

中國生物科技服務控股有限公司

To Build A Future Biotech Platform

- Precision Diagnosis
- Cellular Therapeutics

Company Introduction

China Biotech Services Holdings Limited is a company listed in Hong Kong Stock Exchange GEM board. Stock code: 8037.HK. It was included in MSCI Hong Kong Micro Cap Index in May, 2018

- Focused in two main areas-- precision diagnosis and cellular therapeutics, it has business in cellular therapeutics R&D, medical testing, cancer precision diagnosis and other areas.
- Located in Guangdong-Hong Kong-Macao Greater Bay Area, focusing on Greater China and beyond.
- Seize opportunities of global precision medicine development, devoted to become a leading **future biotechnology platform.**



Brief History

2020.11.5 CD20 CART-OX40 IND application accepted by CDE



2020.9.14 Sunrise completed 1.6 million COVID-19 tests for Hong Kong residents



2020.6 Established Sunrise Diagnostic Centre with BGI HK to promote PCR test for COVID-19



2019.1 Established AMDL, a joint venture of CBSH and world leading cancer precision diagnostics company Pillar Biosciences.



2018.8 Introduced renowned investors including CCB International Asset Management and Mr. Johnson Chun-shun KO.

2018.7 Acquired Shanghai Longyao Biotech (CAR-T therapeutics)



2018.5.15 Was included in MSCI Hong Kong Micro Cap Index

2017.11.27, Changed to the current name.

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Professional Team

Executive Team



Michael Yao, MD

- Co-Chairman of the Board of Directors
- Former Senior Medical Evaluation Officer at Center for Drug Evaluation & Research,
 FDA and US Federal Medical Officer (Title 38-GS-15-6) for 16 years, reviewed 400+
 IND applications and approved the BLA of 10+ new drugs.
- Lifetime Achievement Award in Cellular & Gene Therapy Products area of FDA
- Chair Professor at PBC School of Finance, Tsinghua University
- Former Research Assistant Professor at MD Anderson, Texas



Prof. Xuanming Yang

- Chief Scientific Officer
- The 12th 'Recruitment Program of Young Professionals Plan' expert
- Assistant Professor at Shanghai Jiao Tong University
- Postdoc in pathology, University of Chicago
- PhD at Center for Infection and Immunity, Chinese Academy of Sciences
- Shanghai Pujiang Program Scholar



Dr. Song Huang

- Chief Technology Officer, Executive Director
- Deputy Director of National Institute of Biological Sciences (NIBS), Beijing
- Director of Synthetic Biology, NIBS
- PhD in Biochemistry from University of Texas
- Bachelor of Biology from Peking University



Mr. Xun He

- Executive Director
- Legal Representative of Longyao Biotech
- Bachelor in Chemical Engineering & Master in Biochemistry, Tsinghua University
- EMBA at National University of Singapore
- Deputy president of Beijing Sinobioway Group Co., Ltd
- Founding chairman of Shenzhen Life Science and Biotechnology Association
- Current CEO of Shenzhen Weiming Xinpeng Biomedical Co. Ltd.



Mr. Anthony Wu

- Chairman of the board of directors of Sunrise Diagnostic Centre
- Served as the chairman of the Hong Kong Hospital Authority for ten years
- Standing member of Chinese People's Political Consultative Conference
- Member of the Deepening Medical Reform Expert Group of the State Council
- Public Policy Expert of the National Health and Family Planning Commission
- Chief advisor of the National Administration of Traditional Chinese Medicine,

Professional Team

Advisory Committee



Dr. Shengli Bi

- Scientific Advisor
- Researcher at Chinese Center for Disease Control and Prevention
- Expert in coronavirus and hepatitis research
- First Chinese researcher to sequence hepatitis C
- Took part in the development of SARS vaccine in 2003
- Postdoc at US CDC, PhD at Chinese Academy of Preventive Medicine



