Stock code: 300759.SZ Stock code: 3759.HK

## 2021 Annual Results Announcement



28 March, 2022



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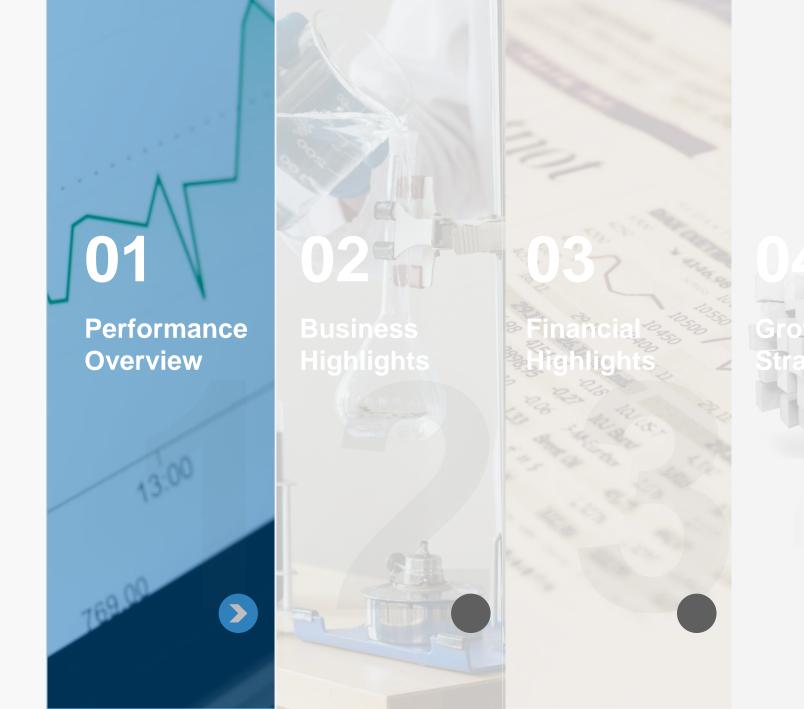
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# CONTENT



## 2021 Performance Overview





## **18 Locations**

Operation sites in China / U.S. / U.K

### >14,900

Employees (>13,400 scientists & technicians)<sup>(1)</sup>

## 1 of Only 2

Platform with a fully integrated busin model globally <sup>(2)</sup>	ness Customers served in 2021

Top 3 Drug discovery service provider globally<sup>(2)</sup>

All Top 20 Global pharmaceutical companies are our customers<sup>(1)</sup>

## $\sim 90\%$ of revenue

From repeat customers<sup>(3)</sup>

## **Over 2000**





#### Robust Non- IFRSs net profit<sup>(4)</sup> Growth



Source: Prospectus, 2019 Annual Report ,2020 Annual Report , 2021 Annual Report, and 2021 Interim Report ,2020H1, 2021H1 ,2020H2 and 2021H2 financials are unaudited.

As of December 31,2021;

By 2020 revenue, Frost & Sullivan analysis;

During FY 2021

Non-IFRSs net profit for the period excludes the impact from certain expense such as share-based compensation expenses, foreign exchange related gains or losses, issuance expense on convertible bonds, Losses on fair value change of convertible bonds-embedded derivative component and realized/unrealized gains or losses from equity investments

