Taiwan’s Premier Biopharma and the future leader in Immuno-Oncology
Safe Harbor Statement

This presentation contains certain forward-looking statements.

These forward-looking statements may be identified by words such as ‘believes’, ‘expects’, ‘anticipates’, ‘projects’, ‘intends’, ‘should’, ‘seeks’, ‘estimates’, ‘future’ or similar expressions or by discussion of, among other things, strategy, goals, plans or intentions. Various factors may cause actual results to differ materially in the future from those reflected in forward-looking statements contained in this presentation, among others:

1. pricing and product initiatives of competitors;
2. legislative and regulatory developments and economic conditions;
3. delay or inability in obtaining regulatory approvals or bringing products to market;
4. fluctuations in currency exchange rates and general financial market conditions;
5. uncertainties in the discovery, development or marketing of new products or new uses of existing products, including without limitation negative results of clinical trials or research projects, unexpected side-effects of pipeline or marketed products;
6. increased government pricing pressures;
7. interruptions in production
8. loss of or inability to obtain adequate protection for intellectual property rights;
9. litigation;
10. loss of key executives or other employees; and
11. adverse publicity and news coverage.

OBI Pharma cautions that this foregoing list of factors is not exhaustive. There may also be other risks that management is unable to predict at this time that may cause actual results to differ materially from those in forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. OBI undertakes no obligation to update publicly or revise any forward-looking statements.

Any statements regarding earnings growth is not a profit forecast and should not be interpreted to mean that OBI’s earnings or earnings per share for this year or any subsequent period will necessarily match or exceed published earnings or earnings per share forecasts of OBI Pharma, Inc.
Corporate Overview

Unique Globo Series Platform

Competitive Market Analysis

Business Strategy & Vision
Corporate Introduction

Founded 29 April 2002
Headquarters Taipei, Taiwan
Subsidiaries OBI Pharma USA, Inc.
OBI Pharma (HK) Limited
OBI Pharma (Shanghai) Limited
Fund Raise 23 Mar 15 NT$ 6.2B (approx US$ 200M)
Market Cap 06 Jun 16 Approx NT$ 91B or ~US$ 2.8B
Chair Michael Chang, PhD
General Manager Amy Huang
Headcount 112 Total (R&D 75)
Website www.obipharma.com/en
OBI’s Mission

Improve health and the quality of life through innovative and cost-effective therapeutics

Focus on the unmet medical needs in challenging diseases – Cancer & Infectious Diseases
Pioneering Leadership

Michael Chang, PhD
Founder & Chairman

Amy Huang
General Manager
World-Class Experience

Tony Yu, PhD
Chief Science Officer

Joanna Meng
Chief Operations Officer
Greater China

Cristina Chang, MD
VP Medicine

Sophia S Lee, PhD
VP Statistic & Biometrics

Phoebe Yu, PhD
VP Translational Science

Richard Tseng, PhD
VP Quality Assurance

Kevin P Poulos
Chief Commercial Officer

Mitch Che
Chief Operations Officer
USA

David Hallinan, PhD
VP Regulatory Affairs

Prepared for Sanford C Bernstein (HK) Limited
Agenda

Corporate Overview

Unique Globo Series Platform

Competitive Market Analysis

Business Strategy & Vision
Innovative Cancer Immunotherapy Pipeline Targeting the *Globo Series* Antigens

**OBI Pharma’s Carbohydrate Discovery Platform**

- **Adagloxad Simolenin**
  - 1st-in-Class Immunotherapy
  - Breast Cancer
  - Ovarian Cancer

- **OBI-833**
  - New Generation Immunotherapy
  - Gastric Cancer
  - Colorectal Cancer
  - Lung Cancer
  - Breast Cancer

- **OBI-888**
  - Monoclonal Antibody targeting *Globo Series*
  - Epithelial Cancers

- **OBI-868**
  - 1st-in-Class GlycoDiagnostic
  - Multiple Cancer Diagnostic

*Globo Series includes Globo H, SSEA 3, and SSEA 4*
## OBI Oncology Pipeline Stages of Development

<table>
<thead>
<tr>
<th>Program</th>
<th>Indication</th>
<th>Pre-Clinical</th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adagloxad Simolenin (A/S)</td>
<td>Breast cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ovarian cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lung Cancer*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gastric Cancer*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Colorectal Cancer*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liver Cancer*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBI-833</td>
<td>Gastric cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Colorectal cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lung cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Breast cancer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBI-888</td>
<td>Epithelial cancers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Planned studies
What is Globo Series?

