TaiGen Biopharmaceuticals Holdings Ltd.

F*太景 (4157.TWO)

November, 2015
Safe Harbor Statement

This presentation is prepared by TaiGen Biopharmaceuticals Holdings Ltd. (“TaiGen”) and includes forward-looking statements about TaiGen and its business, including but not limited to statements regarding drug discovery, research and clinical development, regulatory approval processes, market opportunities and commercialization. These forward-looking statements are subject to risks and uncertainties and may cause actual events or results to differ materially from our current expectations. Please refer to our prospectus for full disclosure of risks before making an investment decision. This presentation is copyright protected and cannot be reproduced without written permission from TaiGen.
A Research-Driven and Product Focus Company

- An approved product
- A productive R&D platform
- A high value pipeline
Company Highlights

- Founded in 2001 in Taipei and backed by blue-chip investors including MPM Capital and Taiwan National Development Fund
- Led by experienced US-trained management team with pharma experience and proven track record
- NCE pioneer in Greater China with three Class 1.1 drugs in the pipeline
- First product, Taigexyn®, expect to be launched in Taiwan in Q4, 2015 and pending approval in China
- Publicly listed in Taipei Exchange (TPEx) since Jan 2014
- Market capitalization of ~US$ 600M (as of 10/30/2015)
- Number of employees: 80; 75% in R&D with Masters, PhD, and MD degrees
# Seasoned Management Team
Each With 20+ Years in Related Fields

<table>
<thead>
<tr>
<th>Name / Title</th>
<th>Experiences</th>
</tr>
</thead>
</table>
| Ming-Chu Hsu, Ph.D.  
*Founder, Chairman, and CEO*                    | Director, Oncology and Virology Research, Roche                             |
| Richard King, Ph.D.  
*SVP Research*                                     | Director, Discovery, AMRI  
Head, Discovery Chemistry, Hoechst Marion Roussel                          |
| Phillip Huang  
*Chief Commercial Officer in Asia*                | Director China Marketing & Sales, Takeda                                    |
| Peter Tsao, Ph.D.  
*VP Corporate Development*                         | Senior Director, Repros Therapeutics  
Director BD, Mitsubishi Tanabe, Tanabe Seiyaku                              |
| Edward Kuo, M.D.  
*VP Clinical Development*                           | Medical Director, Boehringer-Ingelheim, Pfizer, BMS                        |
| Angel Hsiao  
*Senior Director, Finance Department*              | Project Manager, ShinZe Asset Management Servicing Co. (Consultant to Cerberus Group) |
Reputable Gov’t and Private Institutions Form a Strong Shareholders and BOD Bases

- YFY Group ~34%
- Taiwan National Development Fund, Taiwan Sugar, YaoHua etc. ~31%
- Others ~27%
- Employees ~4%
- Other Institutions ~4%

As of Apr. 11, 2015

- 11 BOD members (3 independent Directors included) and 3 Supervisors
TaiGen’s Focus is NCEs – The Highest Margins in the Value Curve

The Pharmaceutical Industry’s Value Curve

High

TaiGen's Focus: New chemical entity drug discovery & development

Low

Technological and Marketing Complexity

Intermediates/bulk substances

Commodity generics

Conventional dosage forms

Value-added & branded generics

Over-the-counter and new drug delivery systems

Gross Margin

## Highly Differentiated NCEs in the Pipeline

<table>
<thead>
<tr>
<th>NCE</th>
<th>Indications</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nemonoxacin</td>
<td>Community Acquired Pneumonia (Oral)</td>
<td>US IND</td>
</tr>
<tr>
<td></td>
<td>Diabetic Foot Infection (Oral)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Acquired Pneumonia (Oral)</td>
<td>China IND (Category 1.1 New Drug) and/or Taiwan IND</td>
</tr>
<tr>
<td></td>
<td>Community Acquired Pneumonia (I.V.)</td>
<td></td>
</tr>
<tr>
<td>Burixafor</td>
<td>Stem Cell Transplantation</td>
<td>US IND</td>
</tr>
<tr>
<td></td>
<td>Myocardial Infarction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemosensitizer (Solid Tumors)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemosensitizer (Hematological Cancers)</td>
<td>China IND (Category 1.1 New Drug) / Taiwan IND</td>
</tr>
<tr>
<td></td>
<td>Stem Cell Transplantation</td>
<td>China IND (Category 1.1 New Drug) Application under review</td>
</tr>
<tr>
<td>TG-2349 (Furaprevir)</td>
<td>Chronic Hepatitis C</td>
<td>US IND / Taiwan</td>
</tr>
<tr>
<td></td>
<td>Chronic Hepatitis C</td>
<td>China IND (Category 1.1 New Drug) Application under review</td>
</tr>
</tbody>
</table>
### Over 300 Patents Granted for Global IP Protection