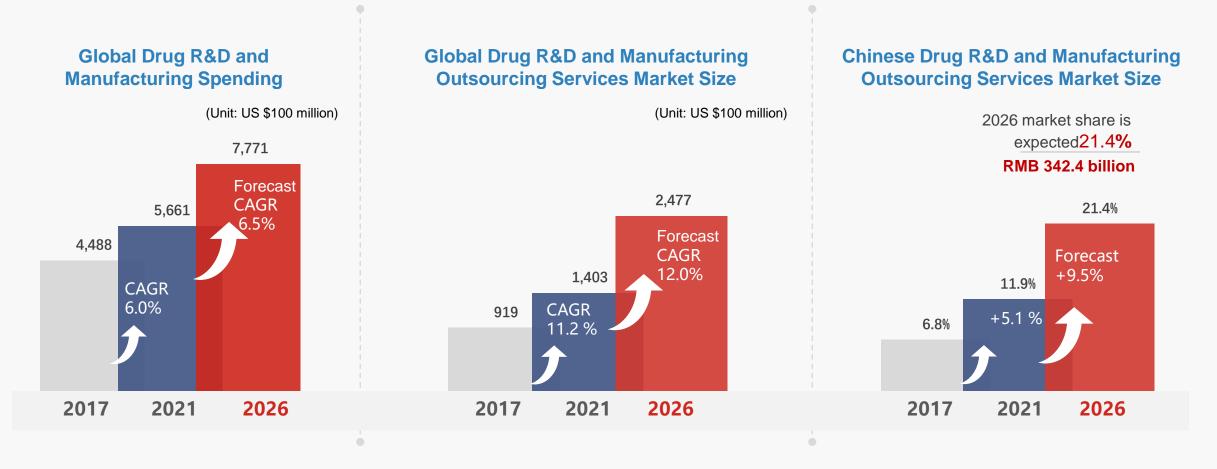
## **Global Footprint**

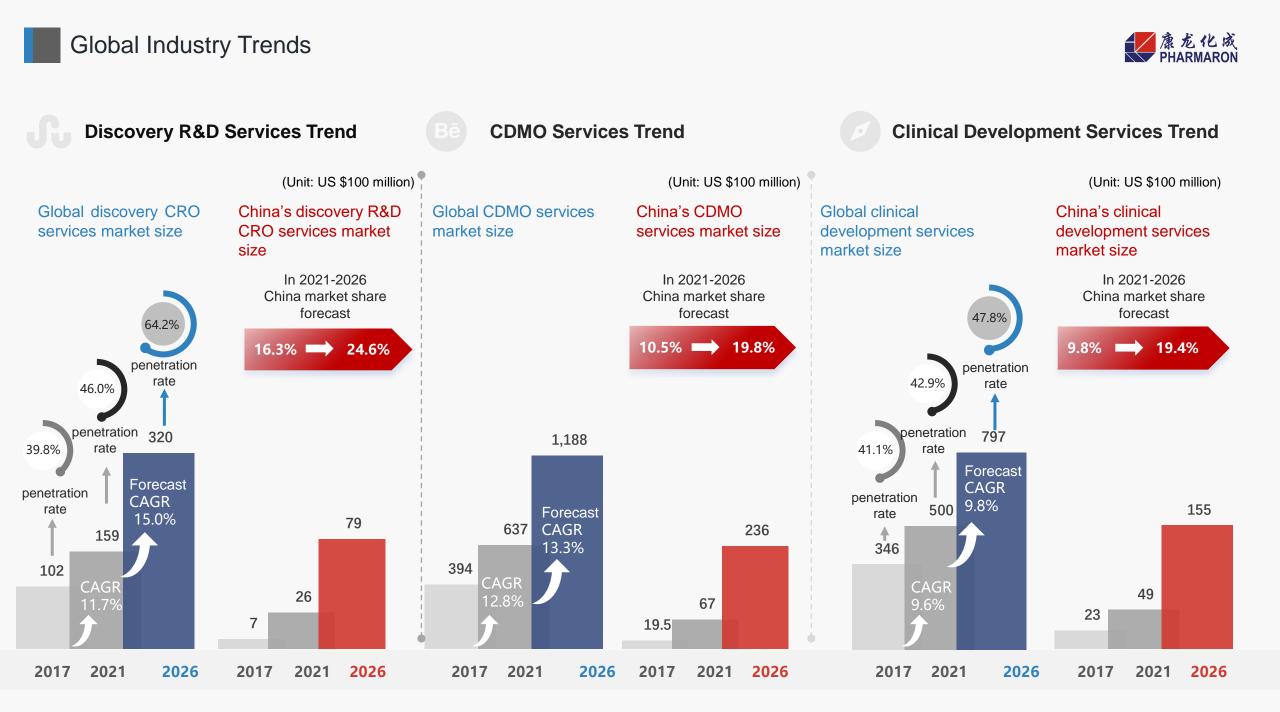




## **Global Industry Trends**

- According to Frost & Sullivan's forecast, the global drug R&D and manufacturing spending from 2021 to 2026 will maintain a stable growth, of which, the pharmaceutical R&D and manufacturing spending in China is expected to grow at a CAGR of 11.2% from 2021 to 2026.
- According to Frost & Sullivan's forecast, From 2021 to 2026, the outsourcing penetration rate of the global drug R&D and manufacturing spending will further increase from 2021 to 2026 and the market share of the Chinese drug R&D and manufacturing outsourcing services is expected to reach 21.4% in 2026.





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Business Highlights

## 2021 Business Segment Highlights

We operate our leading fully-integrated pharmaceutical R&D services platform through four main business segments, namely, Laboratory Services, CMC (Small Molecule CDMO) Services, Clinical Development Services and Biologics and CGT Services, in China, the U.S. and the U.K.

## Laboratory Services

Laboratory chemistry services and Bioscience services (in vitro and in vivo DMPK/ADME, in vitro biology and in vivo pharmacology, safety assessment and U.S. laboratory services).

## Location: China, U.S. and U.K. Revenue RMB 4,565.8 mm Gross Profit RMB1,980.0 mm

#### CMC (Small Molecule CDMO) Services

Chemistry development and manufacturing, material science/ pre-formulation, formulation development and manufacturing, and analytical development services.

#### Location: China and U.K. Revenue RMB 1,746.2 mm

Profit RMB 608.0 mm

#### Clinical Development Services

Overseas clinical development services (radiolabeled sciences and clinical trial services) and domestic clinical development services (clinical research services and site management services covering different service needs of clinical research).

### Location: China, U.S. and U.K.

Revenue RMB 956.4 mm

### **Biologics and CGT Services**

Biologics discovery, development and manufacturing services (CDMO), CGT lab and Gene therapy CDMO services.

## Location: China, U.S. and U.K.RevenueRMB 151.0 mmGross ProfitRMB - 20.9 mm

Rushden Liverpool **Hoddesdon Cramlington** Cardiff Beijing (3 sites) Boston Nanjing Exton San Diego Tianjin Baltimore Xi'an Germantown Shanghai Ningbo Shaoxing Source: 2021 Annual results

## I Laboratory Services



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- Providing customers with more flexible and comprehensive laboratory services through the collaboration of laboratory service teams in China, UK and US.
- With the improvement in capabilities and seamless integration with laboratory chemistry services, bioscience revenue contributed to the laboratory services increased to 46.6% (YoY growth 5.8%).
- Participating in 565 drug discovery projects and 77 IND or NDA filings, of which, 56 projects applied with multiple jurisdictions.
  - Drug safety assessment services passed three GLP field inspections by the US FDA and Belgium OECD, passed the GLP re-inspection by NMPA in 2021. San Diego division of US Laboratory Services passed the GLP field inspection by the US FDA.
  - **7,136** employees, increased by **1,579** in 2021, with **4,900** laboratory chemists and technicians.

#### Infrastructure construction

- Upon the completion of Phase II of the Ningbo Campus I, additional laboratory space for nearly 2,000 laboratory service scientists and technicians.
- First 120,000m<sup>2</sup> of laboratory space of Ningbo Campus I Phase II was gradually in operation starting from the first quarter of 2021.
- > Remaining 42,000 m<sup>2</sup> laboratory space was in the process of internal installation.
- Commenced the construction of 140,000 m<sup>2</sup> safety assessment and *in vivo* bioscience facility in Phase I of Ningbo Campus III and expected to be operational in 2024.
- Expanding the laboratory spaces in Beijing and Xian, and started the laboratory expansion in Qingdao, Chongqing and Zhuhai.
- M&A expansion
- Acquired Biomedical Research (GZ) and Kangruitai in 2021 and increased the Company's NHP colony to nearly 10,000.

Source: 2021 Annual Report. As of December 31, 2021

## Ⅱ CMC (Small Molecule CDMO)



#### Revenue



Process development teams in China and the U.K. cooperated closely to provide customized
solutions in an innovative hybrid mode.

