CARSGEN THERAPEUTICS

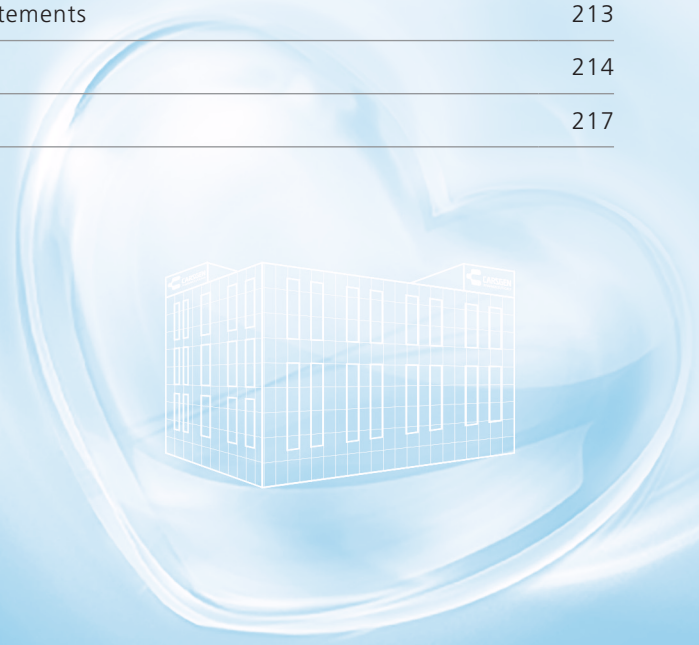
科濟藥業控股有限公司
CARSGEN THERAPEUTICS HOLDINGS LIMITED

(Incorporated in the Cayman Islands with limited liability)

Stock Code : 2171.HK

2022
ANNUAL REPORT

CONTENTS



Corporate Information

BOARD OF DIRECTORS

Executive Directors

Dr. Zonghai LI
Dr. Huamao WANG
Dr. Hua JIANG *(appointed on August 1, 2022)*

Non-executive Directors

Mr. Bingsen GUO
Mr. Huaqing GUO
Mr. Ronggang XIE
Ms. Yachao ZHAO *(resigned on May 27, 2022)*

Independent Non-executive Directors

Dr. Chunhai FAN *(resigned on January 11, 2023)*
Dr. Guangmei YAN
Mr. Tak Young SO
Dr. Huabing LI *(appointed on March 9, 2023)*

CORPORATE HEADQUARTERS

BLDG 12, No. 388 Yindu Road
Xuhui District
Shanghai
PRC

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

5/F, Manulife Place,
348 Kwun Tong Road, Kowloon
Hong Kong

REGISTERED OFFICE

P.O. Box 31119
Grand Pavilion
Hibiscus Way
802 West Bay Road
Grand Cayman KY1-1205
Cayman Islands

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Maples Fund Services (Cayman) Limited
P.O. Box 1093, Boundary Hall
Cricket Square
Grand Cayman KY1-1102
Cayman Islands

LEGAL ADVISERS AS TO HONG KONG LAW

Davis Polk & Wardwell
10th Floor, The Hong Kong Club Building
3A Chater Road, Hong Kong

COMPANY SECRETARY

Mr. Wing Yat Christopher LUI

AUTHORIZED REPRESENTATIVES

Dr. Zonghai LI
Mr. Wing Yat Christopher LUI

AUDIT COMMITTEE

Mr. Tak Young SO *(Chairman)*
Dr. Huabing LI
Mr. Huaqing GUO

REMUNERATION COMMITTEE

Dr. Huabing LI *(Chairman)*
Dr. Zonghai LI
Dr. Guangmei YAN

NOMINATION AND CORPORATE GOVERNANCE COMMITTEE

Dr. Zonghai LI *(Chairman)*
Dr. Huabing LI
Dr. Guangmei YAN

HONG KONG SHARE REGISTRAR

Computershare Hong Kong Investor Services Limited
Shops 1712-1716
17th Floor, Hopewell Centre
183 Queen's Road East
Wanchai
Hong Kong

STOCK CODE

02171

AUDITOR

PricewaterhouseCoopers
Certified Public Accountants
Registered Public Interest Entity Auditor
22/F, Prince's Building
Central
Hong Kong

COMPANY WEBSITE

www.carsgen.com

COMPLIANCE ADVISER

Guotai Junan Capital Limited
27/F., Low Block
Grand Millennium Plaza
181 Queen's Road Central
Hong Kong

PRINCIPAL BANKER

Bank of Hangzhou Co., Ltd.
No. 46, Qingchun Road
Hangzhou
PRC

Chairman's Statement

Dear shareholders,

On behalf of the Board of Directors of CARsgen, I am pleased to present the annual report of the Company for the year ended December 31, 2022 and the outlook for 2023.

Driven by the vision of "making cancer curable", CARsgen has established well-integrated capabilities including target discovery, antibody development, clinical development, and commercial-scale manufacturing. CARsgen has internally developed novel technologies and a product pipeline with global rights to overcome major challenges of CAR T-cell therapies, such as improving the safety profile, enhancing the efficacy in treating solid tumors, and reducing treatment associated costs.

In 2022, we have achieved important milestones in the clinical and regulatory advancements of our pipeline products, development of innovative technologies, expansion of global manufacturing capacities, business development, etc.

For zevorcabtagene autoleucel (zevor-cel), China National Medical Products Administration (NMPA) has accepted the New Drug Application (NDA) and has granted the priority review in October 2022. Enrollment in the Phase 2 clinical trial in the United States and Canada is underway. Updates from the Phase 2 study in the U.S. (NCT03915184) were presented orally at the 7th Annual CAR-TCR Summit and from the pivotal Phase II study in China (NCT03975907) were provided in a poster presentation at the 64th American Society of Hematology (ASH) Annual Meeting in December 2022. An update from China investigator-initiated trials was published in *Haematologica* in August 2022.

For CT041, the first-in-class CAR T-cell product candidate against CLDN18.2, a confirmatory Phase II clinical trial for advanced GC/GEJ in China is ongoing. A Phase 2 clinical trial in the U.S. is expected to initiate in the first half of 2023. Updates from the Phase 1b study in the U.S. (NCT04404595) and the Phase Ib/II study in China (NCT04581473) were provided in poster presentations at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting in June 2022. An update from a China IIT was published in *Nature Medicine* in May 2022.

For AB011, we have completed the enrollment for the Phase I monotherapy and combination with chemo therapies. Updates from Phase Ib study (AB011-ST-01, NCT04400383) were provided in poster presentations at the 2023 ASCO Gastrointestinal (GI) Cancers Symposium in January 2023.

On top of these existing clinical programs, we will actively explore the treatment with our innovative CAR T-cell products for the earlier lines of therapies, which shall create greater clinical and health economic value for the cancer patients. We have also been taking efforts to develop our innovative technologies and product candidates that shall better address the challenges with existing cell therapy products.

2022 is an important year for CARsgen for the expansion of our manufacturing capacities outside of China. For our state-of-the-art GMP Manufacturing Facility in Research Triangle Park, Durham, it has started GMP production of autologous CAR T cell products and successfully released the first GMP batch for the clinical trials in September 2022. Our GMP facility in the U.S, the RTP Manufacturing Facility, with a total GFA of approximately 3,300 sq.m, is expected to provide CARsgen with additional manufacturing capacity of autologous CAR T-cell products for 700 patients annually. The RTP Manufacturing Facility will continue to support CARsgen's ongoing clinical studies and the early commercial launch overseas.

Chairman's Statement

For business development, we entered into a collaboration agreement with Huadong Medicine (Hangzhou) Co., Ltd., a wholly-owned subsidiary of Huadong Medicine Co., Ltd. (SZ. 000963) ("**Huadong Medicine**") for the commercialization of zevor-cel in mainland China. Under the terms of the Agreement, CARsgen received an upfront payment of RMB200 million and is eligible to receive regulatory and commercial milestone payments up to RMB1,025 million. CARsgen will continue to be responsible for the development, regulatory approval, and manufacturing of zevor-cel in mainland China. In January 2023, we announced a collaboration agreement with F. Hoffmann-La Roche Ltd ("**Roche**") to evaluate CARsgen's investigational drug AB011 in combination with atezolizumab, Roche's PD-L1 checkpoint inhibitor, along with standard-of-care chemotherapy in patients with GC/GEJ. As part of the clinical collaboration, CARsgen's proprietary CLDN18.2 IHC test kit, which has showed excellent specificity and sensitivity profiles, will be applied to evaluate CLDN18.2 expression in the gastric cancer patients. We look forward to establishing more collaborations with industry partners and academic institutes to develop and advance our innovative cell therapies and technologies, benefiting cancer patients worldwide.

Financially, we ended 2022 with a net cash position of approximately RMB2.3 billion, with expected runway into 2026, providing us sound financial safety and flexibility.

Looking forward, we are embarking on an even more exciting journey. The management team and I are confident that CARsgen is well positioned to strengthen the leadership in CAR T-cell therapies globally, powered by our differentiated pipeline product candidates, dedicated team efforts, and the high operational efficiencies.

On behalf of the Board of Directors, I would like to express the sincere gratitude to our employees and management team for their determination, hard work and outstanding contributions. I would also like to thank all our shareholders and business partners for their long-term trust and continued support.

Sincerely,
Dr. Zonghai LI
Chairman of the Board of Directors, CARsgen Therapeutics.

Financial Highlights

	Year ended December 31	
	2022	2021
	RMB'000	*RMB'000*
Net loss	**(892,247)**	(4,744,423)
Net loss per share (RMB)	**(1.62)**	(12.26)
Non-IFRS Measures		
Adjusted net loss[(1)]	**(848,252)**	(548,767)
Adjusted net loss per share (RMB)[(1)]	**(1.54)**	(1.42)

	As at December 31	
	2022	2021
	RMB'000	*RMB'000*
Cash and cash equivalents	**2,268,036**	691,284
Term deposits with original maturity between three and twelve months	**–**	2,315,654
Total	**2,268,036**	3,006,938

Our net loss was RMB892 million for the year ended December 31, 2022, representing a decrease of RMB3,852 million from RMB4,744 million for the year ended December 31, 2021. The decrease was primarily due to (i) the decrease of fair value loss on financial instruments issued to investors (the "**Fair Value Loss**"), which totaled RMB4,156 million for the year ended December 31, 2021 and zero for the year ended December 31, 2022. The Fair Value Loss related financial instruments were converted to ordinary shares upon the completion of the Company's initial public offering on June 18, 2021 (the "**IPO**"), hence no loss would be recognized after the IPO; (ii) the decrease of listing fees of approximately RMB27 million (the "**Listing Fees**") for the year ended December 31, 2021, while no listing fee was incurred during the year ended December 31, 2022; partially offset by (iii) the increase in share-based compensation (together with the Fair Value Loss and the Listing Fees, collectively the "**Adjusted Items**"), which totaled RMB44 million for the year ended December 31, 2022, representing an increase of RMB30 million from RMB14 million for the year ended December 31, 2021; (iv) higher research and development expenses and higher administrative expenses; and (v) foreign exchange losses of RMB97 million for the year ended December 31, 2022, representing a net impact of RMB104 million from foreign exchange gains of RMB7 million for the year ended December 31, 2021.

Our adjusted net loss[(1)] was RMB848 million for the year ended December 31, 2022, representing an increase of RMB299 million from RMB549 million for the year ended December 31, 2021. The increase was primarily due to higher research and development expenses, higher general and administrative expenses and foreign exchange losses.

Cash and cash equivalents were RMB2,268 million as of December 31, 2022, representing a decrease of RMB739 million from RMB3,007 million (including terms deposits with original maturity between three and twelve months) as of December 31, 2021. The decrease mostly resulted from payments of research and development expenses, administrative expenses, capital expenditure on long-term assets and repayments of bank borrowings.

(1) Adjusted net loss and adjusted net loss per share are non-IFRS measures. They exclude the impact of the Adjusted Items. For details of non-IFRS measures, please refer to "Non-IFRS Measures" subsection for details.

Business Highlights

As of the date of this report, we have made significant progress in advancing our technology innovations, product pipeline and business operations in the United States of America (U.S.) and the People's Republic of China.

Zevorcabtagene Autoleucel (Zevor-cel, R&D code: CT053)

Zevor-cel is an autologous fully human CAR T-cell product candidate against B-cell maturation antigen (BCMA) for the treatment of relapsed/refractory multiple myeloma (R/R MM). In October 2022, China National Medical Products Administration (NMPA) accepted the New Drug Application (NDA) and has granted the priority review for zevor-cel. Enrollment in the Phase 2 clinical trial in the United States and Canada is underway.

Updates from the Phase 2 trial in the U.S. (NCT03915184) were presented orally at the 7th Annual CAR-TCR Summit and data updates on the pivotal Phase II trial in China (NCT03975907) were reported as a poster presentation at the 64th American Society of Hematology (ASH) Annual Meeting in December 2022. Previous results from the Phase I clinical trial in China were presented at the 63rd ASH Annual Meeting in December 2021. An update from the China investigator-initiated trials was published in *Haematologica* in August 2022.