The Next Era in Cancer Therapy

Breast Cancer Tissue Biopsy

Lou et. al., *Proc Natl Acad Sci U S A.* 2014 Feb 18;111(7):2482-7
Roles of Globo H in the Tumor Microenvironment

Immune checkpoint
- Suppress B cell IgM/IgG production
- Inhibit lymphocyte proliferation
- Reduce cytokine production

Angiogenic Factor
- Induce endothelial cell migration
- Promote tube formation
- Enhance tumor angiogenesis

Cancer Antigen
Antigen presented in cancer cells and cancer stem cells

Lymphocyte
- Notch1
- ID3
- E2A
- ITCH
- ERG2/3
- Degradation

Endothelial cell
- PLCβ1
- PIP2
- IP3
- Ca²⁺

Tumor shedding vesicles containing Globo H Ceramide

J Cancer Sci Ther. 2013. 5(7): 264-70
How broad is the coverage of today’s cancer biomarkers?

Globo Series 60~90%

ER/PR 80%

HER2 23%

Triple Negative 13%

Sources:
GlobalData;
Lou et. al., Proc Natl Acad Sci U S A. 2014 Feb 18;111(7):2482-7
Evolution of OBI’s Carbohydrate Synthesis Technology

One-Pot & Enzymatic Synthesis

---

Glycal Chemistry
- High COGS
- Inefficient synthesis

>100 Steps

Barrier to Carbohydrate-based Drug Discovery

One-Pot Synthesis
- Lower COGS
- Method for CTM production
- ~50 Steps

Barrier to Efficient Large Scale Manufacturing

Enzymatic Synthesis
- Highly efficient
- Minimal purification required
- Further reduced COGs
- Suitable for large scale manufacture

4 Steps
OBI is the only company with a broad “Globo Series” portfolio in late stage development

Globo Series: Globo H, SSEA-3, SSEA-4
### Globo Series widely expressed in 15 different cancers

#### Tumor-Associated Carbohydrate Antigens observed in tissue and cell line studies

<table>
<thead>
<tr>
<th>Tumor</th>
<th>Antigens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melanoma</td>
<td>GM2, GM3, GD2, GD3</td>
</tr>
<tr>
<td>Neuroblastoma</td>
<td>GM2, GD2, GD3, PSA</td>
</tr>
<tr>
<td><strong>Lung</strong></td>
<td>GM2, Forssman antigen, sLe(^x), Le(^y), Globo H, SSEA3, SSEA4</td>
</tr>
<tr>
<td><strong>Mouth</strong></td>
<td>GM2, SSEA3, Globo H, SSEA4</td>
</tr>
<tr>
<td><strong>Esophagus</strong></td>
<td>GM2, Tn, sTn, TF, Globo H, SSEA4</td>
</tr>
<tr>
<td>Small cell lung cancer</td>
<td>GM2, FucGM1, Globo H, PSA, Le(^y), sLe(^a)</td>
</tr>
<tr>
<td><strong>Brain</strong></td>
<td>GM2, GM3, GD2, GD3, Globo H, SSEA3, SSEA4</td>
</tr>
<tr>
<td><strong>Liver</strong></td>
<td>GM2, TF, Le(^y), SSEA3, Globo H, SSEA4</td>
</tr>
<tr>
<td><strong>Bile duct</strong></td>
<td>GM2, GM1, SSEA3, Globo H, SSEA4</td>
</tr>
<tr>
<td><strong>Blood</strong></td>
<td>GM2, GM3, sLe(^x), Le(^y), Globo H</td>
</tr>
<tr>
<td><strong>Kidney</strong></td>
<td>GM2, GM3, GD3, FucGM1, Globo H, SSEA4, Le(^x), Le(^y)</td>
</tr>
<tr>
<td><strong>Breast</strong></td>
<td>GM2, Globo H, SSEA3, SSEA4, TF, Tn, STn, PSA, Le(^y), sLe(^a)</td>
</tr>
<tr>
<td><strong>Prostate</strong></td>
<td>GM2, Tn, STn, TF, RM2, Globo H, SSEA3, SSEA4, Le(^y)</td>
</tr>
<tr>
<td><strong>Colon</strong></td>
<td>GM2, Globo H, SSEA3, SSEA4, TF, sTn, Le(^y)</td>
</tr>
<tr>
<td><strong>Stomach</strong></td>
<td>GM2, Le(^y), sLe(^a), Le(^a), Globo H, SSEA3, SSEA4</td>
</tr>
<tr>
<td><strong>Pancreas</strong></td>
<td>GM2, Globo H, SSEA3, SSEA4, sTn, Le(^y), sLe(^a), sLe(^x), PSA</td>
</tr>
<tr>
<td><strong>Cervix</strong></td>
<td>GM2, GM1, SSEA3, SSEA4, Globo H</td>
</tr>
</tbody>
</table>