- With the seamless integration of the Company's fully-integrated R&D service platform, ~80% of CMC (Small molecule CDMO) revenue came from the drug discovery services customers.
- Worked on 1,013 APIs or intermediates in 2021, including 754 in pre-clinical stage, 224 in Phase
   I-II clinical trials, 30 in Phase III clinical trial, 5 in process validation and commercialization stage.
- ~80% of CMC (Small molecule CDMO) revenue was generated from preclinical to Phase II clinical trial stages.
- Adhering to the highest international quality standards, the pilot plant in Hoddesdon successfully passed the GMP inspection of MHRA in 2021. Chinese facilities completed 74 QA audits (including audits from global Top 20 pharmaceutical companies) in 2021.
- **2,621** employees, increased by **687** from December 31, 2020.

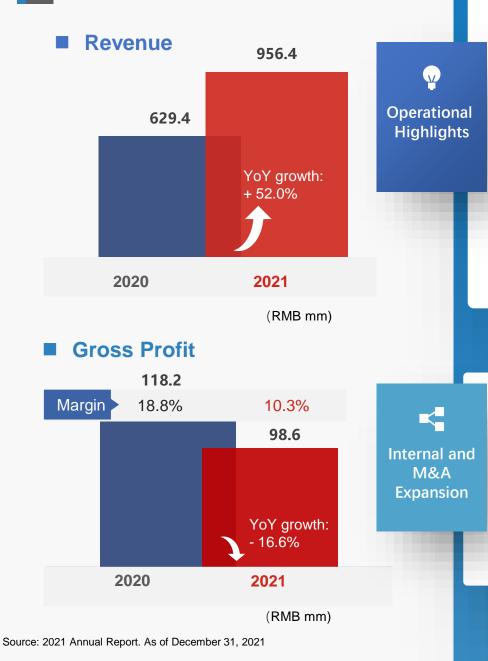
#### Infrastructure construction

- Reactor volume of 200m<sup>3</sup> of Shaoxing Plant Phase1 was operational in early 2022 and the remaining reactor volume of 400m<sup>3</sup> are expected to be operational by mid-2022.
- With Phase III of Tianjin plant (40,000 m<sup>2</sup>) and Phase II of Ningbo Campus I became operation, additional laboratory spaces for nearly 1,000 process and analytical chemists and technicians.

#### M&A expansion

Acquired Cramlington facility in UK in January 2022 with commercial manufacturing reactor volume of 100m<sup>3</sup>.

## III Clinical Development Services



- In 2021, the Company reorganize the clinical development capabilities by optimizing the organizational structure and integrating the domestic clinical development functions including site management, volunteer recruitment, regulatory and medical affairs, clinical operation, data management and biostatistics, pharmacovigilance and quantitative pharmacology, project management and quality assurance, to provide the end-to-end clinical development service throughout all the clinical stages.
- Further strengthen the close collaboration between China and US and provide end-to-end solution in both China and US.
- To support the expansion strategy, 3,357 employees in 2021, increased by 1,149 from December 31, 2020.

- Acquired Enyuan Pharmaceutical and DeltaMed to strengthen the service capabilities in quantitative pharmacology, pharmacovigilance, medical monitoring, medical strategy and medical writing.
- In US, started expanding from early clinical trial services in healthy volunteers to patient clinical studies in 2021.



## IV Biologics and CGT Services



As the Company's mid to long term strategy, began to report biologics and CGT services as a separate service segment in 2021.

Operational Highlights Biologics and CGT laboratory services in the U.S. are gaining customer recognition with rapid increase in both revenue and market share.

Pharmaron Biologics UK as gene therapy CDMO service platform began to take third-party customers orders.

**341** employees, increased by **213** from December 31, 2020.

#### Infrastructure construction

Phase I of Ningbo Campus II (covering nearly 70,000m<sup>2</sup>), is expected to undertake large molecule GMP production service projects in the first half of 2023. After the completion of the project, the Company will be able to provide development services for cell line and cell culture process, upstream and downstream process development, formulation development and fill-and-finish process development and analytics method development, as well as drug substances and product manufacturing services with 200L to 2000L production capacity to support the project from pilot to commercial stage production.

#### **M&A** expansion

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**Internal and** 

M&A

**Expansion** 

Completed the acquisition of Pharmaron Biologics UK in Liverpool, England in the second quarter of 2021 with cGMP manufacturing facilities and over 100 experienced science and technology and production personnel to provides customers with services covering process development and cGMP manufacturing for gene therapy products.