Dr. Yao Shiego

- Senior Advisor to CBSH
- President of the Japan Branch of Shanghai University of Chinese Medicine
- PhD in molecular pathology at Kobe University, Japan
- Former Senior Scientist at P&G USA
- Former Project Leader at Otsuka Pharmaceutical
- Former director of Total Kenko Care, Tokyo

Scientific Advisory Board



Prof. Yangxin Fu

- Chairman of Scientific Advisory Board (SAB) of CBSH & Longyao
- World renowned tumor immunologist
- Professor of Pathology & Chief Physician at UT Southwestern Medical Center
- Articles published on Science, Nature etc., cited over 30,000 times
- Former Professor of pathology at University of Chicago



Prof. Paul Waring

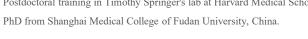
- Chairman of SAB of Asia Molecular Diagnostics Center (AMDC)
- World renowned molecular pathologist
- Former Chairman of Pathology at Melbourne University.
- Former Senior Director of Pathology and Diagnostics & vice President of Medical Innovation at Roche Diagnostics, USA
- PhD in Cancer Biology at the University of Melbourne
- Former Pathology Director at Peter MacCallum Cancer Centre, Melbourne



Dr. Gang Song

Senior Advisor to AMDC & CBSH

- Founder and CEO of Pillar Biosciences, USA
- Former Technical Leader at Integrated Genetics, LabCorp
- Project Leader at IQuum before its acquisition by Roche Molecular Diagnostics
- Postdoctoral training in Timothy Springer's lab at Harvard Medical School





Dr. Xiang Hu

- Member of SAB of CBSH
- Chairman and CEO of Shenzhen Beike Biotechnology Co., Ltd
- Pioneer of stem cell application in China
- Deputy director of National Strategic Alliance of Stem Cell and Regenerative Medicine Industrial Technology Innovation of China
- The 1st batch of the 'Thousand Talents Plan' expert, PhD at Gothenburg University and Chalmers University of Technology, Sweden

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Strategic Layout



*CBSH holds 40% shares of Sunrise. With another shareholder acting in concert with CBSH, CBSH is considered to own 60% of Sunrise.

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Cellular Therapeutics: 3 Patented Tech Platforms

OX40 Co-stimulator Platform

- ✓ Proprietary patented design
- ✓ Lower T Cell Exhaustion Factors
- ✓ Stronger Anti-tumor Effect
- ✓ Lower Apoptosis
- ✓ Stronger Proliferation
- ✓ Higher Effector Molecules

MAX Platform

- √ To use in combination with effector immune cells
- √ Significantly improve the efficacy
- √ Helps to overcome the obstacle of treating solid tumors such as neuroblastoma

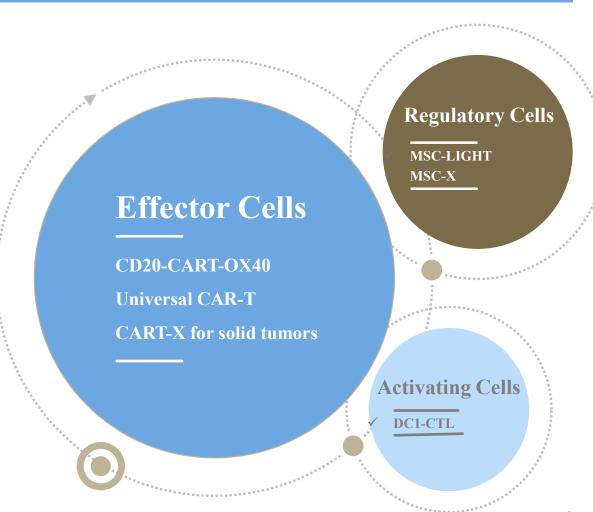
☑ U-CART Platform

- √ Significantly reducing the cost
- √ Off-the-shelf, ready to use
- ✓ Comparable Efficacy to **Autologous CAR-T**
- √ Safety Switch Takes Allogeneic **CAR-T under Control**

Cellular Therapeutics: World Leading Immune Cell Therapeutics Company

Shanghai Longyao Biotech is an immune cell based therapeutics company.