CT041

CT041 is an autologous humanized CAR T-cell product candidate against claudin 18.2 (CLDN18.2), a membrane protein highly expressed in certain cancers. As of the date of this report, CT041, based on our information, is the world's first and only CAR T-cell candidate for the treatment of solid tumors that has entered a Phase II clinical trial. Active CT041 trials include a Phase 1b/2 clinical trial for advanced gastric cancer (GC) and pancreatic cancer (PC) in the United States and Canada (CT041-ST-02, NCT04404595), a Phase Ib clinical trial for advanced gastric cancer/gastroesophageal junction cancer (GC/GEJ) and PC, a confirmatory Phase II clinical trial for advanced GC/GEJ in China (CT041-ST-01, NCT04581473), and an investigator-initiated trial (NCT03874897). A Phase 2 clinical trial of CT041 in the U.S. is planned to initiate in the first half of 2023.

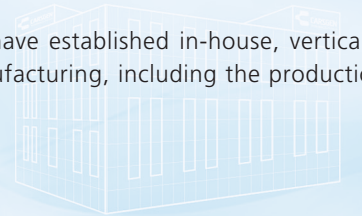
Updates from the Phase 1b study in the U.S. (NCT04404595) and the Phase Ib/II study in China (NCT04581473) were provided in poster presentations at the 2022 American Society of Clinical Oncology (ASCO) Annual Meeting in June 2022. An update from a China IIT (NCT03874897) was published in *Nature Medicine* in May 2022.

AB011

AB011 is a humanized monoclonal antibody product candidate against CLDN18.2 for the treatment of CLDN18.2-positive solid tumors. We have completed the Phase I monotherapy and combination with chemotherapy cohorts enrollment. Data updates from the Phase Ib study (AB011-ST-01, NCT04400383) were reported as a poster presentation at the 2023 ASCO Gastrointestinal (GI) Cancers Symposium in January 2023.

Manufacturing Capacity

We have established in-house, vertically integrated manufacturing capabilities for the three key stages of CAR T manufacturing, including the production of plasmids, lentiviral vectors, and CAR T cells.



We have been expanding our global manufacturing capacity in China and the U.S. to support both clinical trials and the subsequent commercialization of our pipeline products. With the clinical manufacturing facility in Xuhui, Shanghai and commercial GMP manufacturing facility in Jinshan, Shanghai ("**Jinshan Manufacturing Facility**"), we manufacture CAR T-cell products in-house to support clinical trials in China and manufacture the lentiviral vectors in-house to support clinical trials globally. Our Research Triangle Park (RTP) CGMP manufacturing facility in Durham, North Carolina ("**RTP Manufacturing Facility**") has commenced operations of GMP production of autologous CAR T cell products. The first batch from the RTP Manufacturing Facility was successfully released in September 2022. The RTP Manufacturing Facility will provide CARsgen additional manufacturing capacity of autologous CAR T-cell products for 700 patients annually to support clinical studies and early commercial launch in the United States, Canada, and Europe.

Commercialization and External Collaboration

In January 2023, CARsgen and Huadong Medicine (Hangzhou) Co., Ltd., a wholly-owned subsidiary of Huadong Medicine Co., Ltd. (SZ. 000963) ("**Huadong Medicine**") entered into a collaboration agreement for the commercialization of CARsgen's lead drug candidate, zevor-cel, in mainland China.

In January 2023, CARsgen executed a collaboration agreement with F. Hoffmann-La Roche Ltd ("**Roche**") to evaluate CARsgen's investigational drug AB011 in combination with atezolizumab, Roche's PD-L1 checkpoint inhibitor, along with standard-of-care chemotherapy in patients with GC/GEJ.

Management Discussion & Analysis

OVERVIEW

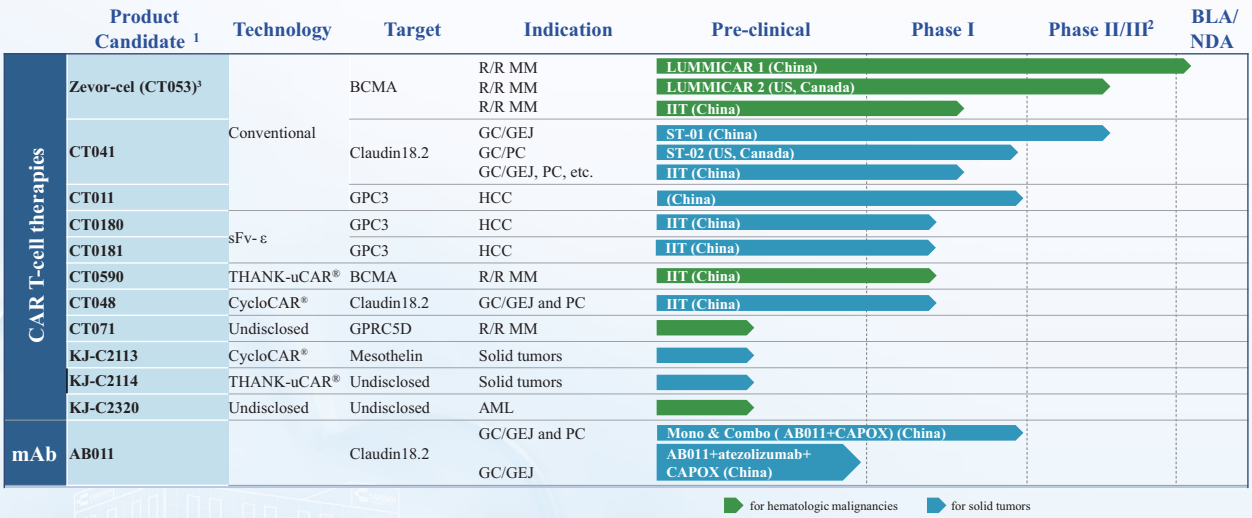
CARsgen is a biopharmaceutical company with operations in China and the U.S. focused on innovative CAR T-cell therapies for the treatment of hematologic malignancies and solid tumors. CARsgen has built an integrated platform to accelerate the cell therapy development life cycle with in-house capabilities including target discovery, antibody development, clinical development, and commercial-scale manufacturing. CARsgen has internally developed novel technologies and a product pipeline with global rights to overcome major challenges of CAR T-cell therapies, such as improving the safety profile, enhancing the efficacy in treating solid tumors, and reducing treatment associated costs. Our vision is to be a global biopharmaceutical leader that brings innovative and effective cell therapies to cancer patients worldwide and makes cancer curable.

Despite facing challenges such as the COVID-19 pandemic, we made significant advancements in 2022 in the clinical development of our pipeline products, technological innovations, manufacturing capacity expansion, and business development.

BUSINESS REVIEW

Our Products and Product Pipeline

Since CARsgen's inception, our strategic business model has comprised the in-house development of innovative and differentiated biopharmaceutical products with a focus on CAR T-cell therapies. Our Core Product Candidate, zevor-cel for the treatment of the hematologic malignancy R/R MM, is at the most advanced development stage among the product candidates in our pipeline. In addition, solid tumor product candidates are in confirmatory Phase II (CT041), Phase I (CT011), and Phase Ib (AB011) clinical trials. The following chart summarizes the development status of each product candidate in our pipeline as of the date of this report. Our product candidates are developed in-house and protected by the global rights owned by CARsgen.



R/R MM: relapsed/refractory multiple myeloma; GC: gastric cancer; GEJ: gastroesophageal junction cancer; PC: pancreatic cancer; HCC: hepatocellular carcinoma; AML: acute myeloid leukemia

Notes:

1. All product candidates are self-developed with global rights.
2. Phase II trials of some indications are pivotal studies.
3. Core Product Candidate. Commercial rights in mainland China have been granted to Huadong Medicine (SZ: 000963). Rights in the South Korean market have been licensed out to HK Inno.N Corporation (KOSDAQ: 195940).

Zevorcabtagene Autoleucel (Zevor-cel, R&D code: CT053) – Fully Human BCMA CAR T

Zevor-cel is an upgraded fully human, autologous BCMA CAR T-cell product candidate for the treatment of R/R MM. It incorporates a CAR construct with a fully human BCMA-specific single-chain variable fragment (scFv) with low immunogenicity and increased stability that overcomes T-cell exhaustion by reducing the self-activation of CAR T cells in the absence of tumor-associated targets.

CARsgen developed zevor-cel in-house with our integrated research and development platform. Zevor-cel received Regenerative Medicine Advanced Therapy (RMAT) for the treatment of R/R MM from the FDA in October 2019, PRIority MEdicines (PRIME) eligibility for the treatment of R/R MM from the EMA in September 2019, Breakthrough Therapy designation for the treatment of R/R MM from the NMPA in December 2020. Also, zevor-cel received Orphan Drug designation for the treatment of multiple myeloma from the U.S. FDA in 2019 and Orphan Medicinal Product designation for the treatment of multiple myeloma from the European Medicines Agency (EMA) in 2020 and received priority review from NMPA in October 2022.

The Phase 2 trial (LUMMICAR STUDY 2, NCT03915184) for R/R MM is being conducted by CARsgen in the United States and Canada. Updated data for a total of 17 patients who received zevor-cel infusion in the Phase 1b/2 trial in U.S. were presented orally at the 7th Annual CAR-TCR Summit in September 2022. CARsgen plans to submit a Biologics License Application (BLA) to the U.S. FDA in 2024.

CARsgen is conducting a pivotal Phase II study (LUMMICAR STUDY 1, NCT03975907) in China for R/R MM. NMPA has accepted the NDA for zevor-cel in October 2022. At the 64th ASH Annual Meeting in December 2022, CARsgen presented one poster, titled 'Phase II Study of Fully Human BCMA-Targeted CAR T Cells (Zevorcabtagene Autoleucel) in Patients with Relapsed/Refractory Multiple Myeloma', highlighting the updated study results for zevor-cel in the Phase I/II trial in China. A poster titled 'Sustainable Efficacy and Safety Results from LUMMICAR STUDY 1: A Phase 1/2 Study of Fully Human B-Cell Maturation Antigen-Specific CAR T Cells (CT053) in Chinese Subjects with Relapsed and/or Refractory Multiple Myeloma', which included the sustainable efficacy and safety results from the Phase I study of zevor-cel in China, was previously presented at the 63rd ASH Annual Meeting in December 2021.

Updated results for the investigator-initiated trials (NCT03302403, NCT03380039, NCT03716856) were published in *Haematologica* in August 2022 article titled 'A novel BCMA CAR-T-cell therapy with optimized human scFv for treatment of relapsed/refractory multiple myeloma: results from Phase I clinical trials'.

Additional data from these global clinical trials will be disclosed in academic journals or at scientific conferences. CARsgen plans to conduct additional clinical trials to develop zevor-cel as a treatment in earlier lines of multiple myeloma.

We may not be able to ultimately develop and market zevor-cel successfully.

CT041 – Humanized CLDN18.2 CAR T

CT041 is an autologous CAR T-cell product candidate against the protein CLDN18.2 and has the potential to be first-in-class globally. CT041 targets the treatment of CLDN18.2-positive solid tumors with a primary focus on GC/GEJ and PC. CLDN18.2 is expressed in a range of solid tumors, including GC/GEJ, PC, biliary tract cancer (BTC), colorectal, lung, and ovarian cancers. Leveraging our in-depth understanding of CAR T-cell therapy, as well as our integrated antibody platform, we were the first in the world to successfully identify, validate and report CLDN18.2 as a solid tumor-associated antigen and viable target for CAR T-cell therapy for solid tumors in which CLDN18.2 is prevalently or highly expressed. To further address the challenges of CAR T-cell therapies in treating solid tumors, we developed an innovative, patent-protected preconditioning regimen that is administered prior to infusion of CT041. This FNC regimen features the addition of low-dose nab-paclitaxel to the conventional lymphodepletion regimen comprising cyclophosphamide and fludarabine.

CT041 was granted RMAT designation by U.S. FDA for the treatment of advanced GC/GEJ with CLDN18.2-positive tumors in January 2022 and was granted PRIME eligibility by the EMA for the treatment of advanced gastric cancer in November 2021. CT041 received Orphan Drug designation from the U.S. FDA in September 2020 for the treatment of GC/GEJ and Orphan Medicinal Product designation from the EMA in January 2021 for the treatment of advanced gastric cancer.

As of the date of this report, CT041, based on our information, is the world's first and only CAR T-cell candidate for the treatment of solid tumors that has entered a Phase II clinical trial.

The Phase 1b/2 clinical trial for advanced GC and PC (CT041-ST-02, NCT04404595) is currently active in the U.S. and Canada. At the 2022 ASCO Annual Meeting, CARsgen presented a poster entitled 'Multicenter Phase 1b Trial of Salvage CT041 CLDN18.2 – specific Chimeric Antigen Receptor T Cell Therapy for Patients with Advanced Gastric and Pancreatic Adenocarcinoma' with updated study results for CT041 in the Phase 1b trial in the U.S.. A Phase 2 clinical trial of CT041 in the U.S. is planned to initiate in the first half of 2023. CARsgen plans to submit the BLA to the U.S. FDA in 2025.