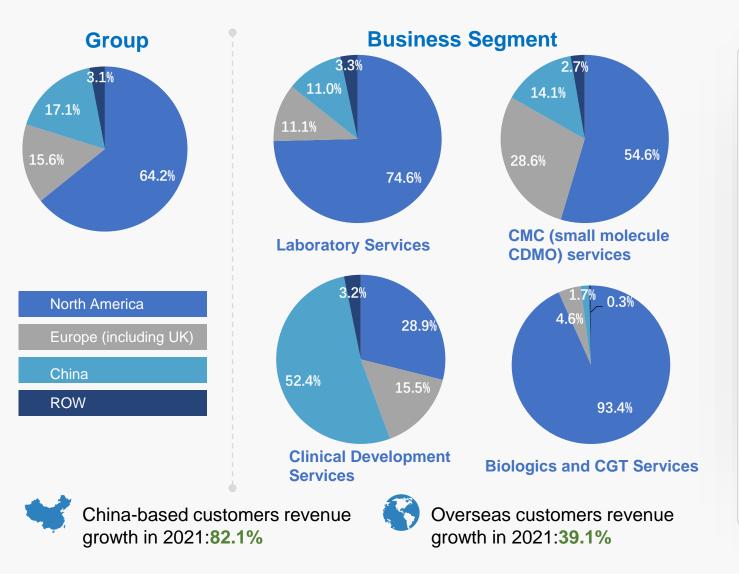
#### Revenue





#### **Geographic Locations of Customers**

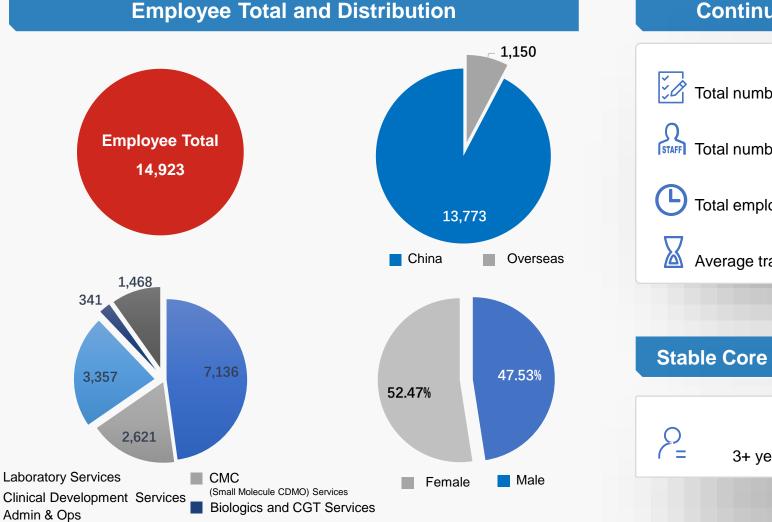
**Customer Structure Further Optimized** 



- With ~90% of the revenue coming from a large, diverse, loyal and repeated customer base that including global top 20 pharmaceutical companies.
- More than **800** new customers addition in 2021.
- Further optimizing the customers mix with reduced customer concentration by 7.3% for the top 20 customers, while the total revenue from the top 20 customers increased by 19.2%.
- Top 20 global pharmaceutical companies contributed to
   19.0% of revenue in 2021.
- Through collaboration with our customers, a total of 29 papers were published on J. Med. Chem., Bioorg. Med. Chem. Lett., and J. Pharm. Sci. and other international scientific journals, together with 27 patent inventorship at home and abroad in 2021.

## **Empowering Talent Development**

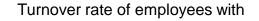
Talent Development: We actively create learning opportunities for our employees and support their growth by offering both systematic and tailored-made trainings to meet their learning and development needs.



## **Continue to Strengthen Learning Culture**

Total number of employee training sessions: 2,621
Total number of employee training participations: 119,128
Total employee training hours: 943,116.50
Average training hours per employee: 63.27

#### **Stable Core Scientific Research and Business Team**



3+ years of service in the Company (%): 2.82%



## Investment in Innovative Technologies



#### **Biocatalysis**

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We produced about 2000 catalytic enzymes and established the enzyme screening and directed-evolution platforms. We also provided services for our clients in identifying high selective enzymes for chiral compound synthesis and production.

#### **Flow chemistry**

Multistep continuous reaction technology, continuous extraction and separation technology, online process analysis PAT technology and automatic control system have been established. From process condition screening to DOE design, a comprehensive flow chemistry service platform has been established. A pilot scale automatic control continuous flow system was established with continuous reaction and continuous extraction, with the capacity of manufacturing of tons of products. A total of nearly 100 projects over kilogram scale had been completed.

## High-throughput experimentation (HTE) platform for reaction condition screening

More than 220,000 conditions screened which optimized nearly 5,000 reactions in 2021.

#### DNA-encoded chemical library technology platform

Over 10 billion new small molecule drug-like compounds with innovative and unique structures in our collections. Many DNA-encoded chemical probes and DNA-encoded compound libraries were effectively synthesized. Submitted 9 patent applications to the Chinese Patent Office, and one research paper has also been accepted by a peer reviewed journal.

#### Chemical proteomics platform

Strength of chemical proteomics platforms by screening covalent binder libraries and established the high-throughput workflow to identify the new targets.

### **Biosciences**

**CMC** (Small Molecule CDMO)

> Laboratory Chemistry

#### Screening assay platform of 3D spheroid and organoid

Established a well characterized 3D liver spheroid model which has been validated by testing the chronic hepatotoxicity of 42 clinical drugs that have been known and classified with different hepatotoxicity categories, against our 3D liver spheroid model and also primary human hepatocyte.

#### In vivo imaging technology platform

Established 270 luciferase-expressed tumor cell lines and 112 orthotopic or metastatic tumor models, which cover 30 different cancers. Provided service for dozens of clients to evaluate the blood-brain-barrier permeability and antitumor effect of test articles by utilizing 31 orthotopic and metastatic brain tumor models.



151

#### Multi-electrode array (MEA) platform on basis of human iPSC-derived cardiomyocyte

Transition from single ion channel assessment to the comprehensive CiPA studies on human cardiomyocytes to achieve the short time cycle for cardiac safety screening. Becomes one of very few CRO companies in China owning both high-throughput patch clamp recording system for single ion channel study and MEA system for real time measurement of cardiac action potentials of human samples.

#### X-ray radiotherapy technology

X-ray irradiator with high energy was introduced and provided services to many clients for a large number of radiotherapy and chemotherapy *in vivo* and *in vitro* studies, which successfully verified mechanism of action and effects of several radiation sensitizers.



#### **ESG Governance**

- Built a three-tiered ESG governance framework with "governance, management, and implementation" level
- Issued and implemented the ESG Management Measures and the ESG Information Management Handbook
- Developed the 2021-2025 environmental targets
- Issue the first standalone ESG Report

#### **Responsible Operations**

- High-quality products
- Innovative technologies
- Quality Services
- Stable and sustainable supply chain