- Among a dozen products in the pipeline, Universal CAR-T (UCAR-T), CD20-CART-OX40 and MSC-L are currently in the process of pre-IND.
- With its innovative and patented co-stimulation design, CAR-T-OX40 boasts much enhanced efficacy. IND application accepted by Chinese CDE for review on Nov 5th, 2020, being the first and only CD20 CAR-T in China to reach this milestone.
- MSC-L is a **first-in-class product** designed to overcome the difficulties in treating solid tumors.
- Our U-CART has its own patented method for knockout and has completed 10 clinical cases.,



Cellular Therapeutics: World Leading Immune Cell Therapeutics Company

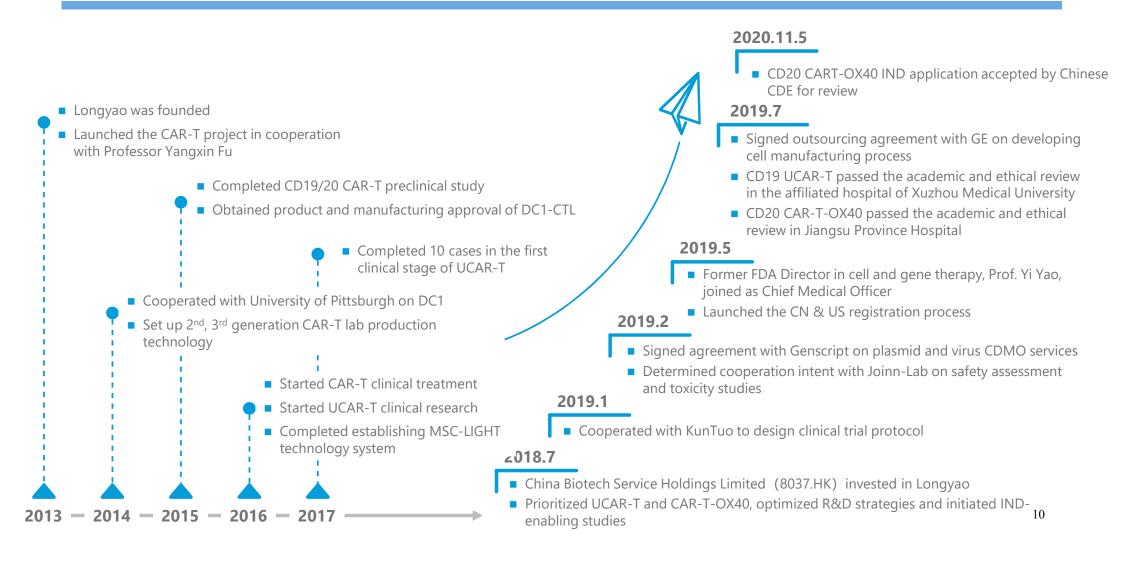
	Target	Scope of Rights	Pre-clinical	Pre-IND	IND	Patent
CD20 CAR-T-OX40	CD20		r/r B cell lymphoma or leuke	mia	2020.11.5 IND accepted by CDE	
CD19 UCAR-T	CD19		r/r B cell lymphoma or leuke	mia		
CD20 UCAR-T	CD20		r/r B cell lymphoma or leuke	mia		
CLDN18.2 CAR-T-OX40	CLDN18.2		Solid Tumors			In Progress
DC1-CTL	NA		Solid Tumors			
DC1-S	NA		Solid Tumors			
MSC-LIGHT	NA		Solid Tumors			
MSC-X	NA		Solid Tumors			

Effector Cell Activating Cell Regulatory Cell





Cellular Therapeutics: World Leading Immune Cell Therapeutics Company



Precision Diagnosis: Long History and Sound Layout

B Four Laboratories

- ✓ PHC Central Lab
- ✓ Asia Molecular Diagnosis Centre
- ✓ Sunrise Diagnostic Centre
- ✓ NGS Lab in Tai Po, Hong Kong

+ 50 Years History

✓ PHC Central Lab was founded in 1969, being one of the oldest medical laboratories in Hong Kong.