In China, CARsgen is conducting a confirmatory Phase II clinical trial for advanced GC/GEJ (CT041-ST-01, NCT04581473). The updated results from the Phase Ib/II CT041 study in China were presented at the 2022 ASCO Annual Meeting with the poster titled 'Safety, Tolerability and Preliminary Efficacy Results in Patients with Advanced Gastric/Gastroesophageal Junction Adenocarcinoma from a Phase Ib/II Study of CLDN18.2 CAR T-cell Therapy'. CARsgen plans to submit an NDA to the NMPA in China in the first half of 2024.

The results of the investigator-initiated trial of CT041 (NCT03874897) were reported in the *Nature Medicine* article titled "Claudin18.2-specific CAR T cells in gastrointestinal cancers: Phase I trial interim results" in May 2022.

Additional data from these global clinical trials will be disclosed in academic journals or at scientific conferences. CARsgen plans to conduct additional clinical trials to develop CT041 as an earlier line of treatment for GC/GEJ and PC.

We may not be able to ultimately develop and market CT041 successfully.

CT011 – Humanized GPC3 CAR T

CT011 is an autologous CAR T-cell product candidate with proof-of-concept clinical data for the treatment of hepatocellular carcinoma (HCC) and has the potential to be the first-in-class globally. Our co-founder, CEO and Chief Scientific Officer, Dr. Zonghai LI led the world's first successful effort in identifying, validating and reporting GPC3 as a tumor-associated target for the development of CAR T-cell therapies to treat HCC. We have completed enrollment of a Phase I trial in China.

A case report of long-term complete response of advanced hepatocellular carcinoma using CT011 titled 'Long term complete response of advanced hepatocellular carcinoma to glypican-3 specific chimeric antigen receptor T-Cells plus sorafenib, a case report' was published in *Frontiers in Immunology* in August 2022.

We may not be able to ultimately develop and market CT011 successfully.

AB011 – Anti-CLDN18.2 mAb

AB011 is a humanized monoclonal antibody product candidate that targets CLDN18.2, which is a stomach-specific isoform of Claudin 18 and is highly expressed in GC/GEJ and PC cells. AB011 displayed strong in vitro antitumor activities against CLDN18.2 positive tumor cells in antibody-dependent cellular cytotoxicity (ADCC) assays and complement-dependent cytotoxicity (CDC) assays and showed potent in vivo antitumor activities when combined with oxaliplatin and 5-fluorouracil in CLDN18.2 positive gastric cancer mouse models.

AB011 is the first monoclonal antibody against CLDN18.2 that received IND clearance in China. We are conducting a Phase I clinical trial of AB011 for the treatment of CLDN18.2 positive solid tumors in China to evaluate the safety, tolerability, pharmacokinetics and preliminary efficacy of AB011 infusion. We completed Phase I monotherapy and the combination with chemotherapy cohorts enrollment.

This multicenter, single-arm, open-label, two-stage, Phase I study (AB011-ST-01, NCT04400383) is conducted to evaluate the safety and preliminary efficacy in patients with advanced solid tumors as monotherapy (Part 1) and AB011 plus chemotherapy (Part 2). The updated results were presented in a poster titled 'A Multicenter, Phase 1 Study of AB011, a Recombinant Humanized Anti-CLDN18.2 Monoclonal Antibody, as Monotherapy and Combined with Capecitabine and Oxaliplatin (CAPOX) in Patients with Advanced Solid Tumors' at ASCO GI in January 2023.

We may not be able to ultimately develop and market AB011 successfully.

IND-Enabling or Preclinical Stage Product Candidates

In addition to the above clinical-stage product candidates currently in clinical phase, we have internally developed eight IND-enabling or preclinical product candidates as described below. Four of these products, CT0180, CT0181, CT0590 and CT048, are already in the IIT clinical stage.

CT0180 is an autologous T-cell product engineered to express a fusion protein of GPC3-targeted antibody and T-cell receptor. An IIT trial has been initiated in China to evaluate the efficacy and safety of CT0180 in the treatment of hepatocellular carcinoma.

CT0181 is an autologous T-cell product engineered to express a fusion protein of GPC3-targeted antibody and T-cell receptor and co-express the interleukin (IL)-7 cytokine. An IIT trial has been initiated in China to evaluate the efficacy and safety of CT0181 in the treatment of hepatocellular carcinoma.

CT0590 is an allogeneic CAR T-cell product candidate deploying our THANK-uCAR® technology that targets BCMA for the treatment of R/R MM. We have initiated an IIT trial to evaluate the efficacy and safety of CT0590 for the treatment of R/R MM.

CT048 is a next-generation autologous CAR T-cell product candidate developed with our CycloCAR® technology to treat patients with CLDN18.2-positive GC/GEJ and PC. We anticipate that by co-expressing cytokine IL-7 and chemokine CCL21, CT048 potentially has a greater clinical efficacy and reduced requirement for lymphodepletion conditioning. CARsgen has initiated an IIT trial to evaluate the efficacy and safety of CT048 for the treatment of GC/GEJ and PC.

CT071 is a CAR T-cell product candidate developed with an undisclosed proprietary technology of CARsgen targeting G protein – coupled receptor, class C, group 5, member D (GPRC5D) for the treatment of R/R MM.

KJ-C2113 is a next-generation autologous CAR T-cell product candidate developed with our CycloCAR® technology that targets mesothelin, a tumor differentiation antigen normally restricted to the body's mesothelial surfaces, that is significantly overexpressed in a broad range of solid tumors. We are developing KJ-C2113 for the treatment of various types of solid tumors.

KJ-C2114 is an allogeneic CAR T-cell product candidate deploying our THANK-uCAR® technology with an undisclosed target for the treatment of certain solid tumors.

KJ-C2320 is a CAR T-cell product candidate deploying an undisclosed proprietary technology of CARsgen with an undisclosed target for the treatment of acute myeloid leukemia.

Continuous Discovery and Technology Development

Despite the approval of some CAR T-cell products for the last-line treatment of hematologic malignancies, significant challenges remain, such as limited efficacies against solid tumors, undesirable safety concerns, and high manufacturing and treatment costs. We strive to explore and develop innovative technology platforms to address these challenges to generate better cell therapy products to global cancer patients.

We have established an integrated research and development platform covering the full CAR T development cycle including target discovery, antibody development, vector design, manufacturing, quality assurance, and quality control. Our integrated cell therapy platform is composed of target discovery, hybridoma and antibody humanization platform, fully human phage display antibody library platform, antibody identification platform, immune cell function evaluation platform, plasmid and lentiviral vector preparation platforms, cell therapy process development platform, analytical platforms with molecular, flow cytometry, biochemical, physical-chemical, and cell-based analytical capabilities, biological samples tests platform, clinical-scale and commercial-scale CAR T manufacturing platform, and platform for clinical studies. This platform enables us to develop a product candidate efficiently and effectively from early discovery to clinical trials and potentially to commercialization.

We continue to dedicate ourselves to advancing innovative CAR T technologies to address the major challenges of the industry. Our four strategic pillars include:

(1) **Efficacy**: To enhance efficacy against solid tumors, we continue to develop next-generation CAR T technologies, such as CycloCAR®. CycloCAR® features the co-expression of cytokine IL-7 and chemokine CCL21 in CAR T cells to potentially improve clinical efficacy and reduce the requirement of lymphodepletion conditioning. Our preclinical studies showed that IL-7 enhanced the proliferation and survival of CAR T cells and inhibited the apoptosis of CAR T cells, and CCL21 could drive infiltration of T cells and dendritic cells into tumor sites. The preclinical CycloCAR T cells improved the therapeutic effects against solid tumors in mice when compared with conventional CAR T cells. Moreover, even without preconditioning chemotherapy, the CycloCAR T cells could potently suppress the tumor growth with a significantly better efficacy than CAR T cells co-expressing IL-7 and CCL19 (7×19 CAR T, a previously reported design by other researchers). Our studies demonstrated that, independent of lymphodepletion chemotherapy, CycloCAR T cells exerted potent antitumor effects that were facilitated by infiltration of T cells and dendritic cells into tumor tissues, CycloCAR T cells experienced increased survival, and a potential anti-angiogenesis effect. We are using CycloCAR® to develop CAR T-cell therapies against several targets including CLDN18.2, GPC3, and mesothelin. We continue to explore potential combination approaches to boost the therapeutic effects of single agents and identify new targets and approaches to tackle new indications.

(2) **Safety**: To minimize safety concerns, we continue to develop innovative technologies that can help reduce the risk of CRS, neurotoxicity and on-target off-tumor toxicities and to improve applicability of adoptive cell therapies. We leverage our in-house antibody platform, powered by a fully human phage display library and improved hybridoma technology, to identify and optimize antibody fragments with higher specificity for tumor targets and increased stability, which lead to reduced auto-activation of CAR T cells in the absence of tumor targets and controlled levels of cytokine release. As evidence of our antibody engineering capabilities, we have developed zevor-cel, which did not induce Grade 3 or higher CRS in the IITs or in the Phase I clinical trials and reduced the need for anti-IL-6 medication and other immunosuppressant mediation (data as of the respective data cutoff dates for the ongoing IITs and clinical trials).

To improve the applicability of adoptive cell therapies, we developed the sFv-ε-based T-cell therapy powered by a full T-cell receptor (TCR) complex comprising a GPC3-targeted scFv and a CD3ε subunit, which can form a functional TCR complex with other TCR subunits (TCRα, TCRβ, CD3γ, CD3δ and CD3ζ) and redirect T cells to kill tumor cells in an MHC-independent manner. Our preclinical studies showed that sFv-ε-based T-cell therapies could effectively recognize and kill carcinoma cells and significantly inhibit tumor growth in mouse xenograft models with reduced cytokine release in vitro and in vivo, which could improve the safety and applicability of adoptive cell therapies. In addition, the co-expressed IL-7 is a cytokine that could enhance the proliferation and survival of T cells. Our preclinical studies showed that sFv-ε-based T-cell therapies displayed superior antitumor efficacy, T-cell persistence, and immunological memory in solid tumors xenografts with low cytokine release.

(3) **Patient accessibility**: To reduce the cost and increase the accessibility of CAR T-cell therapies, we continue to develop our market-differentiating allogeneic THANK-uCAR® technology. THANK-uCAR® is our proprietary technology to generate allogeneic CAR T cells with improved expansion and persistence by modifying donor-derived T cells. To minimize graft versus host disease (GvHD) and host versus graft response (HvGR) from allogeneic T cells, we disrupt the genomic loci encoding TCR and β2 microglobulin (B2M) to eliminate surface expression of the TCR or the human leukocyte antigen (HLA), an approach that has been validated by previous research. However, natural killer (NK) cells attack T cells without HLA expression, which then limits the expansion and persistence of the allogeneic CAR T cells. To protect the allogeneic CAR T cells from the patient's NK cells, we arm these TCR-/HLA – CAR T cells with a CAR that recognizes NKG2A to hinder the NKG2A-positive NK cell rejection of the CAR T cells and therefore allow the THANK-uCAR T cells to resist the attack by NK cells. Our in vitro and in vivo studies demonstrated that the armoring the TCR-/HLA – CAR T cells with the anti-NKG2A CAR resulted in improved expansion in the presence of NK cells. We are developing allogeneic CAR T-cell product candidates using THANK-uCAR® technology, which we believe could potentially increase CAR T cell expansion, persistence and efficacy. We believe the successful application of THANK-uCAR® technology would significantly lower the cost of CAR T-cell therapy and increase patient accessibility.

(4) **Target availability**: In the development of cancer therapies, the expression of tumor-associated antigens in normal tissues poses a significant challenge, as this expression pattern leads to on-target off-tumor toxicities. To resolve the challenge with target availability, we continue to explore innovative technologies to enhance drug target availability and therefore turn undruggable antigens into promising targets. We developed LADAR® technology (local action driven by artificial receptor), in which an artificial receptor is triggered by a LADAR Ligand to induce the transcription of the gene(s) of interest (e.g., the tumor antigen-targeted CAR, plus any cytokines or other therapeutic mediators). Through the LADAR® artificial receptor, the antitumor CAR transcription is only triggered when the LADAR binds to a LADAR Ligand, making it possible to precisely control when and where immune cells act against cancer cells.

The LADAR-CAR signaling circuits require both antigens for LADAR® and CAR recognition to kill target cells, thus reducing on-target off-tumor effects when these two antigens are not simultaneously expressed in the same normal tissues. In our in vitro studies, the LADAR® system induced strong therapeutic gene expression in response to antigen engagement and, importantly, negligible leakage expression in resting cells. LADAR-CAR T cells executed killing function only if both antigens were present.

We are also working on other applications of LADAR® system, such as LADAR-cytokine circuits. We believe that the establishment of LADAR® system is the key step to developing CAR T cells with powerful and precise killing of cancer.

To develop effective CAR T-cell products for more cancer types and further enhance the antitumor effect, we have been expanding our research to more promising oncology targets for cell therapies. In addition, leveraging our proprietary antibody platforms, we have successfully developed humanized or fully human antibodies against these targets, such as GPRC5D, B7-H3, etc. These antibodies, together with our CAR T-cell technology platforms, will help further enhance the product pipeline.