- Providing market exclusivity and out-licensing opportunities

<table>
<thead>
<tr>
<th>Product</th>
<th>Type of Patent</th>
<th>Patents Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nemonoxacin (Antibiotic)</td>
<td>Composition of Matter</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Salt Form</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Process</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Use</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Formulation</td>
<td>31</td>
</tr>
<tr>
<td>Burixafor (Stem Cell Mobilizer)</td>
<td>Composition of Matter / Use</td>
<td>74</td>
</tr>
<tr>
<td>Hepatitis C Virus Protease Inhibitor TG-2349 (HCV Protease Inhibitor)</td>
<td>Composition of Matter / Use</td>
<td>55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>314</strong></td>
</tr>
</tbody>
</table>

As of Oct. 31, 2015
Taigexyn® – NCE Antibiotic for Drug-resistant Infections

- Novel, non-fluorinated quinolone, broad-spectrum antibiotic with global IP protection until 2030
- Expect to launch oral formulation in Taiwan and China in Q4 ‘15
- Completed clinical development of intravenous formulation and expect to file NDA in China next March
- Completed two Phase 2 clinical trials in the US in CAP and DFI
- Received QIDP and Fast Track designations from US FDA
- Licensed to Zhejiang Medicine in China and R-Pharm in Russia
- Expect to complete Phase 3 trials of intravenous formulation by Q4 ‘15
- Continue to explore and expand partnerships in other territories
Taigexyn® – Key Message to Prescribers

**Potent**
- Superior activity against MRSA, VRSA, MDRSP, and PRSP

**Broad-spectrum**
- Excellent activity for Gram +ve, Gram -ve, and atypical pathogens

**Low resistance**
- Require mutations in three different bacterial genes

**Convenient**
- Once-daily use
- Oral and IV available

**Effective**
- Exceptional efficacy was shown in 3 CAP and 1 DFI trials

**Safe**
- High tolerability
- Safety profile similar to levofloxacin
Chinese Pharmaceutical and Quinolone Market

- The Chinese pharmaceutical market is ~RMB 614 B (~US$96 B) in 2014, the second largest in the world behind the US.
- Sales of antibiotics in 2014 is ~RMB 78 B and account for almost 25% of the global spending on antibiotics.
- Quinolone is one of the top antibiotic classes with sales of ~RMB 6 B.
- Price per day of two originator’s quinolones for reference:

<table>
<thead>
<tr>
<th></th>
<th>Avelox (Bayer) RMB</th>
<th>Cravit (Daiichi) RMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intravenous</td>
<td>274</td>
<td>108</td>
</tr>
<tr>
<td>Oral</td>
<td>25.2</td>
<td>12.5</td>
</tr>
</tbody>
</table>
Top 5 Quinolone Sales in China 2014

- Zhejiang Xinchang Medicine, TaiGen’s partner in China, is marketing one of the top selling quinolone, Lai Li Xin, in the Chinese market.

<table>
<thead>
<tr>
<th>Company</th>
<th>Product</th>
<th>Sales (RMB Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayer</td>
<td>Avelox</td>
<td>1,589</td>
</tr>
<tr>
<td>Yangzijiang</td>
<td>Zuo Ke (Branded Levo)</td>
<td>1,313</td>
</tr>
<tr>
<td>Zhejiang Medicine</td>
<td>Lai Li Xin (Branded Levo)</td>
<td>990</td>
</tr>
<tr>
<td>Shuanghe</td>
<td>Li Fu Xing (Branded Levo)</td>
<td>489</td>
</tr>
<tr>
<td>Daiichi Sankyo</td>
<td>Cravit (Originator Levo)</td>
<td>488</td>
</tr>
</tbody>
</table>
Burixafor – Next Generation Stem Cell Mobilizer and Chemsensitizer

- Potent and selective CXCR4 antagonist that mobilize stem cells and cancer cells from the bone marrow into peripheral circulation.