ADAGLOXAD
SIMOLENNIN & ACTIVE IMMUNOTHERAPY
Active Immuno-Oncology therapy: A Major Breakthrough in Cancer Therapy

“Most Important Advancement in Medical History”

Cancer Immunotherapy: ASCO’s Advance of the Year

Estimates Sales of $35B a year by 2023

SOURCES: http://j.mp/35billion
Active Immunotherapy: the next step forward in cancer treatment

Passive immunotherapy
- Antibodies produced outside the body
- Protects against disease and helps fight off infection
- In cancer treatment, antibodies attack tumor cells

Active immunotherapy
Stimulates immune system itself to take an active role in attacking cancer cells
Adagloxad Simolenin
A Novel Active Immunotherapy for Cancer

Adagloxad Simolenin: Innovative Glycoprotein
- Co-injected 821
- Fully synthetic glycoprotein
- Induced a robust antibody response

OBI-821: Potent Adjuvant
- Saponin-based adjuvant
- Increases the antigenic response

Induces IgG & IgM targeting Globo Series

Tumor antigen (Globo H)

Protein carrier
KLH

Globo H
Linker

Adagloxad Simolenin Research Codes: OBI-822/821; OPT-822/821; OPT-822/OPT-821
OBI-822 Mechanism of Action

Watch a 3 min animation of our MOA at http://j.mp/moa323
Adagloxad Simolenin
Induces ADCC and CDC Mediated Tumor Apoptosis

**Key Terms**
- ADCC: antibody-dependent cellular cytotoxicity
- APC: antigen-presenting cell
- CDC: complement-dependent cytotoxicity
- CTL: cytotoxic T lymphocyte
- MHC: major histocompatibility complex
- TCR: T-cell receptor

**Diagram Details**
- A/S (Globo H-KLH + adjuvant)
- T cell
- B cell
- NK cells
- Complement
- Tumor cells

**Clinical Outcome**
Clinical outcome highly correlated to IgG/IgM

**Legend**
- Globo H
- KLH
- IgG
- IgM
- Complement
OBI-822/821
Phase I Studies at MSKCC

Conclusions

- Little toxicity
- Improved survival rate
- Metastatic Breast Cancer
- Globo H-specific IgM & IgG
- Commonly observed adverse events: Local skin reactions, Flu-like symptoms: fever, fatigue, myalgia, headache