### **Empowering Talent Development**

Equality and diversity

- Talent attraction and retention
- Employee health and safety

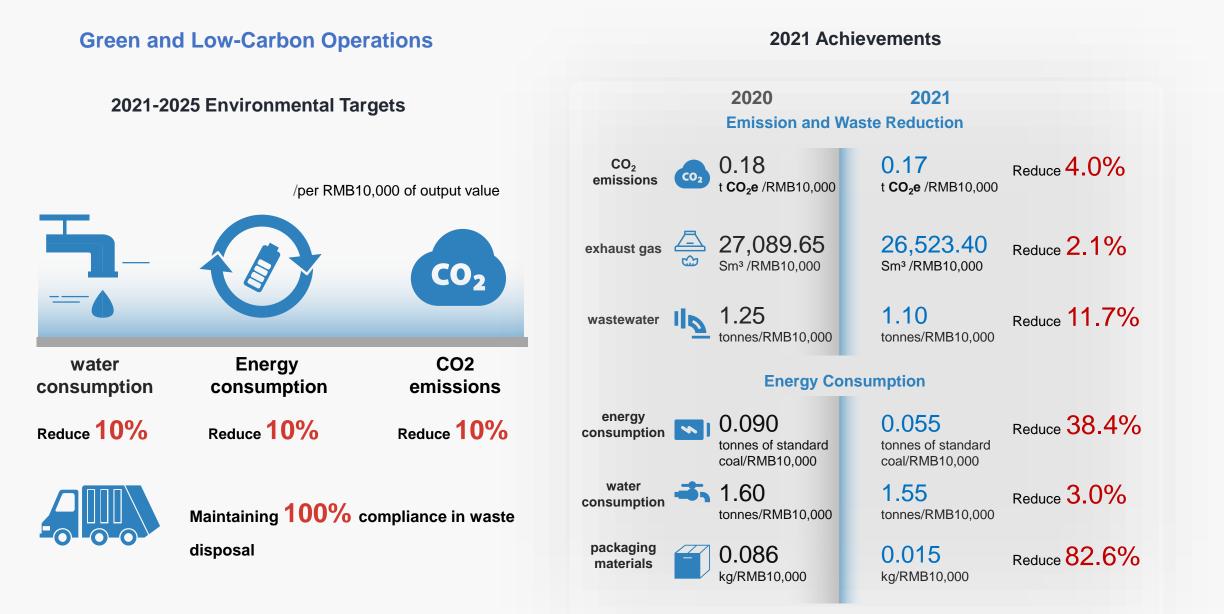
#### **Ethics and Compliance**

- Business integrity, improve regulatory compliance, 0 legal actions due to corruption or fraud.
- Developed information security management policy and protect information security
- Ethics on clinical trials
- Animal welfare

#### **Engaging in Charity and Public Welfare**

Encouraging employee involvement in natural disaster relief, rural revitalization, supporting education and boosting industry development ESG