- Target indications:
  - Hematopoietic Stem Cell Transplantation (HSCT)
  - Chemosensitization

- Phase 1, and two Phase 2 studies in HSCT were conducted in the US under IND with FDA

- Global IP protection including US, EU, Japan, China until 2028-2029
Burixafor – Simplify Collection/Banking of Hematopoietic Stem Cells for HSCT

- Current Standard of Care requires 5-8 days of G-CSF + 1-4 leukapheresis sessions
- Burixafor monotherapy
  - Can be use alone in multiple myeloma patients to mobilize sufficient stem cells for hematopoietic stem transplantation
- Burixafor + G-CSF
  - Lower total cost of hematopoietic stem cell transplantation (US$100-150K)
  - Reduce number of leukapheresis
  - Reduce hospital stay
  - Reduce number of G-CSF injections (minimize bone pain)

Source: EBMT
Burixafor Mobilized Sufficient CD34+ Cells for Stem Cell Transplants

- In TG-0054-04 in the US, burixafor + G-CSF was able to mobilize $\geq 5 \times 10^6$ CD34+ cells/kg which is sufficient for two transplants in 1 or 2 leukapheresis sessions in all patients.
- These encouraging results warrant the further testing of burixafor in a larger randomized clinical trial.

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Leukapheresis Sessions</th>
<th>CD34+ (x 10^6 cells/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
<td>2nd</td>
</tr>
<tr>
<td>MM</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>MM</td>
<td>✓</td>
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</tr>
<tr>
<td>MM</td>
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<td>MM</td>
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<td>MM</td>
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<td>MM</td>
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</tr>
<tr>
<td>MM</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>NHL</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>NHL</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
High Failure Rate for Harvesting Sufficient CD34+ Cells in Patients

- G-CSF is the mainstay in hematopoietic stem cell mobilization. The failure rate reported in the literature ranges from 5-10% in healthy donors to 30-60% in leukemia and lymphoma patients.

- Failure rate is highly dependent on number of cells to be harvested, the cancer type and treatment regimen

- For example, in Mozobil’s two Phase 3 studies, the failure rate in NHL patients is 76% with G-CSF only and adding Mozobil reduce the failure rate to 34% (A). In MM, it is 44% with G-CSF and 13% for Mozobil + G-CSF (B).
Combination of TG-0054 and Vincristine Significantly Prolonged the Disease-free Survival Time of ALL Model

- Combination of burixafor (20 mg/kg) with vincristine significantly prolonged survival time of mice with ALL. Similar prolongation of survival were seen with burixafor + chemotherapy in models of APL and AML.

- No significant body weight change among different treatment groups suggesting no additive toxicity
Metastatic Prostate Cancer Cells in the Bone Marrow

18F-Fluoride PET


Courtesy of Prof. K. Pienta

From J Clin Investigation 121:1298
Pilot Study of Mobilization and Treatment of Disseminated Tumor Cells in Men With Metastatic Prostate Cancer

This study is not yet open for participant recruitment. (see Contacts and Locations)

Verified June 2015 by Johns Hopkins University

Sponsor:
Kenneth Pienta, MD

Collaborator:
Prostate Cancer Foundation

Information provided by (Responsible Party):
Kenneth Pienta, MD, Johns Hopkins University

Purpose

Hypothesis: Treatment with Burixafor hydrobromido will effectively mobilize metastatic prostate cancer (PCa) cells (i.e. disseminated tumor cells; DTCs) into the blood from the bone marrow. It has been demonstrated that prostate cancer cells have been mobilized out of the bone marrow of mice utilizing an anti-CXCR4 strategy; making them more susceptible to chemotherapy.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Intervention</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate Cancer</td>
<td>Drug: Burixafor Hydrobromido Drug: Docetaxel Drug: G-CSF</td>
<td>Phase 1</td>
</tr>
</tbody>
</table>
# Burixafor – One Drug, Multiple Indications, Expanded Potential