☑ Diverse Types of Tests

- ✓ Pathology, blood, biochemistry, imaging, etc.
- ✓ PCR tests
- ✓ NGS

Multiple Certifications

- ✓ CLIA
- √ CAP
- ✓ NATA/RCPA
- ✓ ISO 15189
- ✓ ISO 13485

Precision Diagnosis: International Teams

US Team



Dr. Gang Song
Founder/CEO of Pillar Biosciences
Postdoc at Harvard Univ.
Genetic Engineering Director at Labcorp)
Program leader & Scientist at IQuum



Prof. Dr. Timothy Springer
Professor at Harvard Medical School
Member of NAS & AAAS
Founder of Leukosite



Prof. Dr. Paul Waring
Director of Pathology Dept., Melbourne
Univ.
Former Senior Director of Pathology &
Diagnostics at Genentech



Prof. Dr. Chengzhong ZhangCo-founder of Pillar Biosciences
Assistant Prof. of Biomedicine
Bioinformatician at Harvard Uni.

Hong Kong Team



Anthony Wu
Chairman of the board of directors of Sunrise Diagnostic Centre
10 yrs as Chairman of the Hong
Kong Hospital Authority



Dr. Ning LiDirector of Sunrise Diagnostic Centre
Many yrs experience in molecular
diagnosis



PhD of Bioinformatics at Chinese Academy of Sciences Vice President at BGI

Expert in EU Commission for Innovation & Research



Lawrence Wong
Director of PHC Central Lab
30+yrs experience in diagnosis
field in HK



Michael S.Y. Wah
Director of AMDL
Lab Tech Consultant to PHC
35 yrs experience in medical testing laboratories

Member of
HK Biomedical Scientists Association
HK Society for Molecular Diagnostic Sciences
HK Society of Clinical Chemistry

Associate of UK Institute of Medical Laboratory Science

Associate of Australian Institute of Medical Laboratory Scientist (AIMLS)

Technologist with New Zealand Medical Laboratory Technologist Board (NZMLTB)

Precision Diagnosis: Medical Diagnosis Lab Founded in 1969



50 years of service to a wide range of customers

Precise Health Care Central Laboratory' (PHC Central Laboratory) was established in 1969. It is currently one of the largest third-party medical testing lab in Hong Kong. The company hosts laboratories for pathology, blood biochemistry, radiology and other central laboratories and provides diagnosis service to private doctors in Hong Kong through four MECs (Medical Examination Center).

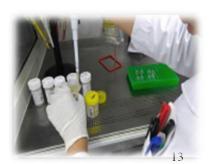
- Long history and well established brand awareness
- More than 500,000 customers/year in Hong Kong.











Precision Diagnosis: V-Care Medical Examination Centers

26 Years of Reliable Service



V-Care was founded in 1994 in Hong Kong. It includes 3 MECs/clinics, located in Causeway Bay, Jordan and Tsuen Wan respectively. V-care provides HPV vaccination, health checkup, COVID-19 antibody testing and other health management and customized services to residents of Hong Kong and Mainland China.



Value-added Services besides Health Examination Reports

Online health management system
Remote report interpretation
Continuous nutritionist advice
Regularly held seminars

Ready to use vaccines
Detailed antibody testing
Professional physicians &
nurses
Strict privacy protection





Precision Diagnosis: Introducing World Leading Technology to HK





Establishing AMDC with Boston Based Pillar Biosciences

In Jan, 2019, CBSH entered into a strategic cooperation with Pillar Biosciences. The joint venture of the two parties, AMDC was established in Hong Kong to bring internationally leading technologies from Harvard to Hong Kong. AMDC has been approved to enter Hong Kong Science & Technology Park.

Pillar Biosciences is a Boston based precision diagnosis company. Its customers and collaborators include many KOLs in the field, such as Illumina, Dana Farber Cancer Institute of Harvard University, Norris Cotton Cancer Center, Columbia University Irvine Medical Center, BGI, Kingmed Diagnostics and Adicon Clinical Laboratories Inc.