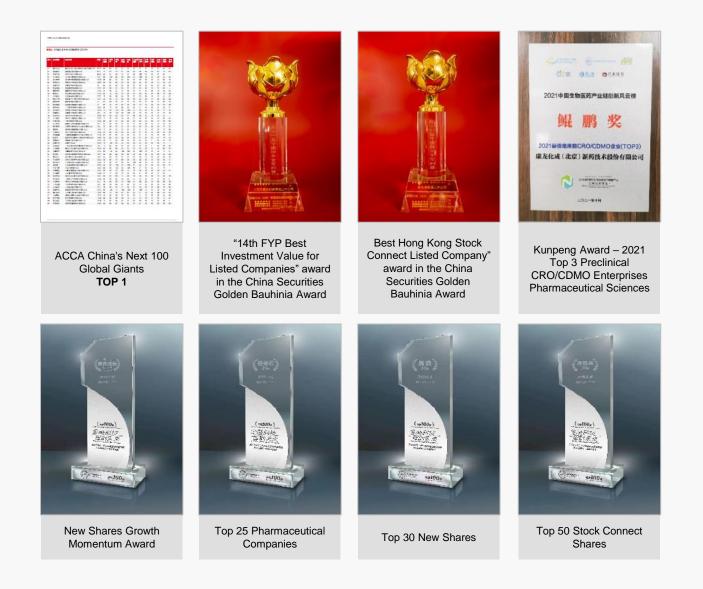




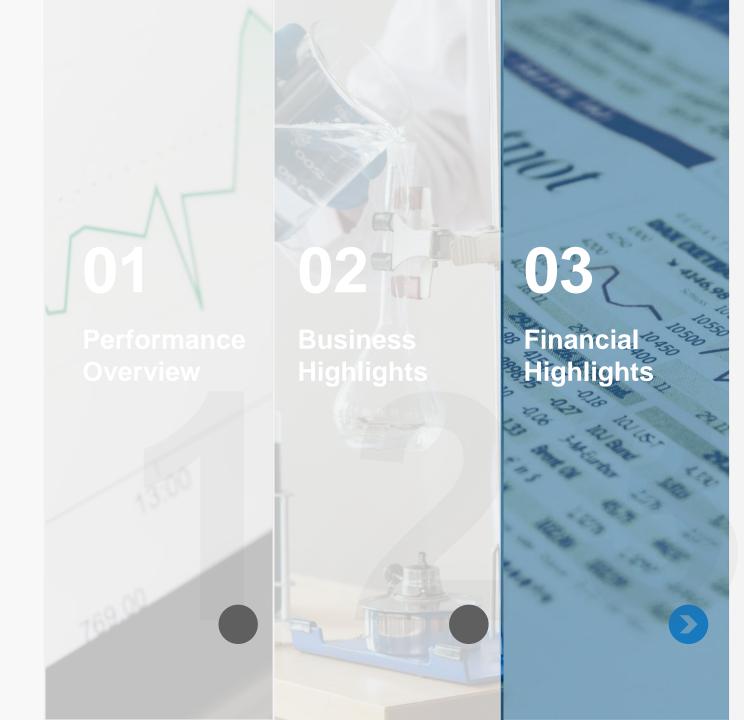
## Awards and Recognitions



#### ■ Included in HSCI, HSHCI, MSCI China Health Care Index, CHINEXT Composite, SZSE Component Index



# CONTENT

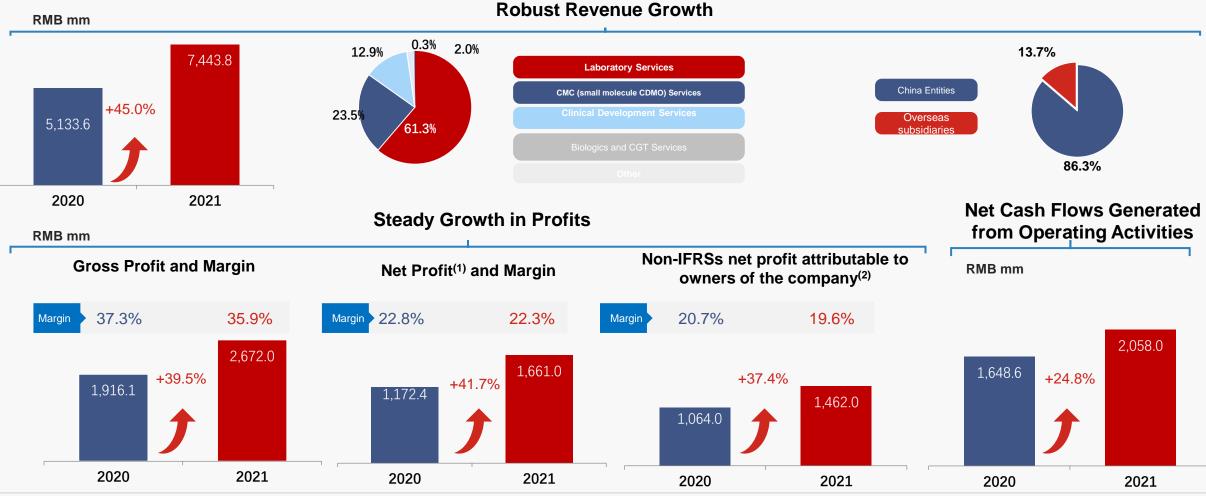


Growth Strategy

## 2021 Financial Performance



- The average exchange rate of USD against RMB depreciated by about 6.5% compared with the last year.
- If the same weighted average USD exchange rate of 2020 was used, the year-on-year revenue growth will be 52.2% in 2021 and the gross margin will be increased by 1.3% points.



Source: 2021 Annual Report.

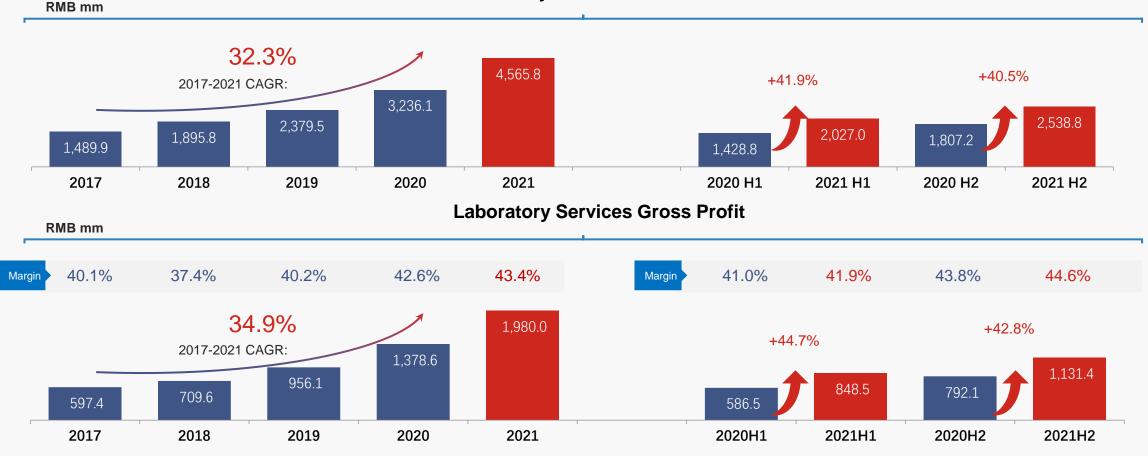
Note: Data are rounded to the nearest million.

1. Net profit attributable to owners of the parent. 2. Non-IFRSs net profit for the period excludes the impact from certain expense such as share-based compensation expenses, foreign exchange related gains or losses, issuance expense on convertible bonds, losses on fair value change of convertible bonds-embedded derivative component.

## Robust Growth and Profitability Across All Business Segments: Laboratory Services



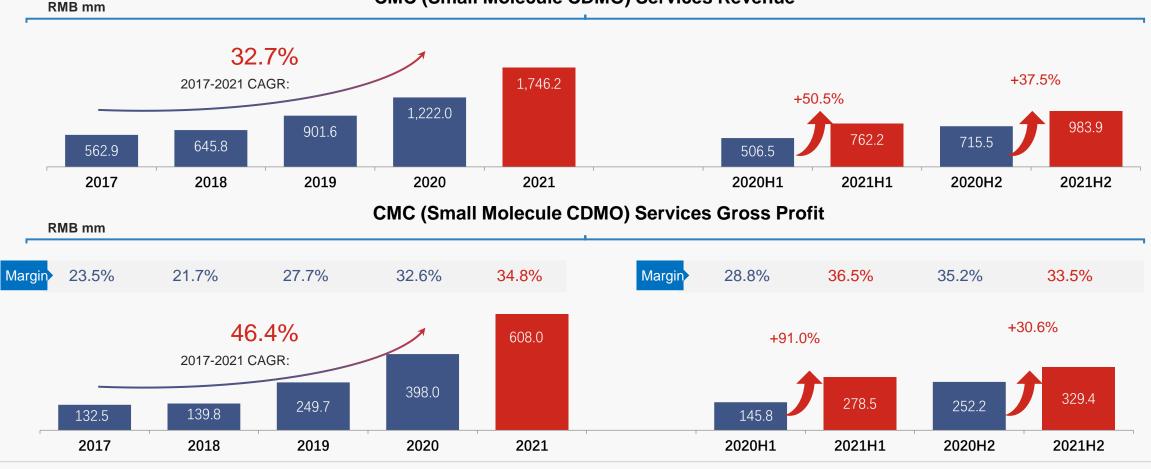
- Revenue growth drivers: Increased demand; Deepened integration between bioscience and laboratory platform; Increased customer interest in our integrated IND enabling solution.
- Gross margin drivers: Higher operating efficiency due to economies of scale; RMB appreciation impact.