These technologies are currently being developed in-house with global rights and can be used alone or in combination to upgrade our existing product candidates and to generate future pipeline product candidates.

Utilizing these technologies, we strive to further enrich our product pipeline and subsequently progress to these pipeline product candidates clinical and commercial stage.

As of December 31, 2022, we had more than 300 patents of which 83 patents had been issued globally including China, the United States, Europe and Japan. This status is an increase of 25 issued patents and 51 patent applications from the end of 2021. Our R&D activities would continue to generate substantial intellectual property in our areas of expertise.

Manufacturing

We have established in-house GMP-compliant manufacturing capabilities to support vertically integrated CAR T manufacturing, including plasmids, lentiviral vectors, and CAR T-cell production. The vertically integrated production contributes to increased efficiency and enhanced control, resulting in improved drug product consistency and faster turnaround times for patients, especially for patients with rapidly progressing solid tumors. The integrated manufacturing will also significantly reduce costs and improve margins for more advantageous commercialization.

We have been expanding our manufacturing capacity in China and the U.S. to support both the clinical trials and the subsequent commercialization of our pipeline products.

Our clinical manufacturing facility in Xuhui, Shanghai with a total gross floor area (GFA) of approximately 3,000 sq.m. and an annual CAR T production capacity to support the CAR T-cell treatment of 200 patients has been used for clinical manufacturing of CAR T-cell products in supporting multiple clinical studies of our leading assets. Since establishment, our Xuhui facility has achieved over 95% manufacturing success rate for all product candidates.

We have also completed the construction of our commercial-scale manufacturing facility located in Jinshan, Shanghai with a total GFA of approximately 7,600 sq.m. and an estimated manufacturing capacity to support CAR T-cell treatment of up to 2,000 patients annually. The Jinshan Manufacturing Facility passed the on-site inspection conducted by the Shanghai Medical Products Administration (SHMPA) and obtained the first Manufacture License for Pharmaceutical Products ("**Manufacturing License**") issued in China for CAR T-cell therapy.

With the clinical manufacturing facility in Xuhui, Shanghai, and the commercial manufacturing facility in Jinshan, Shanghai, we can produce the lentiviral vectors and CAR T cells in-house to support clinical trials and CAR T-cell commercialization in China. We also provide the lentiviral vectors to clinical trials outside of China.

We have made significant progress in expanding CARsgen's manufacturing capacity outside China by launching a state-of-the-art GMP Manufacturing Facility in Research Triangle Park, Durham, North Carolina. We successfully passed the official inspections and received the Certificate of Compliance from the City-County Inspections Department of Durham. We have commenced commissioning and qualification of RTP Manufacturing Facility through the RMAT consultation with the FDA. The RTP Manufacturing Facility has started GMP production of autologous CAR T cell products and successfully released the first GMP batch for the clinical trials in September 2022.

The RTP Manufacturing Facility, with a total GFA of approximately 3,300 sq.m, will provide CARsgen with additional manufacturing capacity of autologous CAR T-cell products for 700 patients annually. The RTP Manufacturing Facility will support CARsgen's ongoing clinical studies and early commercial launch in the United States, Canada and Europe. CARsgen has started building a world-class Chemistry, Manufacturing and Controls (CMC) team for the RTP Manufacturing Facility operations. The RTP Manufacturing Facility project adopted an integrated project delivery approach that greatly shortens construction turnaround time and improves cost effectiveness. This project has received the Job Development Investment Grant award and other investment incentives from North Carolina state, Durham County and Durham City.

By building vertically integrated manufacturing capabilities in-house, we expect to significantly increase manufacturing sustainability, reduce manufacturing costs, and shorten the vein-to-vein time. In addition, we have an in-house GMP-compliant manufacturing facility capable of high yield production of lentiviral vectors. To accelerate the clinical production at the RTP Manufacturing Facility, CARsgen Jinshan Manufacturing Facility will provide the lentiviral vector to support CAR T-cell production for zevor-cel and CT041 clinical studies in the United States and Canada. With large scale lentiviral vectors production, we could greatly reduce the CAR T manufacturing costs.

Commercialization and External Collaboration

In formulating our strategies for the commercialization of our innovative CAR T-cell products, we have been carefully evaluating the different available options while considering the company's strategic development goals at different stages, the resources, the capabilities, and the financial implications. For the commercilization of zevor-cel in China, we have conducted thorough analysis for the two options of commercialization by ourselves or partnering with a company with established commercial network and capabilities.

Collaboration for zevor-cel commercialization in mainland China with Huadong Medicine

In January 2023, CARsgen and Huadong Medicine (Hangzhou) Co., Ltd., a wholly-owned subsidiary of Huadong Medicine Co., Ltd. (SZ. 000963) ("**Huadong Medicine**") entered into a collaboration agreement for the commercialization of zevor-cel in mainland China. Under the terms of the Agreement, CARsgen will receive an upfront payment of RMB200 million and is eligible to receive regulatory and commercial milestone payments up to RMB1,025 million. CARsgen will continue to be responsible for the development, regulatory approval, and manufacturing of zevor-cel in mainland China.

Huadong Medicine's extensive commercialization experience in mainland China along with their strategic goal of being a leader in the oncology therapeutic area created the opportunity for a strong, strategic and mutually beneficial partnership between our two companies. We believe that the partnership with Huadong Medicine, through lever-aging the respective strengths of the two companies, can significantly maximize the commercial successes of zevor-cel in the market while reduce the risk and associated cost.

Collaboration for the evaluation of AB011 with Roche

In January 2023, we announced a collaboration agreement with F. Hoffmann-La Roche Ltd ("**Roche**") to evaluate CARsgen's investigational drug AB011 in combination with atezolizumab, Roche's PD-L1 checkpoint inhibitor, along with standard-of-care chemotherapy in patients with GC/GEJ. Under the terms of the agreement, Roche will be responsible for operation and conduct of the trial while both companies co-share the costs of the AB011 treatment arms in the study. As part of the clinical collaboration, CARsgen's proprietary CLDN18.2 IHC test kit, which has showed excellent specificity and sensitivity profiles, will be applied to evaluate CLDN18.2 expression in the gastric cancer patients.

The co-funded study of AB011 in combination with atezolizumab will be conducted as part of Roche's Morpheus Platform. The Morpheus Platform is a collection of Phase Ib/II clinical trials in multiple cancers with high unmet clinical needs including gastrointestinal cancer, designed to assess the safety and early efficacy to enable more rapid and efficient development of novel cancer treatment combinations.

AB011 is an important asset in the CLDN18.2 franchise of CARsgen and is the first monoclonal antibody against CLDN18.2 that received IND clearance in China. Through this collaboration, we hope that the combination of AB011 and atezolizumab can bring greater clinical benefits to gastric cancer patients.

License Agreement for zevor-cel in the Republic of Korea with HK Inno.N Corporation

CARsgen has entered into a licensing agreement with HK Inno.N Corporation (KOSDAQ: 195940), a fully-integrated pharmaceutical company, to develop and commercialize CT032 and zevor-cel, targeting CD19 and BCMA respectively, for the potential treatment of various cancers in the Republic of Korea. Under the terms of the agreement, CARsgen will receive upfront and additional milestone payments totaling up to USD50 million as well as up to double digit royalties on net sales in the Republic of Korea.

Expansion and Retention of Talent

As of December 31, 2022, we had a total of 539 employees. We have also strengthened the leadership team: we hired Dr. Raffaele BAFFA as the Chief Medical Officer of the Company and Dr. Sylvie PELTIER as the Senior Vice President of Global Regulatory Affairs of the Company. Biographical details of the senior management team are provided on the Company's website at www.carsgen.com, and also presented in the section headed "Directors and Senior Management" of this report.

Impact of COVID-19

Clinical trials continued during the pandemic. COVID-19 had a manageable impact on our patient enrollment, patient visits and monitor's hospital visits. To minimize the impact of COVID-19, we conducted clinical trials at multiple institutions located in different areas, cities, and countries. Although some delays have occurred due to lack of hospital staff and slight administrative delays, there was no significant impact on the progress of clinical trials and interactions with health authorities. We do not expect the COVID-19 pandemic to have any material long-term impact on our clinical trials or our overall clinical development plans. Moreover, we continuously monitor and assess the impact of pandemic on the Group's U.S. operations and business activities outside China. We have noticed manageable impacts of the COVID-19 pandemic on the operations of the U.S. medical sites and the external vendors, which are involved in our clinical studies outside China. We may virtually monitor and audit some medical sites, contract development manufacturing organizations and contract research organizations due to the temporary suspension of onsite visits by our partners. The procurement and delivery of materials, reagents and equipment that are used in clinical manufacturing may be delayed or cancelled due to global supply chain constraints. Those uncertainties described above may slow down the progress of our clinical programs in the future. We have also noticed a potential impact of the COVID-19 pandemic on the construction, commissioning, qualification and validation of our U.S. CGMP manufacturing facility in Durham, North Carolina.

In 2022, the Group implemented a set of COVID-19 prevention and control measures, and there was no significant impact on our daily work. The measures undertaken included daily monitoring of the pandemic, tracking workforce health and travelling information, ensuring vaccination of the workforce, distributing personal protective equipment, frequent disinfection and good ventilation at workplace, and implementing strict visitor policies.

Although the pandemic remains ongoing, we believe the pandemic will not significantly impact our ability to continue our operations, though we cannot predict exactly how our operations may be affected.

Industry Overview

As a novel treatment modality, CAR T-cell therapy offers breakthrough efficacy and curative potential for cancer patients. The global CAR T-cell therapy market has been experiencing strong growth since the approval of the first CAR T-cell therapy in 2017. The global CAR T-cell therapy market is further driven by the increases in global cancer incidence, the approval of more CAR T-cell therapies in more cancer types and indications, the improvements in manufacturing technology and capacities, and the availability of CAR T-cell products in more markets. As of the date of this report, there are six CAR T-cell products approved by U.S. FDA and two CAR T-cell products approved by NMPA in China. However, there are still significant unmet medical needs for the cancer patients worldwide, calling for more and better innovative CAR T-cell products, particularly for the treatment of solid tumors. With our pipeline products, including zevor-cel and CT041, and innovative technology platforms, including CycloCAR®, THANK-uCAR® and LADAR®, we are committed to developing the innovative therapies to fulfill these unmet medical needs.

Future and Outlook

With the mission of "making cancer curable", we will continue to develop innovative product candidates for the treatment of cancer patients worldwide. Building on the milestones we have achieved, we will focus on rapid clinical development of zevor-cel and CT041 both in China and overseas. We will advance the clinical development to earlier line of treatment and continue to develop other product candidates in clinical and preclinical stages and to develop innovative CAR T technologies to further optimize the efficacy, safety and affordability of the CAR T-cell products. We will continue to expand our manufacturing capacity in China and the United States to support the clinical trials and future commercialization of our product candidates and to make CAR T-cell treatments more accessible and affordable. We will continue to establish additional external partnerships with leading research institutes and pharmaceutical companies on technology and product licenses as means to maximize the application of our technology platform and the value of our product pipeline, bringing more innovative cell therapy products to cancer patients worldwide and ultimately creating more value for our investors and the society.

FINANCIAL REVIEW

Overview

We have no products approved for commercial sale and have not generated any revenue from product sales. We have never been profitable and have incurred operating losses in every year since inception, with operating losses of RMB881 million and RMB574 million for the years ended December 31, 2022 and 2021, respectively. Substantially all of our operating losses resulted from research and development expenses and administrative expenses.

Loss for the years

Our net loss was RMB892 million for the year ended December 31, 2022, representing a decrease of RMB3,852 million from RMB4,744 million for the year ended December 31, 2021. The decrease was primarily due to (i) the decrease of fair value loss on financial instruments issued to investors (the "**Fair Value Loss**"), which totaled RMB4,156 million for the year ended December 31, 2021 and zero for the year ended December 31, 2022. The Fair Value Loss related financial instruments were converted to ordinary shares upon the completion of the Company's initial public offering on June 18, 2021 (the "**IPO**"), hence no loss would be recognized after the IPO; (ii) the decrease of listing fees of approximately RMB27 million (the "**Listing Fees**") for the year ended December 31, 2021, while no listing fee was incurred during the year ended December 31, 2022; partially offset by (iii) the increase in share-based compensation (together with the Fair Value Loss and the Listing Fees, collectively the "**Adjusted Items**"), which totaled RMB44 million for the year ended December 31, 2022, representing an increase of RMB30 million from RMB14 million for the year ended December 31, 2021; (iv) higher research and development expenses and higher administrative expenses; and (v) foreign exchange losses of RMB97 million for the year ended December 31, 2022, representing a net impact of RMB104 million from foreign exchange gains of RMB7 million for the year ended December 31, 2021.

Non-IFRS Measures

To supplement the Group's consolidated net loss and net loss per share which are presented in accordance with the IFRS, the Company has provided adjusted net loss and adjusted net loss per share as additional financial measures, which are not required by, or presented in accordance with, the IFRS.

Adjusted net loss for the periods and adjusted net loss per share for the periods represent the net loss and net loss per share respectively excluding the effect of certain non-cash items and/or one-time events, namely the fair value loss of the financial instrument issued to investors, the listing fee and share-based compensation. The terms adjusted net loss and adjusted net loss per share are not defined under the IFRS.