Precision Diagnosis: Establishing Sunrise Diagnostic for COVID-19

Establishing Sunrise with BGI Health Hong Kong









Amid the third wave of COVID-19 outbreak, in June 2020, CBSH, BGI Health Hong Kong and Mr. Anthony Wu, the former chairman of Hong Kong Hospital Authority established Sunrise Diagnostic Centre Limited. Equipped with Huo-Yan labs, it has the capacity of testing more than 30 000 samples/day. If needed, the capacity can be enlarged to 130 000 samples/day. Until Oct 5th 2020, Sunrise has completed about 2 million PCR tests for Hong Kong residents, being the largest **COVID-19 PCR test institution in Hong Kong.**

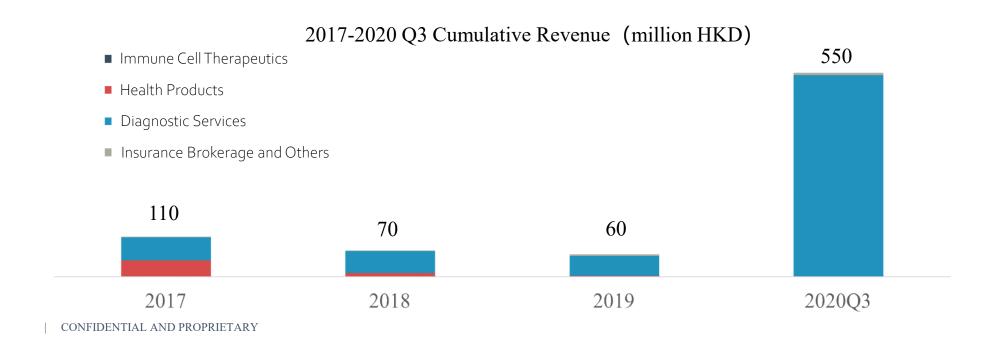
Vaccine: Developing World Class SARS-CoV2 Vaccine



- CBSH is developing recombinant subunit vaccine for SARS-CoV2, temporarily named Bizzavac.
- The technology is transferred from Chinese CDCP. The animal experiments have been carried out and the results are encouraging, with no adverse effects. Right now the experiments on primates are being done. Relevant international IPs have been applied for.

Finance: Turnaround with a Promising Future

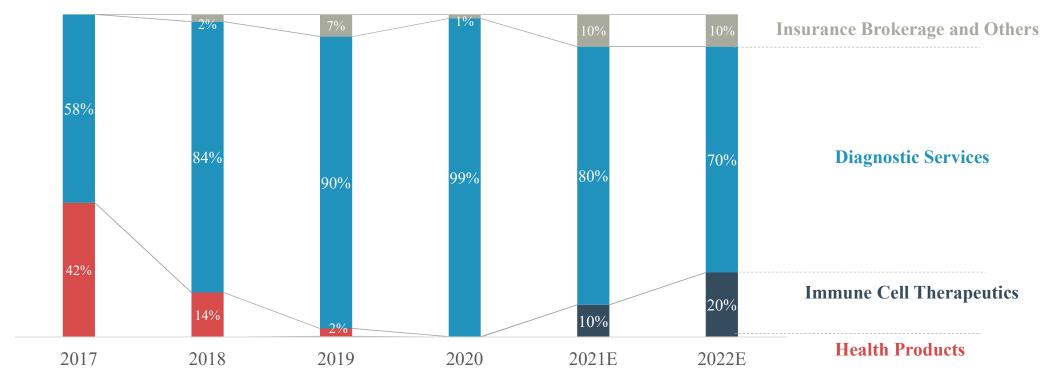
- CBSH estimates that in Q3 2020 it will make a profit of no less than 130 million HKD instead of suffering a loss. In the same period in 2019 it recorded a loss of approximately 60.3 million HKD.
- As Sunrise Diagnostic Centre is still providing COVID-19 testing services to special populations in Hong Kong, the monthly quantity will remain around 100 000 tests, providing a solid basis for sustainable revenue growth.