Laboratory Services Revenue

Source: Prospectus, 2019 Annual Report ,2020 Annual Report , 2021 Annual Report. and 2021 Interim Report. Note: Data are rounded to the nearest million 2020H1,2020H2,2021H1 and 2021H2 financials are unaudited.

- 康龙化成 PHARMARON
- Revenue growth drivers: Strong demand for our CMC services with increased number of projects and strengthened pipeline; Successful integration of our CMC operations in China and UK.
- Gross margin drivers: Higher operating efficiency due to economies of scale; Continuous investment in the new service offerings with relatively low margin; RMB appreciation impact.



**CMC (Small Molecule CDMO) Services Revenue** 

Source: Prospectus, 2019 Annual Report ,2020 Annual Report , 2021 Annual Report. and 2021 Interim Report. Note: Data are rounded to the nearest million 2020H1,2020H2,2021H1 and 2021H2 financials are unaudited.



- Revenue growth drivers: Increased customer interest in our domestic Clinical Development Service; Efforts in cross-selling to existing customers from overseas and China; Impact from the acquisition of LinkStart in June 2020.
- Gross margin drivers: Advance capacity expansion to support the rapid growth strategy for the domestic clinical development services.



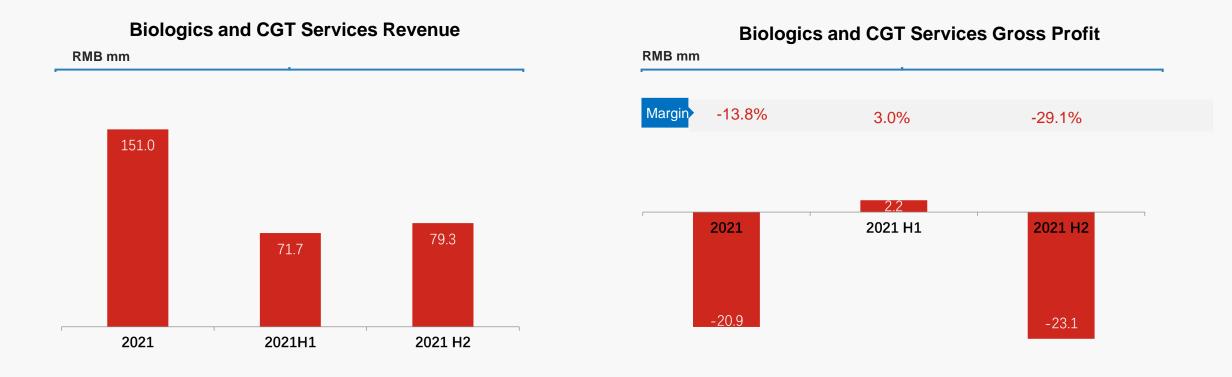
**Clinical Development Services Revenue** 

Source: Prospectus, 2019 Annual Report ,2020 Annual Report , 2021 Annual Report. and 2021 Interim Report. Note: Data are rounded to the nearest million 2020H1,2020H2,2021H1 and 2021H2 financials are unaudited.

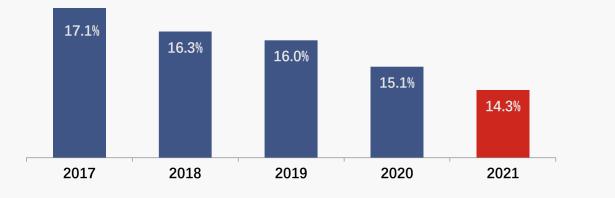
## Robust Growth and Profitability Across All Business Segments: Biologics and CGT Services



- Biologics and CGT business segments began independent accounting during 2021.
- High operating cost for the newly acquired gene therapy CDMO services capabilities (Allergan Biologics Limited) in Liverpool.
- Services in the U.S. are gaining customer recognition with both rapid increase in revenue and margin which partially offset losses in other biologics and CGT services which were in the investment stage







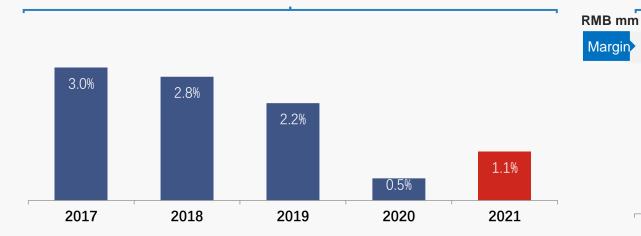
Finance Costs as % of Total Revenue

SG&A Expenses as % of Total Revenue



#### **Research and Development Cost as % of Total Revenue**

#### Non-IFRSs Net Profit Attributable to Owners of The Company





Source: Prospectus, 2019 Annual Report ,2020 Annual Report and 2021 Annual Report. Note: Data are rounded to the nearest million.





Inventories Turnover<sup>(2)</sup>

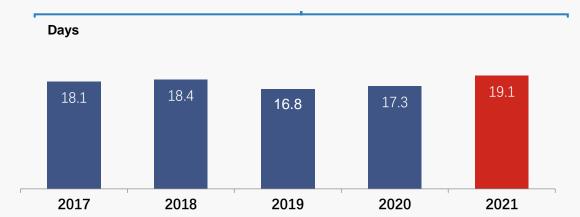
12.4

2019

12.6

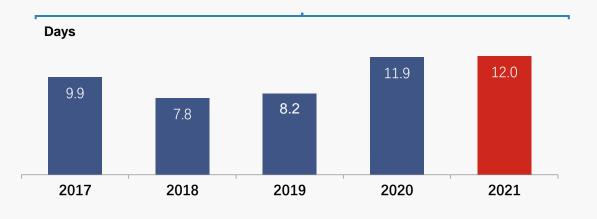
2020

Trade Receivables and Contract Assets Turnover<sup>(1)</sup>



#### Trade Payables Turnover<sup>(2)</sup>

Contract Costs Turnover<sup>(2)</sup>



Source: 2018 Annual Report ,2019 Annual Report ,2020 Annual Report and 2021 Annual Report.

11.9

2018

Days

12.1

2017

1. Calculated based on average of the opening and closing balances of sum of trade receivables (before adjustment of allowance for impairment) and contract assets (before adjustment of allowance for impairment) for the relevant year/period, divided by the corresponding revenue for the year/period, and then multiplied by 360 days for a year.

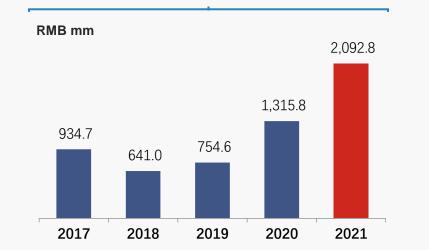
2. Calculated based on average of the opening and closing balances for the relevant year/period, divided by the corresponding cost of sales for the year/period, and then multiplied by 360 days for a year.

11.7

2021

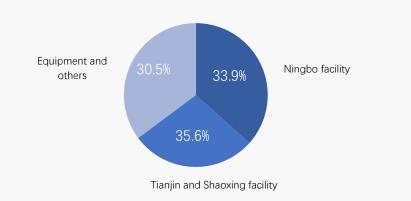
## **Continued Capital Expenditure**



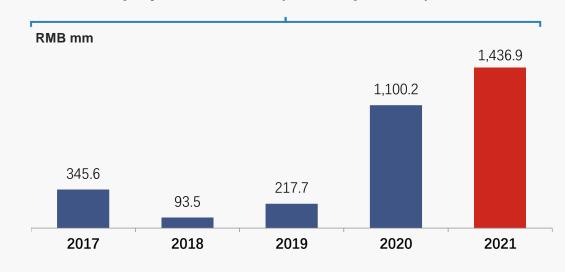


#### **Capital Expenditure for Internal Construction**

#### Capital Expenditure Distribution



Equity Investments (M&A expansion) (note)



#### **Domestic Investments**

- Biomedical Research (GZ), Ltd.
- Zhongke Lingrui (Zhanjiang) Biotechnology Co., Ltd.
- Enyuan Pharmaceutical Technology (Beijing) Co., Ltd.
- DeltaMed (Hangzhou) Co., Ltd

#### **Overseas Investments**



Allergan Biologics Limited

Note, Include payment for acquisition of subsidiaries, associates and others equity investments.

- In June 2021, issued principal amount of US\$300 million zero coupon convertible bonds due 2026 and principal amount of RMB1,916 million zero coupon US\$-settled convertible bonds due 2026 (together, the "Convertible Bonds").
- The net proceeds from the Convertible Bonds was approximately **RMB3,776.0 million.**

## Highlight of the Issue

- The offering represented the first issuance of convertible bonds in both RMB and US dollars by a company listed on the Hong Kong Stock Exchange.
- The first convertible bond issued by A+H dual list company since September 2019.
- The USD tranche priced with a zero coupon and zero yield and the highest conversion premium for healthcare CB issuances in U.S. dollars.
- The first RMB-linked USD-settled convertible bond since 2016, reducing the Company's exposure to mark-to-market volatility from accounting treatment.

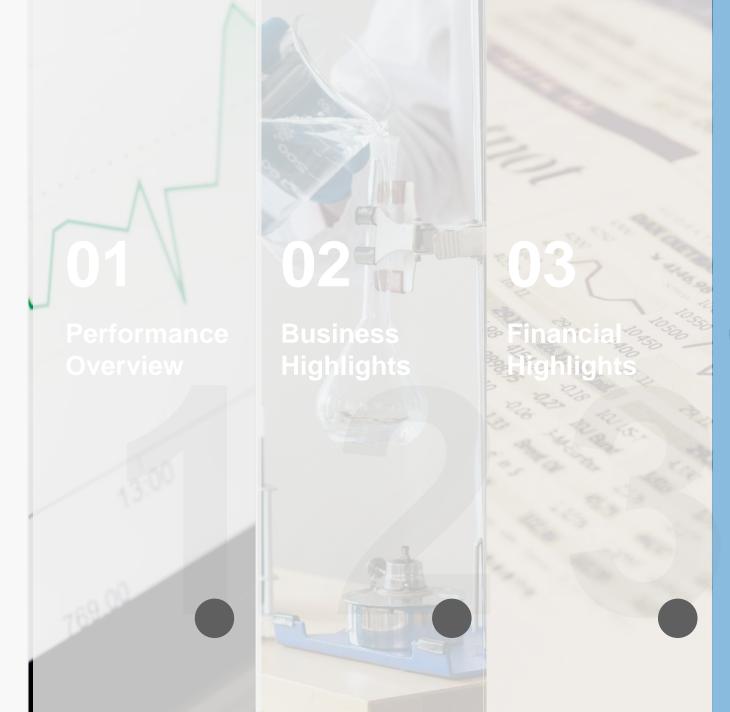
Mark-to-market fair value adjustment for the derivative component of the USD tranche is required.

**Financial Impact** 

- Recognized RMB72.9 million non-cash fair value gain in 2021 due to the decrease of the company's H-share stock price during the period.
- Non-IFRSs net profit excludes the impact from issuance expense on Convertible Bonds and fair value loss or gain from derivative component of Convertible Bonds.



# CONTENT



04 Growth Strategy



Continue to build and improve our "end-to-end, fully integrated and global" pharmaceutical R&D service platform

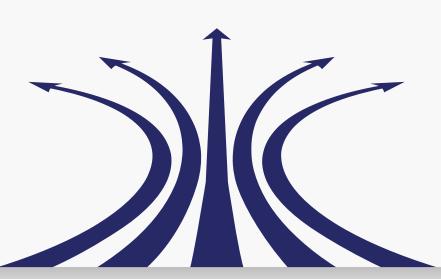
Continue to strengthen the fully integrated clinical development services platform

Strengthen the leading position in the small molecule R&D service area

Continue accelerating the build-up of biologics and CGT services platform

Continue to strengthen our talent pool to support our long-term and sustainable growth

Continue to expand domestic and overseas market shares



Further enhance management capabilities

Infrastructure development and capacity expansion





Thank You!