The table below sets forth a reconciliation of the loss to adjusted loss during the years indicated:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
	(Audited)	(Audited)
Loss for the years	**(892,247)**	(4,744,423)
Add:		
Fair value loss of financial instrument issued to investors	**–**	4,155,572
Listing fee	**–**	26,580
Share-based compensation	**43,995**	13,504
Adjusted net loss	**(848,252)**	(548,767)

	Year ended December 31,	
	2022	2021
	RMB	*RMB*
	(Audited)	(Audited)
Loss per share for the years	**(1.62)**	(12.26)
Add:		
Fair value loss of financial instrument issued to investors per share	**–**	10.74
Listing fee per share	**–**	0.07
Share-based compensation per share	**0.08**	0.03
Adjusted net loss per share	**(1.54)**	(1.42)

The Company believes that the adjusted non-IFRS measures are useful for understanding and assessing the underlying business performance and operating trends, and that the Company's management and investors may benefit from referring to these adjusted financial measures in assessing the Group's financial performance by eliminating the impact of certain unusual, non-recurring, non-cash and/or non-operating items that the Group does not consider indicative of the performance of the Group's core business. These non-IFRS measures, as the management of the Group believes, is widely accepted and adopted in the industry in which the Group is operating. However, the presentation of these non-IFRS measures is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with the IFRS. Shareholders of the Company and potential investors should not view the adjusted results on a stand-alone basis or as a substitute for results under IFRS, and these non-IFRS measures may not be comparable to similarly-titled measures represented by other companies.

Research and Development Expenses

	Year ended December 31,	
	2022 ***RMB'000*** **(Audited)**	2021 *RMB'000* (Audited)
Employee benefit expenses	**273,297**	178,297
Testing and clinical expenses	**252,470**	204,309
Research and development consumables	**51,494**	53,456
Depreciation of property, plant and equipment	**47,208**	28,155
Depreciation of right-of-use assets	**20,160**	16,193
Utilities	**19,070**	10,875
Amortization of intangible assets	**5,846**	5,321
Travelling and transportation expenses	**4,952**	2,982
Office expenses	**2,392**	776
Professional service fees	**1,191**	240
Short term lease and low value lease expenses	**814**	691
Other expenses	**1,407**	426
Total	**680,301**	501,721

Research and development expenses increased to RMB680 million for the year ended December 31, 2022, representing an increase of RMB178 million from RMB502 million for the year ended December 31, 2021, primarily due to higher expenses for testing and productions in support of our clinical trials, and the additional costs incurred at the newly operational manufacturing facility in North Carolina.

Administrative Expenses

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
	(Audited)	(Audited)
Employee benefit expenses	**79,931**	57,138
Listing expenses	**–**	26,580
Professional service fees	**23,216**	23,260
Office expenses	**13,041**	10,013
Depreciation of property, plant and equipment	**4,411**	1,492
Auditors' remuneration	**3,445**	3,793
– audit service	**3,260**	3,585
– non-audit service	**185**	208
Depreciation of right-of-use assets	**2,837**	606
Travelling and transportation expenses	**2,036**	799
Amortization of intangible assets	**1,071**	679
Utilities	**991**	308
Short term lease and low value lease expenses	**723**	100
Other expenses	**4,093**	1,063
Total	**135,795**	125,831

Administrative expenses increased to RMB136 million for the year ended December 31, 2022, representing an increase of RMB10 million from RMB126 million for the year ended December 31, 2021, primarily due to increase in employee benefit expenses resulting from higher headcount in the US and additional share-based compensation, offset by reduction in listing expenses.

Details of employee benefit expenses and share-based compensation included in the above administrative expenses and research and development expenses are as below:

Employee benefit expenses

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
	(Audited)	(Audited)
Wages and salaries	**250,072**	178,613
Pension costs	**21,472**	13,020
Share-based compensation	**43,995**	13,504
Other employee benefits	**37,689**	30,298
Total	**353,228**	235,435
Amount included in Research and Development Expenses	**273,297**	178,297
Amount included in Administrative Expenses	**79,931**	57,138

The increase of employee benefit expenses is mainly due to higher headcount in the US and the related increase in staff salary and benefit costs.

Share-based payments

Expenses for the share-based compensation have been charged to the consolidated statements of comprehensive loss as follows:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
	(Audited)	(Audited)
Administrative expenses	**7,685**	1,890
Research and development expenses	**36,310**	11,614
Total	**43,995**	13,504

The increase of share-based compensation expenses is mainly due to additional RSUs/options granted.

Fair Value Loss of Financial Instruments Issued to Investors

The fair value loss of financial instruments issued to investors decrease to zero for the year ended December 31, 2022, representing a decrease of RMB4,156 million from RMB4,156 million for the year ended December 31, 2021, primarily due to the fair value loss related financial instruments were converted to ordinary shares upon the completion of the Company's IPO, hence no loss would be recognized after the IPO.

LIQUIDITY AND CAPITAL RESOURCES

Management monitors and maintains a level of cash and cash equivalents deemed adequate to finance our operations and mitigate the effects of fluctuations. In addition, management monitors our borrowings and, from time to time, evaluates operations to renew our borrowings upon expiry based on our actual business requirements. We rely on equity financing and debt financing as our major sources of liquidity.

The following table sets forth our cash flows for the periods indicated:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
	(Audited)	(Audited)
Net cash used in operating activities	**(643,048)**	(512,322)
Net cash generated from/(used in) investing activities	**2,386,990**	(2,471,321)
Net cash (used in)/generated from financing activities	**(236,514)**	2,674,032
Net increase/(decrease) in cash and cash equivalents	**1,507,428**	(309,611)
Cash and cash equivalents at beginning of the period	**691,284**	1,042,969
Exchange gains/(losses) on cash and cash equivalents	**69,324**	(42,074)
Cash and cash equivalents at end of the period	**2,268,036**	691,284

Net Cash Used in Operating Activities

During the Reporting Period, we incurred negative cash flows from operations, and substantially all of our operating cash outflows resulted from our research and development expenses and administrative expenses.

Our operating activities used RMB643 million and RMB512 million for the year ended December 31, 2022 and 2021, respectively. We are currently a pre-income company. We believe our pipeline products have promising global market potential in the future. We intend to continue investing in our research and development efforts and aim to obtain marketing approvals for our product candidates as soon as feasible. As we launch and commercialize our product candidates, we expect to generate operating income and improve our net operating cash outflow position.

Net Cash Generated from Investing Activities

Our cash generated from investing activities mainly reflects our cash generated from short term deposits and used in our purchase of property, plant and equipment. For the year ended December 31, 2022, our net cash generated from investing activities was RMB2,387 million, which was primarily redemption of investment of term deposit and partially offset by purchase of property, plant and equipment. For the year ended December 31, 2021, our net cash used in investing activities was RMB2,471 million, which was primarily attributable to investment of term deposit and purchase of equipment.

Net Cash Used in Financing Activities

During the Reporting Period, our cash outflow from financing activities primarily due to repayments of bank borrowings.

For the year ended December 31, 2022, our net cash used in financing activities was RMB237 million, primarily attributable to net repayments of bank borrowings of RMB219 million and payment of interest expenses of RMB10 million. For the year ended December 31, 2021, our net cash generated from financing activities was RMB2,674 million, which was primarily attributable to proceeds from our IPO and bank borrowings.

Cash and Cash Equivalents and Term Deposits with Original Maturity over Three Months

	As at December 31, 2022 *RMB'000* (Audited)	As at December 31, 2021 *RMB'000* (Audited)
Cash at banks		
– RMB	**906,855**	33,773
– USD	**1,357,360**	657,511
– HKD	**3,821**	–
Subtotal	**2,268,036**	691,284
Term deposits with original maturity between three and twelve months – USD	**–**	2,315,654
Total	**2,268,036**	3,006,938

The Group's total balance of cash and cash equivalents plus term deposits as at December 31, 2022 were RMB2,268 million, representing a decrease of RMB739 million compared to RMB3,007 million as at December 31, 2021. The decrease was primarily attributable to payments of research and development expenses, administrative expenses, investment of capex and repayments of bank borrowings.

Borrowing and Gearing Ratio

The Group's total borrowings, including interest-bearing borrowings, as at December 31, 2022 were RMB7 million, representing a decrease of RMB220 million compared to RMB227 million as at December 31, 2021.

As at December 31, 2022 and December 31, 2021, the Group's bank borrowings of approximately RMB7 million and RMB12 million respectively are pledged by property, plant and equipment and right-of-use assets of the Group.

The fair values of the borrowings approximate their carrying amounts as the discounting impact is not significant.

As at December 31, 2022, the Group's secured borrowings is mature within three years with the interest rate of 5.2250% (2021: 5.2250%). The gearing ratio (calculated by dividing the sum of borrowings and lease liabilities by total equity) of the Group as at December 31, 2022 and 2021 were 4.83% and 11.28%, respectively.

Lease liabilities

The Group leases land use right and properties. Lease on land use right has been fully paid and lease on properties were measured at net present value of the lease payments to be paid during the lease terms.

Lease liabilities were discounted at incremental borrowings rates of the Group.

Our lease liabilities increased slightly to RMB112 million as at December 31, 2022 from RMB111 million as at December 31, 2021.

OTHER FINANCIAL INFORMATION

Significant Investments, Material Acquisitions and Disposals

As at December 31, 2022, we did not hold any significant investments. During the year ended December 31, 2022, we did not have any material acquisitions or disposals of subsidiaries, associates and joint ventures.

Foreign Exchange Risk

The Group has entities operating in the United States of America and in the People's Republic of China and there are certain cash and cash equivalents, other receivables, accruals and other payables denominated in a currency that is not the functional currency of the relevant group entity. As at December 31, 2022, the Group had no foreign exchange hedging instruments. The Group constantly reviews the economic situation and its foreign exchange risk profile, and will consider appropriate hedging measures, as may be necessary.

As at December 31, 2022 and 2021, if the USD strengthened/weakened by 5% against the RMB with all other variables held constant, net loss for the years would have increased/decreased approximately RMB78 million and RMB44 million respectively.

Capital Expenditure

For the year ended December 31, 2022, the Group's total capital expenditure amounted to approximately RMB139 million, which was mostly used in purchase of property, plant and equipment, and software.

Charge on Assets

As at December 31, 2022 and 2021, the Group's building with carrying values of RMB31 million and RMB33 million respectively were pledged for certain of the Group's borrowings.

As at December 31, 2022 and 2021, the Group's land use right with carrying values of RMB6.6 million and RMB6.8 million respectively was pledged as collateral for the Group's borrowings.

Contingent Liability

As at December 31, 2022, the Group did not have any material contingent liabilities.

Employees and Remuneration Policies

During the Reporting Period, we have scaled down our team from about 573 employees as at December 31, 2021 to 539 employees as at December 31, 2022. As at December 31, 2022, we had a total of 539 employees, with 64.38% of them are female.

In compliance with the applicable labor laws, we enter into standard confidentiality and employment agreements with our key management and research staff. The contracts with our key personnel typically include a standard non-compete agreement that prohibits the employee from competing with us, directly or indirectly, during his or her employment and for up to two years after the termination of his or her employment. The agreements also typically include undertakings regarding assignment of inventions and discoveries made during the course of his or her employment.

During the Reporting Period, we did not experience any strikes, labor disputes or industrial action which had a material effect on our business. We believe we have not experienced any significant difficulty in recruiting staff for our operations. We have established a labor union that represents employees with respect to the promulgation of bylaws and internal protocols in China.

Our employees' remuneration consists of salaries, bonuses, share-based incentive plans, social insurance contributions and other welfare payments. In accordance with applicable laws, we have made contributions to social insurance funds (including pension plan, unemployment insurance, work-related injury insurance, medical insurance and maternity insurance, as applicable) and housing funds for our employees. During the Reporting Period, we had complied with all statutory social insurance fund obligations applicable to us under PRC & US laws in all material aspects, and housing fund obligations applicable to us under PRC laws.

To remain competitive in the labor market, we provide various incentives and benefits to our employees. We invest in continuing education and training programs, including internal and external training, for our management staff and other employees to upgrade their skills and knowledge. We also provide competitive salaries, project and stock incentive plans to our employees, especially key employees.

Future Investment Plans and Expected Funding

The Group will continue to expand its markets in the PRC and globally in order to tap its internal potential and maximize shareholders' interest. The Group will continue to grow through self-development, mergers and acquisitions, and other means. We will employ a combination of financing channels to finance capital expenditures, including but not limited to internal funds, capital markets and bank loans. Currently, the bank credit lines available to the Group are adequate.

The biography details of the Directors and senior management are set out as follows:

EXECUTIVE DIRECTORS

Dr. Zonghai LI (李宗海), aged 49, was appointed as a Director in February 2018, and the Chief Executive Officer and the Chief Scientific Officer in February 2021. He was re-designated as an executive Director in February 2021.

Dr. Zonghai LI has also held positions at CARsgen Therapeutics (Shanghai). He has been a director and the chief executive officer since October 2014, and the chief scientific officer since December 2017.