Finance: Revenue Structure

With the continued development in precision diagnosis and the R&D progress of cellular therapeutics, these two areas are predicted to contribute to the majority of CBSH's revenue in the future.

Historical Revenue Structure and Forecast

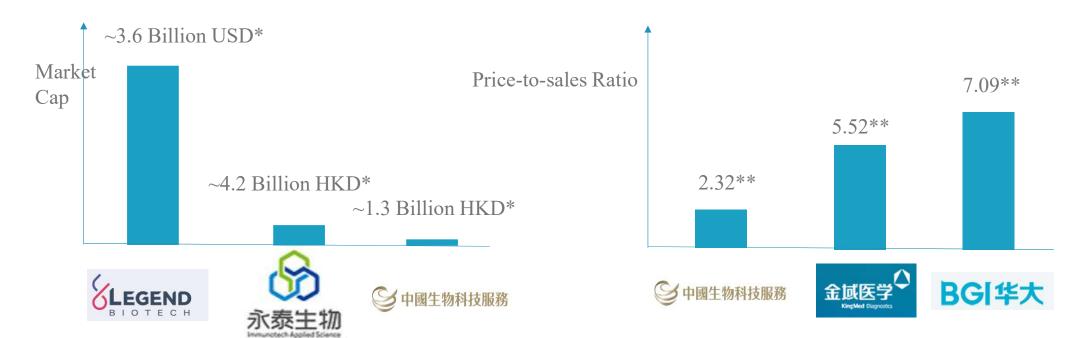


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Market Cap: Great Potential for Growth

Cellular Therapeutics

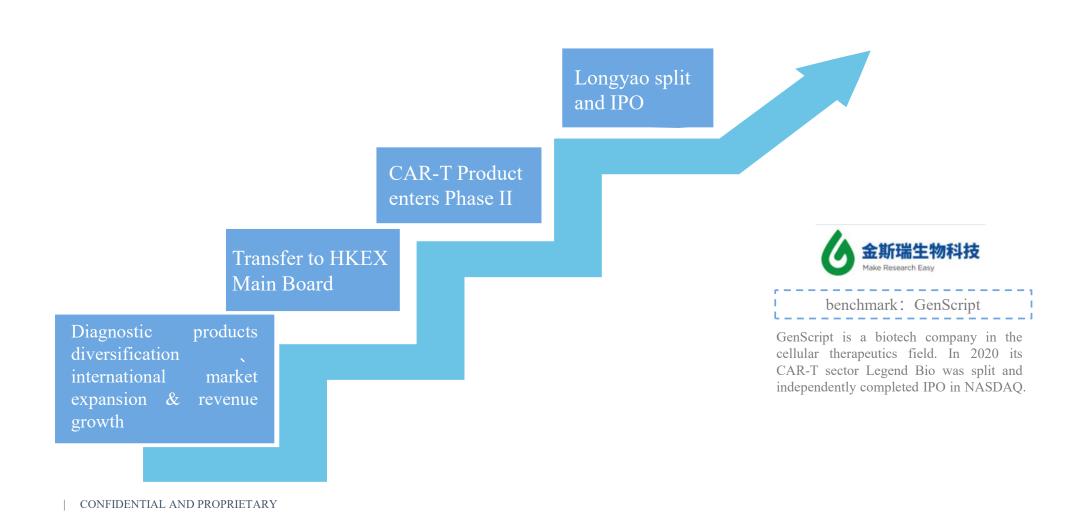
Precision Diagnosis



^{*} until local time Nov 13th, 2020 market closing

^{* *} data of the 12 months before Nov 13th, 2020 CONFIDENTIAL AND PROPRIETARY

Prospect: Become a World Leading Biotech Platform



Strong Collaboration Network

Academic Institutions













Hospitals











Companies

