Adagloxad Simolenin Phase 1: Immunogenicity with favorable safety profile in MBC

**Objective:** Determine toxicity and immunogenicity of Globo H-KLH

**Population:** N = 27 MBC, Stage IV with CR or SD on hormone therapy

**Treatment:** 10 ug of Globo H-KLH and 100 ug of A/S s.c. at weeks 1, 2, 3, 7 and 19

<table>
<thead>
<tr>
<th>Toxicity, n</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local skin reaction</td>
<td>2</td>
<td>111</td>
<td>0</td>
</tr>
<tr>
<td>Rash</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Arthralgias</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Constipation</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cough</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fatigue</td>
<td>21</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Fever</td>
<td>14</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Myalgias</td>
<td>21</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Nausea</td>
<td>38</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Vomiting</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rigors/chills</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pruritus</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Increase in amylase</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Leukopenia</td>
<td>7</td>
<td>2(^a)</td>
<td>0</td>
</tr>
<tr>
<td>Neutropenia</td>
<td>3</td>
<td>1(^b)</td>
<td>0</td>
</tr>
<tr>
<td>Lymphopenia</td>
<td>4</td>
<td>13(^c)</td>
<td>9(^d)</td>
</tr>
<tr>
<td>Anemia</td>
<td>5</td>
<td>0</td>
<td>1(^e)</td>
</tr>
<tr>
<td>Thrombocytopenia</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Personal communication with P. Livingston


1. Chromium release assay; 2. % Specific lysis

KLH, keyhole limpet hemocyanin; CDC, complement-dependent cytotoxicity; ADCC, antibody-dependent cell mediated cytotoxicity; s.c., subcutaneous

Serological Response

<table>
<thead>
<tr>
<th>CDC Activity(^1)</th>
<th>ADCC Activity(^2)</th>
<th>PFS</th>
<th>OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/27 (33%)</td>
<td>8/27 (30%)</td>
<td>11/27 (41%)</td>
<td>21/27 (78%)</td>
</tr>
</tbody>
</table>

\(^1\) Chromium release assay; \(^2\) % Specific lysis

KLH, keyhole limpet hemocyanin; CDC, complement-dependent cytotoxicity; ADCC, antibody-dependent cell mediated cytotoxicity; s.c., subcutaneous

*Both patients had pretreatment grade 1 values.

\(^a\)This patient had a pretreatment grade 1 value.

\(^b\)Twelve patients had pretreatment grade 2 values.

\(^c\)Six patients had pretreatment grade 3 values; 3 patients had pretreatment grade 2 values.

\(^d\)This patient had a pretreatment grade 3 value.

\(^e\)This patient had a pretreatment grade 3 value.
Double-blind, Randomized Controlled Trial
Phase 2/3 of Active Immunotherapy with Globo H-KLH
in Subjects with Metastatic Breast Cancer

Enrollment target reached 21 July 2014
Adagloxad Simolenin Phase 2/3: Double-blind, Randomized, Multinational Study – 9 Injections in 37 weeks

MBC with CR, PR, or SD following 1-2 lines of therapy (chemotherapy or hormone therapy)

N = 349

EXPERIMENTAL ARM
A/S 30 μg/100 μg + cyclophosphamide 300 mg/m² IV
n = 224

PLACEBO ARM
PBS + cyclophosphamide 300 mg/m² IV
n = 124

Phase II study at global level as proof of concept trial and Phase III in Taiwan as an agreement between the TFDA and OBI

aCyclophosphamide given 3 days prior to A/S or placebo
bOne patient randomized to the experimental arm did not receive study drug
mBC: metastatic breast cancer; PBS: phosphate buffered saline; PFS: progression-free survival; OS: overall survival; CR: complete response; PR: partial response; SD: stable disease.
## Summary of Phase 2/3 Study Results

<table>
<thead>
<tr>
<th><strong>Dosage</strong></th>
<th>PFS trending in favor of A/S in all patients completed 9 doses of A/S or Placebo</th>
</tr>
</thead>
</table>
| **Immune Responders** | Significant improvements in PFS and interim OS vs placebo  
Observed in patients who had an immune response to treatment |
| **Percentage of Responders** | 50% of treated patients had a significant antibody response (IgG titer ratio ≥ 1:160) |
| **Molecular Subtypes** | Signal of efficacy in all subtypes, including HER2 +/-, HR+/-, TNBC, all Globo H expression levels |
| **Overall PFS** | Primary Endpoint (PFS) not met |
| **Interim OS** | Trending in favor in treatment group |
| **Safety** | Well-tolerated  
Most common drug-related AE: grade 1/2 injection site reaction |
| **Subjects** | MBC patients with at least 1 prior anti-cancer therapy |
No difference in PFS in all randomized subjects who received at least 1 dose