Dr. Zonghai LI has approximately 20 years of work experience in the biopharmaceutical field. Dr. Zonghai LI worked at Shanghai Cancer Institute (上海市腫瘤研究所) from July 2005 to June 2018 and served as the leader of the biotherapy research team at the State Key Laboratory of Oncogenes and Related Genes of Shanghai Cancer Institute (上海市腫瘤研究所癌基因及相關基因國家重點實驗室) during such period. In light of the governmental policy to support and encourage scientific researchers to work in private technology companies conditional upon the requisite college or research institutes' approval, Dr. Zonghai LI decided to establish our Group in October 2014 to conduct R&D work and the commercialization of cellular immunotherapy, while continuing to work at Shanghai Cancer Institute. The arrangement was ratified and approved by the Shanghai Cancer Institute in January 2016. Before that, Dr. Zonghai LI was a project manager at Guilin Pavay Gene Pharmaceutical Co., Ltd. (桂林華諾威基因藥業有限公司) from July 2000 to April 2002.

Dr. Zonghai LI has dedicated himself to developing innovative treatment for the patients with cancer. One of his early career achievements is the identification of GE11, a peptide ligand of EGFR which has become a widely used unnatural peptide in antitumor study now. He is also the inventor of new technologies such as Hpd3cell, a new phage display technology; FR806, a new safety switch for T cell therapy; CycloCAR technology to increase the antitumor activities of chimeric antigen receptor (CAR) T cells. He has a leading role in the research on CAR T cell therapy against solid tumors by publishing the first paper of CAR T cell therapy against GPC3, Claudin 18.2 and EGFR/EGFRvIII worldwide. Dr. Zonghai LI was a professor in Shanghai Cancer Institute, Renji Hospital affiliated to Shanghai Jiao Tong University School of Medicine (上海交通大學醫學院附屬仁濟醫院上海市腫瘤研究所) and a doctoral supervisor at Renji Hospital affiliated to Shanghai Jiao Tong University School of Medicine (上海交通大學醫學院附屬仁濟醫院).

Dr. Zonghai LI obtained his bachelor's degree in preventive medicine and master's degree in pathology and pathogen biology from the Central South University (中南大學), formerly known as the Hunan Medical University (湖南醫科大學), the PRC, in June 1997 and July 2000 respectively. He obtained his Doctor of Philosophy degree in pathogen biology from Fudan University (復旦大學), the PRC, in June 2005. Dr. Zonghai LI was awarded the Leading Talents of Shanghai City (上海市領軍人物) in 2018 and the Shanghai Youth Science and Technology Award (上海市青年科技傑出貢獻獎) in 2019.

Dr. Huamao WANG (王華茂), aged 46, was appointed as a Director in September 2018 and the Chief Operating Officer in February 2021. He was re-designated as an executive Director in February 2021.

Dr. Wang has also held positions at other members of our Group. He has been a director and the Chief Operating Officer of CARsgen Therapeutics (Shanghai) since October 2014, the general manager of CARsgen Pharmaceuticals since November 2017 and the general manager of CARsgen Diagnostics since November 2020.

Prior to joining our Group, Dr. Wang served as the general manager of YIJIE Biotech (Shanghai) Holding Limited (上海益傑生物技術有限公司) from July 2013 to October 2014, and the deputy general manager of Shanghai Ruijin Biotechnology Co., Ltd. (上海銳勁生物技術有限公司) from January 2011 to June 2013. Before that, Dr. Wang worked at Zhejiang Academy of Medical Sciences (浙江省醫學科學院) from July 2009 to January 2011.

Dr. Wang obtained his bachelor's degree in biochemistry from Sichuan University (四川大學), the PRC, in July 1999. He received his master's degree and Doctor of Philosophy degree in pathogenic organisms from Fudan University (復旦大學), the PRC, in June 2003 and June 2009, respectively.

Dr. Hua JIANG (蔣華), aged 44, was appointed as an executive Director on August 1, 2022, who has about 18 years of work experience in the field of cancer biotherapy, and also serves as Vice President of Early Discovery of CARsgen, and is responsible for formulating the strategy of early discovery and the construction of R&D pipeline.

Dr. Jiang joined the Company in April 2021 as Senior Director of Immune Cell Research and Development Department, and is responsible for the research work of Immune Cell Research and Development and Preclinical Pharmacology. Dr. Jiang has achieved outstanding outcomes, not only by strengthening the technology platform but also by expanding a number of candidate product pipelines.

Prior to joining the Company, from July 2007 to April 2021, Dr. Jiang was responsible for the research and development of antibody and CAR T-cells, as well as the related mechanism in Shanghai Cancer Institute (上海市腫瘤研究所). Dr. Jiang was a professor in Shanghai Cancer Institute (上海市腫瘤研究所) and a doctoral supervisor at Shanghai Jiao Tong University School of Medicine (上海交通大學醫學院). Dr. Jiang has published more than 20 SCI papers, including JNCI, CCR, Molecular Therapy and other professional journals. She published the world's first paper about CLDN18.2 and EGFR/EGFRvIII CAR T Therapy as the first author and the world's first paper of small molecule inhibitor and CAR T combination therapy in solid tumors as the co-corresponding author.

Dr. Jiang earned her bachelor's degree in Clinical Medicine from Jining Medical College (濟寧醫學院) in 2001. She obtained her master's degree in Pathogen Biology from Shandong University (山東大學) in 2004 and Ph.D. in Pathogen Biology from Fudan University (復旦大學) in 2007.

NON-EXECUTIVE DIRECTORS

Mr. Bingsen GUO (郭炳森), aged 52, was appointed as a Director in September 2018 and re-designated as a non-executive Director in February 2021.

Mr. Guo had been a director of CARsgen Therapeutics (Shanghai) from April 2016 to April 2020.

Mr. Guo is an entrepreneur with expertise in plastic manufacturing industry. He was appointed as a supervisor from February 2017 to April 2019 and co-founded Quanzhou Hongcheng Precision Plastic Mould Ltd. (泉州弘晟精密塑膠模具有限公司) in February 2017. Mr. Guo was appointed as the vice president of the council of the Fifth Administrative Committee of Fujian Province Youth Commercial Association (福建省青年商會第五屆管委會理事會) in 2016. In October 2009, Mr. Guo founded Hubei Xincheng Plastic Ltd. (湖北鑫晟塑膠有限公司); established Xinsheng Precision Computer Mould (Fujian) Ltd. (鑫晟精密電腦模具(福建)有限公司) in April 2006 and acts as its executive director. Mr. Guo cofounded Fujian Huian Xian Yide Plastic Co., Ltd. (福建惠安縣怡德塑膠有限公司) in March 1998 and acts as its director.

Mr. Guo was awarded the 12th Fujian Province Outstanding Entrepreneur (第十二屆福建省優秀企業家) in 2008. He was nominated as one of the National Villages Young Entrepreneurial Leaders (全國農村青年創業致富帶頭人) in 2008.

Mr. Guo is an uncle of another non-executive Director, Mr. Huaqing GUO (郭華清).

Mr. Huaqing GUO (郭華清), aged 34, was appointed as a Director in September 2020 and re-designated as a non-executive Director in February 2021.

Mr. Guo has been an executive Director, the general manager and legal representative at Xiamen Runtang Tianyi Investment Management Ltd. (廈門潤唐天一投資管理有限公司) since June 2020 and has been responsible for investment management in the secondary market. He served as general manager and legal representative at Fujian Dingwo Investment Management Ltd. (福建省鼎沃投資管理有限公司) from September 2015 to May 2020, during which he participated in equity investments projects, and as a vice president at Quanzhou Jiatai Footwear Ltd. (泉州嘉泰鞋業有限公司) from September 2011 to August 2015. With his experience in business administration and investment management, our Company believes that Mr. Guo can bring a unique perspective to the Board, in particular, in assisting our Company's business development and risk assessment of various investments.

Mr. Guo obtained his bachelor's degree in business administration from Jiageng College of Xiamen University (廈門大學嘉庚學院), the PRC, in July 2011.

Mr. Guo is a nephew of Mr. Bingsen GUO (郭炳森).

Mr. Ronggang XIE (謝榕剛), aged 37, was appointed as a Director in September 2020 and re-designated as a non-executive Director in February 2021.

Mr. Xie has been appointed as a non-executive director of InnoCare Pharma Limited (諾誠健華醫藥有限公司) (HKEX: 9969), a non-executive director of Akeso, Inc. (康方生物科技(開曼)有限公司) (HKEX: 9926) and a director of Shanghai Allist Pharmaceuticals Co., Ltd. (上海艾力斯醫藥科技股份有限公司) (SSE: 688578) since March 2021, August 2020 and November 2019, respectively. Mr. Xie is currently a partner of Shanghai Loyal Valley Investment Management Limited (上海正心谷投資管理有限公司) and was promoted to a managing director in November 2016 after joining as a senior investment manager in October 2015. Prior to joining Shanghai Loyal Valley Investment Management Limited, Mr. Xie was appointed as an investment director between June 2014 and June 2015 and served as an investment manager at Suzhou Kaifeng Zhengde Investment Management Co., Ltd (蘇州凱風正德投資管理有限公司) from June 2011 to June 2014.

Mr. Xie obtained his master's degree in biomedical engineering from Southeast University (東南大學), the PRC, in March 2011.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Dr. Guangmei YAN (顏光美), aged 65, was appointed as an independent non-executive Director effective as of the Listing Date.

Dr. Yan has been appointed as an independent director of MGI Tech Co., Ltd. (深圳華大智造科技股份有限公司) (SSE: 688114) since June 2020 and Medprin Regenerative Medical Technologies Co., Ltd. (廣州邁普再生醫學科技股份有限公司) (SZSE: 301033) since November 2018.

Dr. Yan served as the vice president of Sun Yat-sen University (中山大學) (previously known as Sun Yat-sen University of Medical Sciences (中山醫科大學)) from 2008 to 2017. He was appointed as a professor from December 1996 to November 1999 and an assistant professor from August 1989 to July 1992. He began to teach at the university in August 1989.

Dr. Yan obtained his bachelor's degree in medicine from the Central South University Xiangya School of Medicine (中南大學湘雅醫學院), formerly known as the Hunan Medical School (湖南醫學院), the PRC in December 1979 and completed a training course of the National College of Pharmacy Teaching (全國高等學院校藥理學師資進修班) organized by the university in February 1982. Dr. Yan obtained his master's and doctorate degree in medicine from Sun Yat-sen University (中山大學), formerly known as Sun Yat-sen University of Medical Sciences (中山醫科大學), the PRC, in March 1985 and July 1989, respectively.

Mr. Tak Young SO (蘇德揚), aged 52, was appointed as an independent non-executive Director effective as of the Listing Date.

Mr. So has more than 20 years of experience in finance, accounting, investment and private equity businesses with global financial institutions and asset management companies. Mr. So served as an independent non-executive Director of Goodbaby International Holdings Limited (好孩子國際控股有限公司) (HKEX: 1086) since May 2022 and Shanghai Henlius Biotech, Inc. (上海復宏漢霖生物技術股份有限公司) (HKEX: 2696) since September 2019. Mr. So previously served as a partner of Prospere Capital Limited from January 2018 to May 2022 and served as a managing partner of FastLane Group in July 2012. He started his career as an auditor with Ernst & Young, Hong Kong from February 1993 to December 1994.

Mr. So has previously served various positions, including chief financial officer of PAG Capital in November 2011, chief financial officer of Asia Pacific of asset management division for Deutsche Bank, Hong Kong from August 2007 to November 2011, chief financial officer of Hamon Asset Management Limited, an affiliate of Bank of New York Mellon in February 2005, head of finance and operations of consumer and commercial banking in Hong Kong, head of asset and liability management of Greater China and chief financial officer of private client banking in Hong Kong of ABN AMRO Bank N.V., Hong Kong from March 2002 to January 2005, vice president of global capital market/Asia treasury and vice president of financial controls of Bank of America, Hong Kong from January 1998 to March 2002.

Mr. So received his bachelor of business degree and his master of business administration degree from the University of Technology in Sydney, Australia in April 1994 and September 1998, respectively. He is a fellow member of Certified Practicing Accounting Australia since August 2011.

Dr. Huabing LI (李華兵), aged 42, was appointed as an independent non-executive Director commencing from March 9, 2023.

He has rich working experiences in the field of biology, and has worked in Shanghai Jiaotong University School of Medicine Shanghai Institute of Immunology as a Researcher with main responsibilities of the research on epigenetic immunology from December 2017. Prior to this, he served as postdoctoral researcher in Yale University from September 2012 and was a postdoctoral research fellow in Rutgers, the State University of New Jersey from June 2011 to August 2012.

Dr. Huabing LI earned his Bachelor's degree in Science in Biological Science from College of Life Sciences, Nankai University in June 2002. He obtained Master's degree in Science in Genetics from Nankai University in July 2005 and Ph.D. in Biochemistry and Molecular Biology from Rutgers, The State University of New Jersey in May 2011.

SENIOR MANAGEMENT

Dr. Zonghai LI (李宗海), Dr. Huamao WANG (王華茂) and Dr. Hua JIANG (蔣華) are each an executive Director of our Company and also a member of our senior management team. For further details, please see "Directors and Senior Management – Executive Directors" for details of their biography.

