysis (at 222 events) completed
  - DSMC reported no unanticipated safety events
  - DSMC recommended continuation without modification
- Second interim analysis at 333 events, DSMC report expected Q1 2015
- Final analysis at 444 events (if required) expected 2H 2015
**IMPRESS Patient Characteristics**

*Consistent with Previously Reported Large Studies*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>RTOG 9704&lt;sup&gt;1&lt;/sup&gt; (n=221)</th>
<th>IMPRESS (n=722)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Median)</td>
<td>61</td>
<td>65</td>
</tr>
<tr>
<td>Gender (Male)</td>
<td>53</td>
<td>52</td>
</tr>
<tr>
<td>Tumor Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>85%</td>
<td>80%</td>
</tr>
<tr>
<td>Body/Tail</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>CA19-9 ≥180</td>
<td>9%&lt;sup&gt;2&lt;/sup&gt;</td>
<td>9%</td>
</tr>
<tr>
<td>Tumor Grade (Poor/Undifferentiated)</td>
<td>30%</td>
<td>35%</td>
</tr>
<tr>
<td>Nodal Status (N+)</td>
<td>68%</td>
<td>70%</td>
</tr>
<tr>
<td>Tumor Size (≥3.0 cm)</td>
<td>59%</td>
<td>55%</td>
</tr>
<tr>
<td>High Risk (N+ and/or ≥2.5 cm)</td>
<td>NA</td>
<td>92%</td>
</tr>
</tbody>
</table>

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<sup>1</sup> Regine et al, JAMA 2008; 299(9): 1019-1026

Survival in Resected Pancreatic Cancer

NO Change in Outcomes for Over Three Decades

Median OS ≈ 19 Months

N=1,687

He, J, Et al, HPB, Volume 16, Issue 1, January 2014
Commercialization Strategy
*Algenpantucel-L for Patients with Pancreatic Cancer*

- NewLink plans to execute an independent US commercial launch
  - Establish experienced oncology commercial team
  - Leverage key pancreatic surgical centers as hubs
  - Provide strong product support across entire multidisciplinary team

- Key launch components currently being assembled
  - Utilizing state of the art cold chain distribution technology & services
  - Conducting reimbursement analysis & establishing support services
  - Corporate & product branding initiatives underway

- Pursuing partnerships for ex-U.S. commercialization
  - Anticipate EMEA submission with IMPRESS results
  - Partnership discussions to follow IMPRESS results
IDO Pathway Inhibitors
Indoleamine 2,3-dioxygenase (IDO)

“Disrupting mechanisms by which tumors evade a patient’s immune system.”

NewLink Genetics IDO Pathway Inhibitors
NLG919
Indoximod
Key Immune Checkpoints

Interrelations of CTLA-4, IDO and PD-1 Pathways

CTLA-4 ↔ IDO → PD-L/PD1

IDO(+) pDC

IDO(−) DC

IDO activated Tregs up-regulate PD-ligands on DCs

Based on Sharma et al ... and DH Munn J. Clin. Invest., 2007
NewLink Genetics IDO Program

Developing Two Distinct IDO Pathway Inhibitors

- **NLG-919**
  - Potent direct inhibitor of IDO protein
  - Orally administered, small molecule
  - Partnered with Genentech

- **Indoximod**
  - Orally administered, small molecule
  - Ongoing randomized phase 2 trials combining with chemo/vaccine
  - Carved out of Genentech collaboration
NewLink/Genentech Collaboration

Broad and Positive Industry News Coverage

“One of the richest deals in immune-oncology”, Biren Armin, Jefferies

NewLink in $1 billion deal with Roche to develop cancer drug

Genentech pays $150M upfront to partner on NewLink’s immuno-oncology drug

Top Story: NewLink lands $150M upfront from Genentech

Genentech strikes rare $1.15B cancer pact with NewLink Genetics
Indoximod
IDO Inhibition Synergy w CTLA-4 Blockade
Induces Regression of Established Tumors

Holmgaard et al, JEM 2013,
Indoximod
IDO Inhibition + CTLA-4 + Vaccine
Synergizes with CTLA-4 Blockade plus Vaccine

Holmgaard et al, JEM 2013,
# Indoximod

## Summary of Significant Clinical Trials

<table>
<thead>
<tr>
<th>Indication</th>
<th>In combination with…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metastatic breast cancer</td>
<td>Docetaxel or paclitaxel</td>
</tr>
<tr>
<td>Glioblastoma</td>
<td>Temozolomide</td>
</tr>
<tr>
<td>Advanced melanoma</td>
<td>Ipilumimab</td>
</tr>
<tr>
<td>Metastatic pancreas cancer</td>
<td>Gemcitabine plus nab-paclitaxel</td>
</tr>
</tbody>
</table>
NewLink Genetics

*Ebola Vaccine*

- Exclusive worldwide license from Canadian government
- Recombinant vesicular stomatitis virus (rVSV) vaccine
- Potential for both pre and post exposure use
- GMP manufacturing capacity/potentially millions of doses
- Significant support from DTRA, FDA and other agencies
- Phase I trials in healthy volunteers underway
NewLink Genetics

Targeting Immune Escape

Two distinct, proprietary platforms that harness multiple components of the immune system to combat cancer

HyperAcute™ Vaccines

Inducing Immune Activation

IDO Pathway Inhibitors

Blocking Immunosuppression

Immune Escape