Data suggests patients need to complete 9 doses of A/S to show a benefit

**Progression Free Survival (ITT)**

<table>
<thead>
<tr>
<th></th>
<th>A/S</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>224</td>
<td>124</td>
</tr>
</tbody>
</table>

**Hazard Ratio**

0.96
(0.74 - 1.25),
p = 0.7728

**Median PFS wks (95% CI)**

A/S: 32.86 (28.4 - 47.6),
Placebo: 40.00 (31.6 - 49.1)

**Total Events**

A/S: 159 (71.0%),
Placebo: 90 (72.6%)

**Median Follow-up:**
A/S: 32.1 weeks, Placebo: 32.4 weeks

---

**Graph:**
- **Progression Free Survival, %**
- **Weeks Since Randomized**
- **A/S**
- **Placebo**

**PFS in the ITT population (all patients received ≥ 1 dose)**
Interim Overall Survival (ITT Population)

Overall Survival by Investigator Assessment

- **OPT-822/821**
  - N=224
  - Hazard Ratio (95% CI): 0.79 (0.51 - 1.22), p = 0.289
  - 4-year Survival, % (95% CI): 69.3 (60.3 - 76.6)
  - Median FU, months: 22.9
  - Total Events, n (%): 50 (22.3)

- **Placebo (PBS)**
  - N=124
  - Hazard Ratio (95% CI): 0.79 (0.51 - 1.22), p = 0.289
  - 4-year Survival, % (95% CI): 60.5 (48.1 - 70.9)
  - Median FU, months: 21.1
  - Total Events, n (%): 35 (28.2)
Patients who can complete the whole treatment seem to benefit

**PFS by Investigator Assessment**

<table>
<thead>
<tr>
<th></th>
<th>OPT-822/821</th>
<th>Placebo (PBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Received all 9 Injections of Study Drug</strong></td>
<td>104 (46.2%)</td>
<td>64 (51.6%)</td>
</tr>
<tr>
<td><strong>Hazard Ratio (95% CI)</strong></td>
<td>0.66 (0.42 – 1.01)</td>
<td>( p = 0.0566 )</td>
</tr>
<tr>
<td><strong>Median PFS (95% CI)</strong></td>
<td>90.1 weeks (80.4 - NA)</td>
<td>72.6 weeks (58.0 - 97.1)</td>
</tr>
<tr>
<td><strong>Total Events</strong></td>
<td>50 (48.1%)</td>
<td>36 (56.3%)</td>
</tr>
</tbody>
</table>

**PFS of Patients who completed all 9 planned injections**

Number of Patients who are still Progression free

<table>
<thead>
<tr>
<th></th>
<th>OPT-822/821</th>
<th>Placebo (PBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>104</strong></td>
<td>104</td>
<td>64</td>
</tr>
<tr>
<td><strong>104</strong></td>
<td>104</td>
<td>63</td>
</tr>
<tr>
<td><strong>104</strong></td>
<td>104</td>
<td>62</td>
</tr>
<tr>
<td><strong>104</strong></td>
<td>98</td>
<td>62</td>
</tr>
<tr>
<td><strong>86</strong></td>
<td>86</td>
<td>57</td>
</tr>
<tr>
<td><strong>75</strong></td>
<td>75</td>
<td>44</td>
</tr>
<tr>
<td><strong>68</strong></td>
<td>68</td>
<td>40</td>
</tr>
<tr>
<td><strong>58</strong></td>
<td>58</td>
<td>32</td>
</tr>
<tr>
<td><strong>51</strong></td>
<td>51</td>
<td>28</td>
</tr>
<tr>
<td><strong>43</strong></td>
<td>43</td>
<td>20</td>
</tr>
<tr>
<td><strong>32</strong></td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td><strong>24</strong></td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td><strong>20</strong></td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td><strong>17</strong></td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td><strong>13</strong></td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