Dr. Raffaele BAFFA, aged 62, joined the Group in April 2022 and is our Chief Medical Officer.

Dr. Baffa has rich experiences in pharmaceutical industry and research institutes, taking various leadership positions in multi-national corporations and biotech companies. Prior to joining our Group, Dr. Baffa served as Chief Medical Officer and Executive Vice President of Research & Development at Ziopharm Oncology (NASDAQ: ZIOP). Ziopharm Oncology was rebranded to Alaunos (NASDAQ: TCRT) in January, 2022. Prior to Ziopharm Oncology, Dr. Baffa was the Head of Research & Development and Chief Medical Officer in Medisix Therapeutics, a company focused on developing novel immune cell therapies. Dr. Baffa was the Vice President, Therapeutic Area Head of Oncology, Global Clinical Development for Shire Pharmaceuticals, and following the acquisition of the oncology division by Servier Pharmaceuticals, Dr. Baffa served as the Chief Medical Officer of Servier Pharmaceuticals. Dr. Baffa has also held leadership positions at Pfizer and Sanofi.

Dr. Baffa earned an M.D. from University of Padova, School of Medicine and a Ph.D. in biology and molecular pathology from University of Parma in Italy.

Mr. Richard John DALY, aged 62, joined the Group in January 2022 and is our President of CARsgen Therapeutics Corporation, a subsidiary of the Company in the United States.

Mr. Daly has approximately 30 years of experience in pharmaceutical industry, including leadership positions in multi-national corporations and biotech companies. Prior to joining our Group, Mr. Daly served as Chief Operating Officer of Beyond Spring, Inc. (NASDAQ: BYSI). From February 2016 to July 2018, Mr. Daly served as Chief Executive Officer, President and Chairman of Neuralstem, Inc. (NASDAQ: PALI). Mr. Daly served in AstraZeneca as the President of the U.S. Diabetes subsidiary (formerly BMS-AZ Diabetes Alliance). Prior to these positions, from 1998 to 2011, Mr. Daly served at Takeda and TAP Pharmaceuticals, a joint venture established between Takeda and Abbott Laboratories, holding several leadership positions, including the Executive Vice President at Takeda Pharmaceutical North America and the Senior Vice President of marketing at TAP Pharmaceuticals. Mr. Daly currently sits on the boards of directors of Catalyst Pharmaceuticals (NASDAQ: CPRX) and Opiant Pharmaceuticals (NASDAQ: OPNT).

Mr. Daly holds an MBA from Kellogg School of Management at Northwestern University and a Bachelor of Science degree from University of Notre Dame.

Dr. Leigh James HSU, aged 52, joined our Group in June 2017 and is our Senior Vice President, Business Development.

Dr. Hsu has over 15 years of work experience in business management and strategic planning in the biotechnology industry. Prior to joining our Group, Dr. Hsu served as director of business development at Acadia Pharmaceuticals (NASDAQ: ACAD) and vice president of corporate development and strategy at Lpath, Inc. (merged with Apollo Endosurgery, Inc. in December 2016) between January 2005 and November 2016.

Dr. Hsu obtained his bachelor's degree in biochemistry and cell biology and his doctorate degree in molecular pathology from the University of California, San Diego in the United States, in June 1993 and September 1999, respectively. He received his master's degree in business administration from the University of California, Irvine in the United States, in June 2001.

Dr. Jie JIA (賈捷), aged 45, joined our Group in December 2016 and is our Vice President, Strategic Alliances and Operations.

Dr. Jia has served in CARsgen Therapeutics Corporation, our wholly-owned subsidiary incorporated in the United States since joining our Group, including as the Vice President, Business Development, responsible for overseeing the corporate operations of the Group in the United States, leading the strategic alliances and managing CMC operations from December 2016 to July 2017, as the Vice President, Strategic Alliances, responsible for overseeing the corporate operations in the United States, leading strategic alliances, managing CMC operations from July 2017 to December 2018, and as the Vice President, Strategic Alliances and Operations, responsible for overseeing the corporate operations in the United States, leading strategic alliances, managing CMC operations from January 2019 to present.

Dr. Jia obtained his bachelor's degree in biochemistry from Sichuan University (四川大學), the PRC, in July 1999 and his doctorate degree in biochemistry and molecular biology from Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences (中國科學院上海生命科學研究院), the PRC, in August 2004. He has been a member of The North American Vascular Biology Organization and Sigma Xi since 2006 and 2008, respectively. In 2014, he joined The Nitric Oxide Society as a member. He became a member of American Association for the Advancement of Science in 2016. Dr. Jia joined the American Society of Clinical Oncology as an allied physician and doctoral scientist in 2017. He has been a member of the American Society of Hematology and a full member of the American Society of Quality since 2019.

Dr. Hong MA (馬洪), aged 52, joined our Group in August 2018 and is our Senior Vice President, Clinical Development.

Dr. Ma served as the senior medical director at Immatics US, Inc., a joint venture launched by Immatics Biotechnologies GmbH (NASDAQ: IMTX) and MD Anderson Cancer Center from May 2016 to August 2018. He served as the director of clinical development from December 2014 to May 2016 and worked as a temporary employee at Bellicum Pharmaceuticals, Inc. (NASDAQ: BLCM) from September 2014 to December 2014. Dr. Ma was the director of clinical operations at Endocyte, Inc. (NASDAQ: ECYT) (which is delisted on NASDAQ from 31 December 2018) from June 2012 to July 2014.

Dr. Ma obtained his bachelor's degree in clinical medicine and his master's degree in cancer pathophysiology from Central South University (中南大學), formerly known as Hunan Medical University (湖南醫科大學)), the PRC, in July 1994 and July 1997, respectively. He received his master's degree in business administration from University of Georgia, the United States, in May 2005. Dr. Ma has been elected as an Allied Physician/ Doctoral Scientist of the American Society of Clinical Oncology since 2011. He has also been a member of the American Society of Hematology since 2016.

Ms. Lan XIE (謝嵐), aged 50, joined the Group in March 2021 and is our Senior Vice President, Finance.

Prior to joining our Company, Ms. Xie served as the vice president, finance of Connect Biopharma (Shanghai) Co., Ltd. (康乃德生物醫藥(上海)有限公司), a subsidiary of Connect Biopharma Holdings Limited (NASDAQ: CNTB) from October 2020 to March 2021 during which she was responsible for U.S. listing, finance and tax related matters. Prior to this, Ms. Xie served as the chief financial officer of Sunshine Guojian Pharmaceuticals (Shanghai) Co., Ltd. (三生國健藥業(上海)股份有限公司) (SSE Sci-Tech Innovation Board: 688336) from April 2019 to May 2020 and she was the vice president and the chief financial officer (China region) of SciClone Pharmaceuticals (China) Co., Ltd. (賽生醫藥(中國)有限公司), a wholly-owned subsidiary of SciClone Pharmaceuticals Holdings Limited (賽生藥業控股有限公司) (HKEX: 6600) from August 2012 to September 2018. From November 2007 to July 2012, Ms. Xie served as the vice president, finance of Shanghai ChemPartner Co., Ltd. (上海睿智化學研究有限公司). Ms. Xie was a senior manager in PricewaterhouseCoopers Consultants, Shenzhen Co., Ltd. Shanghai Branch from August 2005 to November 2007 and was responsible for corporate mergers and acquisitions and financial due diligence related work.

Ms. Xie obtained her bachelor's degree in business administration in Boston University in May 1994. She has also earned a master of business administration degree (MBA) in INSEAD in July 2003.

Dr. Sylvie PELTIER, aged 59, joined the Group in October 2022 and is our Senior Vice President, Global Regulatory Affairs.

Dr. Peltier has extensive global leadership and hands-on experiences in Clinical and CMC Regulatory Affairs across several multinational pharmaceutical and biopharmaceutical companies. Prior to joining CARsgen, Dr. Peltier served as Vice President, Head of US Regulatory Affairs at MorphoSys US Inc (NASDAQ: MOR) since 2020, and as Head of Regulatory Affairs at Servier Pharmaceuticals LLC from 2018. Before joining Servier Pharmaceuticals LLC, Dr. Peltier served at Cephalon since 2007, an international biopharmaceutical company which was acquired later by TEVA Pharmaceuticals Industries Ltd (NYSE: TEVA), holding various positions from Senior Director, Europe Regulatory Affairs, CNS/Pain and CMC, Senior Director, US Regulatory Affairs, to Senior Director, Clinical Search Evaluation and Due Diligence. Previously, Dr. Peltier worked at Pfizer Regulatory Affairs from 1995.

Dr. Peltier earned a Diploma of Pharmacy Doctorate and a Diploma of Graduated Specialized Studies (DESS) in Health Law from University of Paris XI in Paris, France.

REPORT OF THE DIRECTORS

The Directors present their report and the audited consolidated financial statements (the "**Consolidated Financial Statements**") of the Group for the Reporting Period.

GENERAL INFORMATION

The Company was incorporated in the Cayman Islands on February 9, 2018 as an exempted company with limited liability under the laws of the Cayman Islands. The Company's shares were listed on the Main Board of the Stock Exchange on June 18, 2021.

PRINCIPAL ACTIVITIES

CARsgen is a biopharmaceutical company with operations in China and the U.S., mainly focused on innovative CAR T-cell therapies for the treatment of hematologic malignancies and solid tumors. CARsgen has built an integrated cell therapy platform with in-house capabilities that span target discovery, antibody development, clinical trials, and commercial-scale manufacturing. CARsgen has internally developed novel technologies and a product pipeline with global rights to address major challenges of CAR T-cell therapies, such as improving the safety profile, enhancing the efficacy in treating solid tumors, and reducing treatment costs. CARsgen vision is to become a global biopharmaceutical leader that brings innovative and differentiated cell therapies to cancer patients worldwide and makes cancer curable. There was no significant change in the nature of the Group's principal activities during the Reporting Period.

Particulars of the Company's principal subsidiaries as at December 31, 2022 are set out in Note 12 to the Consolidated Financial Statements.

BUSINESS REVIEW

A fair review of the business of the Group as well as a discussion and analysis of the Group's performance during the Reporting Period and the material factors underlying its financial performance and financial position as required by section 388(2) and Schedule 5 to the Companies Ordinance (Chapter 622 of the Laws of Hong Kong) ("**Companies Ordinance**") can be found in the section headed "Management Discussion and Analysis" of this report.

DIRECTORS

During the Reporting Period and up to the Latest Practicable Date, the Board consists of the following Directors:

Executive Directors

Dr. Zonghai LI *(Chairman)*
Dr. Huamao WANG
Dr. Hua JIANG *(appointed on August 1, 2022)*

Non-executive Directors

Mr. Bingsen GUO
Mr. Ronggang XIE
Mr. Huaqing GUO
Ms. Yachao ZHAO *(resigned on May 27, 2022)*

Independent Non-executive Directors

Dr. Chunhai FAN *(resigned on January 11, 2023)*
Dr. Guangmei YAN
Mr. Tak Young SO
Dr. Huabing LI *(appointed on March 9, 2023)*

In accordance with Article 16.2 of the Articles of Association of the Company, Dr. Hua JIANG and Dr. Huabing LI, Directors appointed by the Board on August 1, 2022 and March 9, 2023 respectively either to fill a casual vacancy or as an addition to the Board, shall hold office only until the next following general meeting of the Company and shall then be eligible for re-election at that meeting. As such, Dr. Hua JIANG and Dr. Huabing LI will retire from office at the forthcoming annual general meeting of the Company ("**AGM**") and, being eligible, will offer themselves for re-election.

In accordance with Article 16.19 of the Articles of Association of the Company, Mr. Ronggang XIE, Mr. Huaqing GUO and Dr. Guangmei YAN will retire from office by rotation at the forthcoming AGM and, being eligible, will offer themselves for re-election.

DIRECTORS AND SENIOR MANAGEMENT'S BIOGRAPHIES

Biographical details of the Directors and senior management are set out in the section headed "Directors and Senior Management" of this report.

CHANGES IN INFORMATION OF DIRECTORS

Details of changes in Directors during the Reporting Period and up to the Latest Practicable Date are set out below:

Name	Position	Details of Change	Reasons of Change
Ms. Yachao ZHAO	non-executive Director	resigned on May 27, 2022	to allow more time for her to focus on her other business commitments
Dr. Hua JIANG	executive Director	appointed on August 1, 2022	–
Dr. Chunhai FAN	independent non-executive Director	resigned on January 11, 2023	other business commitments which require more of his attention and dedication
Dr. Huabing LI	independent non-executive Director	appointed on March 9, 2023	–

Having made specific enquiry and as confirmed by Directors, save for (i) with effect from March 18, 2023, Dr. Guangmei YAN's annual remuneration having been adjusted to RMB150,000, and (ii) the biography details as disclosed under the section headed "Directors and Senior Management" of this report, no other changes in the information of Directors which shall be subject to disclosure according to paragraphs (a) to (e) and (g) under Rule 13.51(2) of the Listing Rules shall be disclosed in accordance with Rule 13.51B(1) of the Listing Rules since the date of publication of the 2022 interim report of the Company.

INDEPENDENCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

The Company has received from each of the independent non-executive Directors an annual confirmation in writing of his independence pursuant to Rule 3.13 of the Listing Rules. The Company considers that, during the Reporting Period and as at the Latest Practicable Date, all of the independent non-executive Directors are independent.

DIRECTORS' SERVICE CONTRACTS

For more information about the service contracts entered into by the Company, please see the Corporate Governance Report in this report for further details.

PERMITTED INDEMNITY PROVISION AND DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

A permitted indemnity provision (as defined in the Companies Ordinance (Chapter 622 of the Laws of Hong Kong)) in relation to the directors' and officers' liability insurance is currently in force and was in force during the Reporting Period and up to the Latest Practicable Date. The Company has arranged appropriate directors' liability insurance coverage for the Directors of the Group during the Reporting Period and up to the Latest Practicable Date.

SUFFICIENCY OF PUBLIC FLOAT

Based on the information that is publicly available to the Company and within the knowledge of the Directors, the Company had maintained the prescribed public float under Rule 8.08 of the Listing Rules during the Reporting Period and as at the Latest Practicable Date.

KEY PERFORMANCE INDICATORS

Details of the key performance indicators of the Group as at December 31, 2022 are set out in the section headed "Management Discussion & Analysis" of this report.

CORPORATE GOVERNANCE

Particulars of the Company's corporate governance practices are set out in the section headed "Corporate Governance Report" of this report.

REVIEW BY AUDIT COMMITTEE

The Audit Committee currently comprises two independent non-executive Directors, namely, Mr. Tak Young SO and Dr. Huabing LI, and one non-executive Director, namely Mr. Huaqing GUO. The Audit Committee has reviewed the audited Consolidated Financial Statements for the year ended December 31, 2022 with the management and the auditor of the Company. The Audit Committee considered that the annual results are in compliance with the applicable accounting standards, laws and regulations, and the Company has made appropriate disclosures thereof. The Audit Committee has also discussed matters with respect to the accounting policies and practices adopted by the Company and internal control with senior management of the Company.

PRINCIPAL RISKS AND UNCERTAINTIES

Risks Relating to Our Financial Position and Need for Additional Capital

- We have incurred significant net losses and net operating cash outflows since our inception, and we anticipate that we will continue to incur net losses and net operating cash outflows for the foreseeable future and may never become profitable;
- We have net operating cash outflow during the Reporting Period;
- We may need additional capital to meet our operating cash requirements, and financing may not be available on terms acceptable to us, or at all;
- We have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance. The risks involved in our business may cause potential investors to lose substantially all of their investment in our business;
- We may need to obtain additional financing to fund our operations, and if we are unable to obtain such financing, we may be unable to complete the development and commercialization of our primary drug candidates;
- Raising additional capital may cause dilution to our shareholders, restrict our operations or require us to relinquish rights to our technologies or drug candidates.

Risks Relating to Our Business

- We depend substantially on the success of our product candidates, all of which are in pre-clinical or clinical development. If we are unable to successfully complete clinical development, obtain regulatory approval and commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed;

- We operate in a rapidly changing industry and we face substantial competition, which may result in others discovering, developing or commercializing competing products before or more successfully than we do, or developing product candidates or treatments that are safer, more effective, more effectively marketed or cost less than ours, or receive regulatory approval or reach the market earlier. As a result, our product candidates may not achieve the sales we anticipate and could be rendered non-competitive or obsolete;

- Clinical development of biopharmaceutical products involves a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results;

- If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates;

- We may not be successful in our efforts to build or in-license a pipeline of new product candidates. If we fail to do so, our commercial opportunity will be limited;

- We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or have a greater likelihood of success.

Risks Relating to Extensive Government Regulation

- All material aspects of the research, development, manufacturing and commercialization of biopharmaceutical products are heavily regulated. Any failure to comply with existing regulations and industry standards, or any adverse actions by the NMPA or other comparable regulatory authorities against us, could negatively impact our reputation and our business, financial condition, results of operations and prospects;

- The regulatory approval processes of the NMPA and other comparable regulatory authorities are lengthy, time-consuming and inherently unpredictable. If we are ultimately unable to obtain, or experience delays in obtaining, regulatory approval for our product candidates, our business will be substantially harmed;

- Changes in government regulations or in practices relating to the pharmaceutical and biopharmaceutical industries, including healthcare reform in China, and compliance with new regulations may result in additional costs;

- Even if we are able to commercialize any approved product candidates, the products may become subject to unfavorable pricing regulations, or to unfavorable changes in national or third-party reimbursement practices, which could harm our business.

Risks Relating to Manufacturing of Our Product Candidates

- Our product candidates are cell therapies. The manufacture of our product candidates is complex, and we may encounter difficulties in production, particularly with respect to development or scaling-out of our manufacturing capabilities. If we encounter such difficulties, our ability to provide supply of our product candidates for clinical trials or our products for patients, if approved, could be delayed or stopped, or we may be unable to maintain a commercially viable cost structure.

Risks Relating to Commercialization of Our Product Candidates

- The market opportunities for our product candidates may be limited to those patients who are ineligible for or have failed prior treatments and may be small, and our projections regarding the size of the addressable market may be incorrect;

- We currently have a limited marketing and sales organization and have no experience as a company in launching and marketing products. If we are unable to establish marketing and sales capabilities to market and sell our product candidates, we may not be able to generate product revenue or commercialize future product candidates. We may not be able to effectively build and manage our sales network;

- Product liability claims or lawsuits could cause us to incur substantial liabilities, and our insurance coverage may be inadequate to protect us from all the liabilities we may incur;

- The increasing use of social media platforms presents new risks and challenges.

Risks Relating to Our Intellectual Property Rights

- If we are unable to obtain and maintain adequate patent and other intellectual property protection for our product candidates and other intellectual property, or if the scope of such intellectual property rights obtained is not sufficiently broad, third parties could develop and commercialize products and technologies similar or identical to ours and compete directly against us, and our ability to successfully develop and commercialize any of our product candidates or technologies may be adversely affected;

- If we determine that our intellectual property rights (including rights in-licensed from third parties) or other intangible assets are impaired, our results of operations and financial condition may be adversely affected;

- Even if we are able to obtain patent protection for our product candidates, the life of such protection, if any, is limited, and third parties could be able to circumvent our patents by developing similar or alternative products and technologies in a non-infringing manner, or develop and commercialize products and technologies similar or identical to ours and compete directly against us after the expiration of our patent rights, if any, and our ability to successfully commercialize any product or technology would be materially adversely affected.

For further details, please refer to the section headed "Risk Factors" in the Prospectus.

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS IN SHARES AND UNDERLYING SHARES OF THE COMPANY AND ITS ASSOCIATED CORPORATIONS

Interests and short positions of our Directors in the share capital of the Company and its associated corporations

As at December 31, 2022, the interests or short positions of the Directors and chief executives' of the Company in the Shares, underlying Shares and debentures of the Company or any associated corporation (within the meaning of Part XV of the SFO), which (a) were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which he/she was taken or deemed to have under such provisions of the SFO); or (b) were required, pursuant to section 352 of the SFO, to be recorded in the register referred to therein; or (c) were required to be notified to the Company and the Stock Exchange pursuant to the Model Code, were as follows:

LONG POSITION IN THE SHARES OF THE COMPANY

Name of Director/ Chief Executive	Capacity	Total number of Shares/ underlying Shares held	Approximate Percentage of Interest in the Company *(Note 3)*
Dr. Zonghai LI *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Mr. Bingsen GUO *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Dr. Huamao WANG *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Mr. Huaqing GUO *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Dr. Hua JIANG	Beneficial owner	2,970,656/ Long position	0.52%

Notes:

(1) YIJIE Biotech (BVI) holds 198,139,536 Shares of our Company, representing 34.60% of interest of our Company as at December 31, 2022. YIJIE Biotech (BVI) is owned as to 69.00%, 10.20%, 10.00%, 10.00% and 0.80% by CART Biotech, Redelle Holding, He Xi Holdings Limited, Candock Holdings Limited and Accure Biotech Limited (collectively, the "**Intermediary Entities**") respectively. The Intermediary Entities are wholly-owned by Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO and Mr. Haiou CHEN respectively.

(2) Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO, Mr. Haiou CHEN, the Intermediary Entities, Ms. Xuehong YANG, Yeed Holdings, Ms. Xiaojing GUO and Quanzhou Dingwo (LP) entered into the Concert Party Agreement on February 22, 2021 and each party is deemed to be interested in the Shares that the other parties are interested in under section 317 of the SFO. Each of Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO and Mr. Haiou CHEN, through the Intermediary Entities and YIJIE Biotech (BVI), are interested in 198,139,536 Shares of our Company, representing 34.60% of interest in our Company as at December 31,2022. Ms. Xuehong YANG is interested in 8,888,888 Shares, representing 1.55% of interest in our Company through Yeed Holdings as at December 31,2022. Ms. Xiaojing GUO is interested in 5,555,556 Shares, representing 0.97% of interest in our Company through Quanzhou Dingwo (LP) as of December 31,2022. In addition, Mr. Haiou CHEN is entitled to receive up to 2,788,750 Shares pursuant to options granted to him, subject to the conditions (including vesting conditions) of those options. Therefore, Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO, Mr. Haiou CHEN, the Intermediary Entities, Ms. Xuehong YANG, Yeed Holdings, Ms. Xiaojing GUO and Quanzhou Dingwo (LP) are deemed to be interested in a total of 215,372,730 Shares, representing 37.61% of interest in our Company as at December 31, 2022.

(3) As at December 31, 2022, the total issued share capital of the Company was 572,625,274 Shares.

SUBSTANTIAL SHAREHOLDERS' INTERESTS IN SHARES AND UNDERLYING SHARES OF THE COMPANY

Interests and short positions discloseable under Divisions 2 and 3 of Part XV of the SFO

As at December 31, 2022, the persons, other than the Directors or the chief executive of the Company, who had interests or short positions in the Shares and underlying Shares as recorded in the register of interests required to be kept by the Company pursuant to Section 336 of Part XV of the SFO are as follows:

Long Position in the Shares of the Company

Name of Shareholders	Capacity	Number of securities/ Nature of Shares held	Approximate percentage of interest in the Company *(Note 6)*
CART Biotech *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Redelle Holding *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
He Xi Holdings *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
CANDOCK Holdings *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Mr. Haiou CHEN *(Note 1) (Note 2)*	Beneficial interest, interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Accure Biotech *(Note 1) (Note 2)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Ms. Xuehong YANG *(Note 2) (Note 3)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Yeed Holdings *(Note 2) (Note 3)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Ms. Xiaojing GUO *(Note 2) (Note 4)*	Interest of controlled corporations and interest of party acting in concert	215,372,730/ Long position	37.61%
Quanzhou Dingwo (LP) *(Note 2) (Note 4)*	Beneficial interest and interest of party acting in concert	215,372,730/ Long position	37.61%

Name of Shareholders	Capacity	Number of securities/ Nature of Shares held	Approximate percentage of interest in the Company *(Note 6)*
YIJIE Biotech (BVI) *(Note 1)*	Beneficial interest and interest of party acting in concert	215,372,730/ Long position	37.61%
GIC Private Limited *(Note 5)*	Interest in controlled corporation	33,260,450/ Long position	5.81%
GIC Special Investments Private Limited *(Note 5)*	Investment manager	33,260,450/ Long position	5.81%
GIC (Ventures) Pte. Ltd. *(Note 5)*	Interest in controlled corporation	33,260,450/ Long position	5.81%

Notes:

(1) YIJIE Biotech (BVI) holds 198,139,536 Shares of our Company, representing 34.60% of interest of our Company as at December 31, 2022. YIJIE Biotech (BVI) is owned as to 69.00%, 10.20%, 10.00%, 10.00% and 0.80% by the Intermediary Entities respectively. The Intermediary Entities are wholly-owned by Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO and Mr. Haiou CHEN respectively.

(2) Dr. Zonghai LI, Mr. GUO Bingsen, Dr. Huamao WANG, Mr. Huaqing GUO, Mr. Haiou CHEN, the Intermediary Entities, Ms. Xuehong YANG, Yeed Holdings, Ms. Xiaojing GUO and Quanzhou Dingwo (LP) entered into the Concert Party Agreement on February 22, 2021 and each party is deemed to be interested in the Shares that the other parties are interested in under section 317 of the SFO. Each of Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO and Mr. Haiou CHEN, through the Intermediary Entities and YIJIE Biotech (BVI), are interested in 198,139,536 Shares of our Company, representing 34.60% of interest in our Company as at December 31, 2022. Ms. Xuehong YANG is interested in 8,888,888 Shares, representing 1.55% of interest in our Company through Yeed Holdings as at December 31, 2022. Ms. Xiaojing GUO is interested in 5,555,556 Shares, representing 0.97% of interest in our Company through Quanzhou Dingwo (LP) as of December 31, 2022. In addition, Mr. Haiou CHEN is entitled to receive up to 2,788,750 Shares pursuant to options granted to him, subject to the conditions (including vesting conditions) of those options. Therefore, