Introduction to the National Health Technology Park in Zhongshan, China
Zhongshan, China

- A city with a population of 3 million
- Located in Southern China in the beautiful Pearl River Delta
- Within the culturally rich Guangdong Province
Zhongshan, China

- One of China’s top ten cleanest air quality cities (2012 nationwide report)
- Lowest crime rate 5 consecutive years (2009-2013)
- Lowest income gap between rural and urban areas
- in all of Guangdong Province
Life in Zhongshan
Hi-Tech Development Zone

• A 36 sq. mile area within Zhongshan focused on biopharmaceutical, electronic information technology, high-end equipment manufacturing and new energy industries.

• Founded in 1990, one of the earliest development zones in China.

• 1000+ companies from 20+ countries; over 20 Fortune 500 companies.

• Gross Industrial Output over 25 billion USD in 2013.
In 2013, the industrial output in the Health Park was 4.4 billion USD with 55% growth over the last three years.
Specialized Parks
Within the Hi-Tech Development Zone of Zhongshan

Hi-Tech Development Zone

- Electronics Park
- Packaging & Printing Park
- High-Tech Park
- Health Park

Brands: Acer, Canon, Toshiba, Mitsubishi Motors, Merck, Sandoz, Casio
Specialized Parks
Within the Hi-Tech Development Zone of Zhongshan

- Electronics Park
- High-Tech Park
- Packaging & Printing Park
- Downtown
- Health Park
- Tsuihang New District
Health Park

Within the Hi-Tech Development Zone of Zhongshan, China

- First national health park in China built in compliance with international GLP, GCP, GMP and GSP standards
- Founded in 1994
- Over 160 companies
- Main industries: biopharmaceutical and medical devices
- Other industries: dietary supplements, drug packaging and distribution and cosmetics
Biopharmaceutical Manufacturing

- 30+ biopharma companies
- Manufacturing of biologics, synthetic drugs and crude drugs
- All facilities meet US FDA, NIH and CFDA GMP standards
Medical Devices Manufacturing

- Haote Artificial Heart Lab
- HOKAI
- Hopefull Medical Equipment

- All companies are supported by key government and trade associations
  - China Association of Medical Equipment
  - Shenzhen Association of Medical Devices
  - Committee for Surgical Implants of Chinese Association of Medical Device Industry
Drug Distribution

- Multi-channel distribution capabilities
- Standardized checking, sorting and storage processes

Jointown

JohnKing Pharmaceutical
Research & Development

Pharmacokinetics Studies

New Drug Pre-Production Pilot Project

Modern Chinese Medicine & Crude Drug Comparison

Large Molecule R&D
Quality Assurance

GDZC Food and Cosmetics Safety Testing Center

Comprehensive Test Center for Health and Medicine

Guangdong’s Quality Surveillance and Testing Institute for Medical Devices

Tianshun Gene Testing Center
Advantages of Developing in Zhongshan’s Health Park
Drug Review Efficiency

• New CFDA review reform program started in Nov 2012
• A local CFDA facility is being built in Guangdong Province
• Local authorization to process new drug and manufacturing technology transfer and contract manufacturing applications
• Guangdong province is the only province with this review infrastructure
Cost Advantages

- Government tax incentives
- Premium real estate at fraction of US cost

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<tr>
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<th>Zhongshan, China</th>
<th>United States</th>
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<tbody>
<tr>
<td>Minimum Wage</td>
<td>$214/ month</td>
<td>$1,160/ month</td>
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<tr>
<td>Manufacturing Technician Annual Salary</td>
<td>$7,335/ year</td>
<td>$48,000/ year</td>
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Established CMOs & CROs

Akesobio Pharmaceutical, CRO

Sunho Pharmaceutical, International CMO Base
Conveniently surrounded by international airports, major sea ports, expressways and railways

- 4 international airports and 2 domestic airports, within 35-100 mile radius
- The port of Zhongshan is one of China’s largest sea ports
- Access to 4 other nearby sea ports
- Many major expressways
- Guangzhou Railway Station, within one hour's drive of Zhongshan, offers rides to all major cities in China
Hospitals

- Zhongshan People’s Hospital
- Zhongshan Bo’ai Hospital
- Zhongshan Traditional Chinese Hospital
- High-Tech Development Zone Hospital

- A major treatment center within the High-Tech Development Zone + 3 other state of the art hospitals within a 15 mile radius
  - Cardiovascular, organ transplant, pediatrics and Ob/Gyn specialties
- Abundance of local facilities for clinical studies
Biopharma Startup Incubators

- Presence of biopharma incubators focused on innovative science and technology
Thank you