<table>
<thead>
<tr>
<th>Indication</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autologous stem cell transplantation</td>
<td>Already completed one POC trial in multiple myeloma, NHL, HD in the US. Second trial ongoing. Results suggest potential in reducing number of leukapheresis and hospital costs</td>
</tr>
<tr>
<td>Allogeneic stem cell transplantation</td>
<td>Signed agreement with Cellex in Germany to initiate trials in allogeneic poor mobilizers. Potential to apply for orphan drug designation in US/EU.</td>
</tr>
<tr>
<td>Chemosensitization in hematological malignancies</td>
<td>Initiated chemosensitization in acute myeloid leukemia at the Hematological Institute in Tianjin</td>
</tr>
<tr>
<td>Chemosensitization in solid tumors</td>
<td>Signed agreement with Johns Hopkins University Hospital for a pilot study in metastatic prostate cancer</td>
</tr>
</tbody>
</table>
Burixafor – Other Potential Indications

- Studies were performed in myocardial infraction model using mini-pigs
- Results showed that endothelial progenitors cell are being mobilized after administration of burixafor
- Significant improvement in LVEF (left ventricular ejection fraction) compared to the control group was observed
- Seeking partnerships to fully explore the potential
Burixafor – Milestones in the Next 12-24 Months

- TG-0054-04 trials (n=12) expect to be completed by Q4 ‘15. Results will be presented at the upcoming ASH meeting (12/5-8 Orlando, FL).
- Chemosensitization in refractory and relapsed AML– Phase 1/2 study started in China in May 2015.
- TaiGen have initiated discussions with the FDA on advancing burixafor into the next phase.
- Allogeneic HSCT in poor mobilizers – IIT plan to start end of Q1 ’16 at Cellex and Dresden University Hospital. Top-line data in cell mobilization expected in the next 12-18 months.
- Chemosensitization in metastatic prostate cancer – IIT plan to start around Q4 ’15 at Johns Hopkins University. Top-line data in cell mobilization kinetics and biomarkers expected in the next 18-24 months.
Furaprevir – Highly Effective and Affordable HCV Treatment

- Furaprevir is active against all six genotypes of HCV and has the potential to reduce total treatment duration to 12 weeks or less
- Phase 1/2a study was completed under IND with US FDA and results were presented at AASLD.
- A Phase 2 12-week study of furaprevir in combination with peg-interferon and ribavirin the plasma in GT-1b patient is ongoing in Taiwan
- The data to date indicated that HCV RNA levels is undetectable as early as Week 1 after treatment and continue to be undetectable at Week 16 (SVR4=100%)
- Clinical trial authorization (Class 1.1) was submitted to China FDA at the end of April 2015
- The high pricing of the newest DAA treatments make it out of reach for patients even in the richest developed countries. The medical need in many middle income countries with high HCV burden such as China, Taiwan, Brazil, Turkey, Thailand and Ukraine - is still extremely high.
TaiGen’s Near-Term Goals and Long-Term Vision

- Launch and expand indications of Taigeyxn® in China and Taiwan
- Establish Taigeyxn® partnerships in other territories
- Advance Burixafor into Phase 3 clinical development and expedite the path to commercialization
- Develop affordable, highly effective, and shorter HCV treatment regimens using Furaprevir as the anchor of cocktail therapy
- Utilize TaiGen’s NCE platform to develop a sustainable product pipeline
- Develop sales and marketing, manufacturing functions to become a fully integrated pharmaceutical company
Backup
HSCT Market is Growing Steadily

- An estimate of 70,000+ hematopoietic stem cell transplants (HSCT) were performed worldwide in 2013 with a CAGR (2009-2013) of 3.8 and 4.6% for US and Europe respectively.
- Twice as many HSCTs are performed in Europe (39,209) than the US (19,216) in 2013.