**PFS: 22.5 vs 18.1 months**
PFS Superior in all subtypes including HER2+/-, HR+/-, TNBC

PFS A/S Immune Responder vs Placebo

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>No. of Responder</th>
<th>No. of Placebo</th>
<th>Hazard Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>112</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td>Biologic Subtype</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER(+) and/or PR(+), HER2(-)</td>
<td>89</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Triple Negative</td>
<td>12</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>HER2(+)</td>
<td>11</td>
<td>23</td>
<td></td>
</tr>
</tbody>
</table>

Immune response: IgG titer ratio ≥1:160 at any time after baseline; Ig, immunoglobulin
Adagloxad Simolenin was **well tolerated**

Most common drug-related AE = Grade 1/2 injection reaction

<table>
<thead>
<tr>
<th>TEAE Preferred Term</th>
<th>A/S N=224</th>
<th></th>
<th>Placebo N=124</th>
<th></th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>Events</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Patients with Any TEAE</td>
<td>220</td>
<td>98.2%</td>
<td>2403</td>
<td>119</td>
<td>96.0%</td>
</tr>
<tr>
<td><strong>Injection Site Reaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection Site Erythema</td>
<td>31</td>
<td>13.8%</td>
<td>68</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>Injection Site Pain</td>
<td>25</td>
<td>11.2%</td>
<td>41</td>
<td>2</td>
<td>1.6%</td>
</tr>
<tr>
<td>Injection Site Swelling</td>
<td>23</td>
<td>10.3%</td>
<td>55</td>
<td>1</td>
<td>0.8%</td>
</tr>
<tr>
<td>Fatigue</td>
<td>72</td>
<td>32.1%</td>
<td>112</td>
<td>31</td>
<td>25.0%</td>
</tr>
<tr>
<td>Nausea</td>
<td>79</td>
<td>35.3%</td>
<td>146</td>
<td>40</td>
<td>32.3%</td>
</tr>
<tr>
<td>Vomiting</td>
<td>43</td>
<td>19.2%</td>
<td>73</td>
<td>21</td>
<td>16.9%</td>
</tr>
<tr>
<td>Headache</td>
<td>35</td>
<td>15.6%</td>
<td>48</td>
<td>23</td>
<td>18.5%</td>
</tr>
<tr>
<td><strong>Pyrexia</strong></td>
<td>45</td>
<td>20.1%</td>
<td>62</td>
<td>8</td>
<td>6.5%</td>
</tr>
<tr>
<td>Cough</td>
<td>26</td>
<td>11.6%</td>
<td>37</td>
<td>23</td>
<td>18.5%</td>
</tr>
<tr>
<td>Upper Respiratory Tract Infection</td>
<td>32</td>
<td>14.3%</td>
<td>35</td>
<td>15</td>
<td>12.1%</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>34</td>
<td>15.2%</td>
<td>41</td>
<td>11</td>
<td>8.9%</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>26</td>
<td>11.6%</td>
<td>31</td>
<td>18</td>
<td>14.5%</td>
</tr>
<tr>
<td>Back Pain</td>
<td>25</td>
<td>11.2%</td>
<td>26</td>
<td>16</td>
<td>12.9%</td>
</tr>
<tr>
<td>Arthralgia</td>
<td>23</td>
<td>10.3%</td>
<td>27</td>
<td>17</td>
<td>13.7%</td>
</tr>
<tr>
<td>Constipation</td>
<td>26</td>
<td>11.6%</td>
<td>35</td>
<td>13</td>
<td>10.5%</td>
</tr>
<tr>
<td>Dizziness</td>
<td>25</td>
<td>11.2%</td>
<td>36</td>
<td>14</td>
<td>11.3%</td>
</tr>
<tr>
<td>Insomnia</td>
<td>18</td>
<td>8.0%</td>
<td>22</td>
<td>15</td>
<td>12.1%</td>
</tr>
</tbody>
</table>
CS Huang, MD, PhD
Global Principal Investigator
Professor of Surgery and
Director of the Breast Center at
NTUH, Taiwan

“...[Adagloxad Simolenin] may have a benefit in patients [who] are able to generate an immune response”
Vaccine Encouraging in Immune Responders

Hope Rugo, MD
US Principal Investigator
Prof Medicine Director of University of California San Francisco Helen Diller Family Comprehensive Cancer Center

“In patients receiving the vaccine who generated an IgG titer ≥ 160 at any time during treatment, progression-free survival was superior to placebo…” she reported. “Lack of immune response to the vaccine correlated with very poor outcomes.”

Next Steps for OBI-822-001

Key Sub-Analyses of study data:

• IgG and IgM responses
• Immune responders vs Non-responders vs Placebo
• Globo Series Expression
• Demographic analysis
• Geographic analysis
• Tumor types
Adagloxad Simolenin
Upcoming Milestones

Clinical Milestones
- **Acceptance for presentation** at an upcoming important international congress
- **Presentation of 001 Trial data analysis** at a major cancer meeting
- **Publication of the results** of the data in a major peer-reviewed medical journal
- **1st patient-in** (FPFV) for Global Phase 3 trial

Regulatory Milestones
- **Taiwan CDE data discussions**
- **EOP2 Meetings**: US FDA, EMA, Health Canada
Agenda

Corporate Overview

Unique Globo Series Platform

Competitive Market Analysis

Business Strategy & Vision
There is an urgent unmet need in Metastatic Breast Cancer

Breast cancer = 23% of all cancer in women

>1.5M new cases every year

MBC 5-year Survival <25%

>500,000 die every year

A clear unmet medical need still exists in Oncology therapies

Drugs were evaluated for efficacy using available data from pivotal clinical trials. Primary endpoints, such as progression-free survival (PFS) and overall survival (OS) were assessed. Drug safety was evaluated based on available data from pivotal clinical trials and drug prescribing information as well as GlobalData's primary research with Key Opinion Leaders.

SOURCE: GlobalData, 2015
“Changing the way patients look at cancer treatment”

- Micro doses
- Subcutaneous
- Well-tolerated
- Less frequent dosing
- Trending towards long-term survival
Beyond Breast Cancer
Building the Globo Series Active Immunotherapy Cancer Franchise

Adagloxad
Simolenin
A/S indications priority selection
Based on Incidence, Globo Series Expression, Mortality

Hazard rate (mortality / Incidence) vs. % Globo Series expression

- Colorectal: 1,824,701
- Lung: 1,676,633
- Stomach: 1,360,602
- Pancreas: 1,111,689
- Liver: 951,594
- Mouth: 782,451
- Kidney: 455,784
- Esophagus: 337,860
- Breast: 337,872
- Ovary: 527,624
- Brain: 256,213
- Cervix: 238,719
- Prostate: 1,300,373

Unmet Medical Need

OBI-822 Relative strength
3 factors drive Adagloxad Simolenin Clinical Development
Epidemiology, Mortality Risk, Globo Series Expression

<table>
<thead>
<tr>
<th>Cancers</th>
<th>Mortality (‘000)</th>
<th>Incidence (‘000)</th>
<th>Globo Series Expression*</th>
<th>Risk Ratio Ranking (Incidence/Mortality)</th>
<th>OBI-822 1st-in-Class Active Immunotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>522</td>
<td>1,677</td>
<td>74%</td>
<td>3.2</td>
<td>P2/3 Enrollment Completed</td>
</tr>
<tr>
<td>Ovary</td>
<td>152</td>
<td>239</td>
<td>89%</td>
<td>1.6</td>
<td>On-going P2 IIS</td>
</tr>
<tr>
<td>Pancreas</td>
<td>330</td>
<td>338</td>
<td>100%</td>
<td>1.0</td>
<td>Planned</td>
</tr>
<tr>
<td>Colon</td>
<td>694</td>
<td>1,361</td>
<td>86%</td>
<td>2.0</td>
<td>Planned</td>
</tr>
</tbody>
</table>

