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

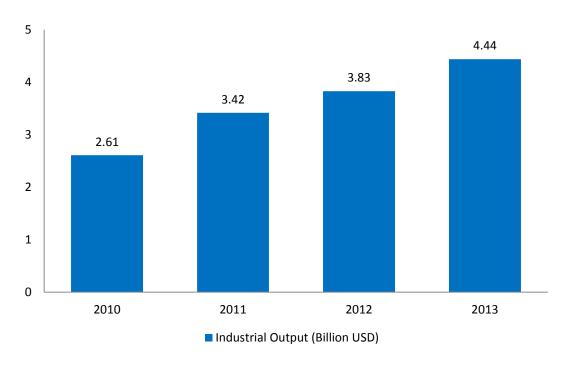


- A 36 sq. mile area within Zhongshan focused on biopharmaceutical, electronic information technology, high-end equipment manufacturing and new energy industries.
- Founded in 1990, one of the earliest development zones in China.
- 1000+ companies from 20+ countries; over 20 Fortune 500 companies.
- Gross Industrial Output over 25 billion USD in 2013.



Growth in Hi-Tech Development Zone

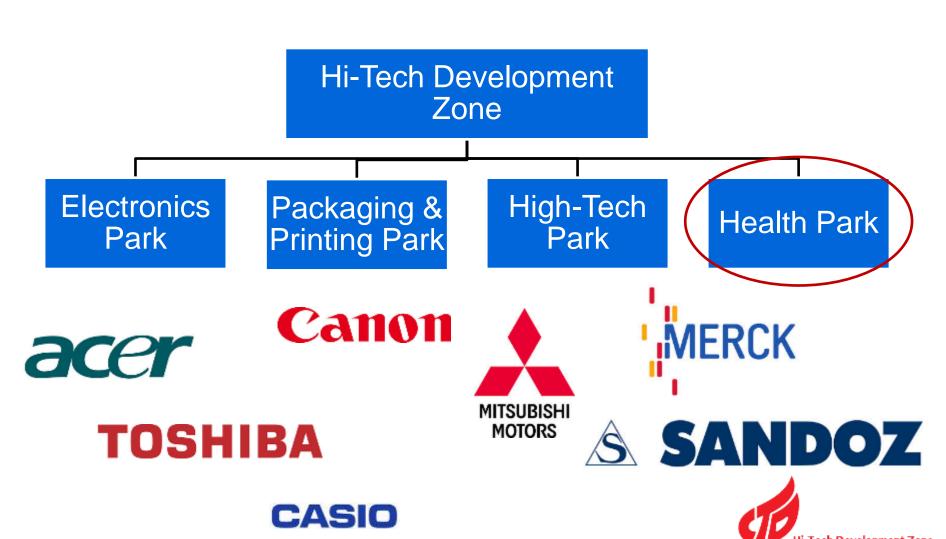
 In 2013, the industrial output in the Health Park was 4.4 billion USD with 55% growth over the last three years.





Specialized Parks

Within the Hi-Tech Development Zone of Zhongshan



Specialized Parks

Within the Hi-Tech Development Zone of Zhongshan



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







Sandoz/ Novartis

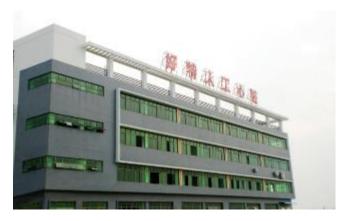
Ferring Pharmaceuticals

A&Z Pharmaceuticals

- 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



Jointown



JohnKing Pharmaceutical

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



Research & Development



Pharmacokinetics Studies



Modern Chinese Medicine & Crude Drug Comparison



New Drug Pre-Production Pilot Project



Large Molecule R&D

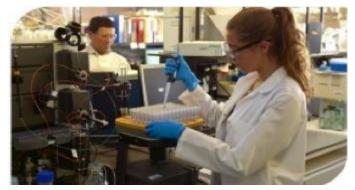
Quality Assurance



GDZC Food and Cosmetics Safety
Testing Center



Guangdong's Quality Surveillance and Testing Institute for Medical Devices



Comprehensive Test Center for Health and Medicine



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

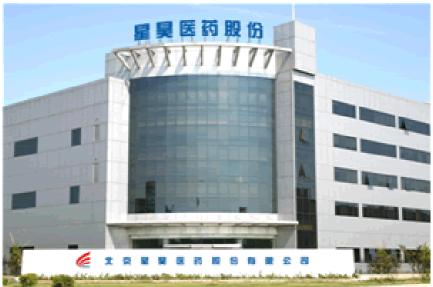
	Zhongshan, China	United States
Minimum Wage	\$214/ month	\$1,160/ month
Manufacturing Technician Annual Salary	\$7,335/ year	\$48,000/ year



Established CMOs & CROs



Akesobio Pharmaceutical, CRO



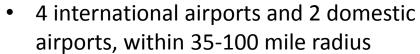
Sunho Pharmaceutical, International CMO Base



Transportation

Conveniently surrounded by international airports, major sea ports, expressways and railways







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 Traditional Chinese Hospital



Zhongshan Bo'ai 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



Biovalley Mansion (Biopharma Incubator)



Zhongshan University Incubator

 Presence of biopharma incubators focused on innovative science and technology



Thank you