Annual Number of HSCT in Europe 1998-2013

Annual Number of Transplant Recipients in the US by Transplant Type

Cancer and transplant statistics from CIBMTR, EBMT, National Cancer Institute, Lymphoma Leukemia Society.
Major Indications of HSCT

- The top three indications for HSCTs are multiple myeloma, NHL and AML. Together these account for 59% (Europe) and 68% (US) of all HSCTs performed in 2013.
- In US, an estimate of 6-8% of MM and AML patients received HSCT as treatment in 2013.
- HSCT in multiple myeloma is growing at 6.8% (US) and 6.3% (Europe) during 2009-2013, above the CAGR of all HSCTs in the same period. AML is growing at 4.1% in US and 5.5% in Europe and NHL at 1.6% in US and 3.1% in Europe.
CXCR4 Antagonist Sensitizes Prostate Cancer in Chemotherapy

Domanska et al. Neoplasia (2012) 14:709-718
Role of CXCR4 and Prostate Cancer

The Role of CXCR7/RDC1 as a Chemokine Receptor for CXCL12/SDF-1 in Prostate Cancer*[S]

Received for publication, September 6, 2007, and in revised form, December 5, 2007. Published, JBC Papers in Press, December 5, 2007, DOI 10.1074/jbc.M707465200

Jianhua Wang†, Yusuke Shiozawa†, Jincheng Wang†, Yu Wang†, Younghun Jung†, Kenneth J. Pienta†, Rohit Mehra†, Robert Loberg†, and Russell S. Taichman†

From the†Department of Periodontics and Oral Medicine, University of Michigan School of Dentistry, the‡Department of Internal Medicine, Division of Hematology/Oncology, and the§Department of Pathology, University of Michigan School of Medicine, Ann Arbor, MichiAa 48109

Research article Related Commentary, page 1253

Human prostate cancer metastases target the hematopoietic stem cell niche to establish footholds in mouse bone marrow

Yusuke Shiozawa,† Elisabeth A. Pedersen,† Aaron M. Havens,†,‡ Younghun Jung,† Anjali Mishra,† Jeena Joseph,† Jin Koo Kim,† Lalit R. Patel,‡ Chi Ying,‡ Anne M. Ziegler,† Michael J. Pienta,† Junhui Song,‡ Jingcheng Wang,† Robert D. Loberg,‡ Paul H. Krebsbach,§ Kenneth J. Pienta,§ and Russell S. Taichman†
Burixafor to Address Unmet Medical Needs in Chemosensitization Market

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>New Cases Per Year*</th>
<th>5-yr Survival Rate</th>
<th>% of Patients Receiving Transplants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute myeloid leukemia</td>
<td>28,000</td>
<td>25.9%</td>
<td>6.2</td>
</tr>
<tr>
<td>Multiple myeloma</td>
<td>45,080</td>
<td>46.6%</td>
<td>7.7</td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>131,645</td>
<td>70.0%</td>
<td>0.3</td>
</tr>
<tr>
<td>Hodgkin lymphoma</td>
<td>17,611</td>
<td>85.9%</td>
<td>0.6</td>
</tr>
</tbody>
</table>

- AML has the poorest 5-yr survival and highest relapse rate among hematological cancers with very few treatment options in the pipeline.
- Co-administration of burixafor and chemotherapeutic agents is expected to lengthen the disease-free survival time and improve patients’ quality of life.
- Burixafor development strategy is to obtain market approval for AML patients undergoing consolidation and/or relapse/refractory patients and eventually be combined with the first-line induction agents.

*7 major markets = US, EU5, and Japan
Data from Datamonitor, SEER

Restricted & Confidential
# Unmet Medical Needs in Metastatic Solid Tumors

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>New Cases Per Year</th>
<th>Metastatic</th>
<th>5-yr Survival Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 Major Markets *</td>
<td>US</td>
<td>Non-metastatic</td>
</tr>
<tr>
<td>Prostate</td>
<td>610,000</td>
<td>220,800</td>
<td>4%</td>
</tr>
<tr>
<td>Breast</td>
<td>600,000</td>
<td>231,840</td>
<td>6%</td>
</tr>
</tbody>
</table>

- Although the five-year survival rate for patients diagnosed with localized prostate and breast cancer is very high, the prognosis for patients with distant metastases drops significantly.
- Treatment options of metastatic cancers are often limited.

*7 major markets = US, EU5, and Japan
Data from GlobalData, SEER