SOURCES:
Lou et al. 2482–2487, PNAS, 18 Feb 2014, vol. 111, no. 7;
GLOBOCAN 2012
### Adagloxad Simolenin Future co-development opportunities: Cancers with High *Globo Series* expression

<table>
<thead>
<tr>
<th>Cancers</th>
<th>Risk ratio Ranking (Incidence/Mortality)</th>
<th>Mortality Risks</th>
<th>Incidence Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung</td>
<td>1.2</td>
<td>87%</td>
<td>1,825k</td>
</tr>
<tr>
<td>Prostate</td>
<td>3.6</td>
<td>28%</td>
<td>1,112k</td>
</tr>
<tr>
<td>Stomach</td>
<td>1.3</td>
<td>76%</td>
<td>952k</td>
</tr>
<tr>
<td>Liver</td>
<td>1.0</td>
<td>95%</td>
<td>782k</td>
</tr>
<tr>
<td>Cervix</td>
<td>2.0</td>
<td>50%</td>
<td>528k</td>
</tr>
<tr>
<td>Esophagus</td>
<td>1.1</td>
<td>88%</td>
<td>456k</td>
</tr>
<tr>
<td>Brain</td>
<td>1.4</td>
<td>74%</td>
<td>256k</td>
</tr>
<tr>
<td>Mouth</td>
<td>2.1</td>
<td>48%</td>
<td>300k</td>
</tr>
<tr>
<td>Kidney</td>
<td>2.4</td>
<td>42%</td>
<td>338k</td>
</tr>
</tbody>
</table>

Globo Series: Globo H, SSEA3, SSEA 4

SOURCES: Lou et al. 2482–2487, PNAS, 18 Feb 2014, vol. 111, no. 7; GLOBOCAN 2012
Blockbuster Potential for Adagloxad Simolenin

1. Monotherapy

2. Combination Therapies
   - Current Therapy: Hormone therapy, Chemotherapy, etc.
   - Emerging Therapy: Checkpoint inhibitors PD-1, CTLA-4/6, etc.

3. Maintenance Therapy

4. Theranostic Approach
Strong worldwide IP protection for Adagloxad Simolenin

33 14 4

Patents in Review  Approved Global Patents  Approved US Patents
**Adagloxad Simolenin: Novel Immuno-Oncology therapy with exceptional benefits**

| 1st-in-Class            | • Targets “Globo Series” in multiple cancers  
<table>
<thead>
<tr>
<th></th>
<th>• Fulfills high unmet medical &amp; market needs</th>
</tr>
</thead>
</table>
| **Impressive data**     | • Well-tolerated, Long-term survival  
|                        | • Strong Proof of Concept data               |
| **Specific**            | • Targets Globo Series antigens  
|                        | • Minimal or no apparent effect on healthy cells |
| **Better Quality of Life** | • Few adverse events  
|                        | • Less frequent dosing                       |
| **Strong IP**           | • One-Pot Synthesis  
|                        | • Enzymatic Synthesis                        |
Agenda

Corporate Overview

Unique Globo Series Platform

Competitive Market Analysis

Business Strategy & Vision
OBI Business Model for Success

- **Sufficient Fundraising**
- **Strategic Focus** on high potential markets
- **Strategic Partnership**
- **Mergers & Acquisitions**
OBI presence at Key BIO Business Development 2016 International Meetings

BIO International Convention
The Global Event for Biotechnology
June 6-9, 2016
Moscone Convention Center
San Francisco, CA

BioTaiwan Exhibition
July 21-24
TWTC Nangang Exhibition Hall 4F
Taipei Int’l Healthcare & Medical Cosmetology Expo

BioJapan 2016

BIO-Europe
November 7-9, 2016
Cologne, Germany
OBI Pharma aspires to be... Leading Global Cancer Pharma by 2035

#1 Taiwan Biopharma by 2025

Partnering Revenue & Income (ex-territory)

New Opportunistic Indications (OBI 822, OBI 833)

Core Indications (OBI 822, OBI 833)

OBI 888 Core Indications

Partnering Revenue & Income

Licensing/M&A New targets pipeline & complementary products
THANK YOU!
www.obipharma.com/en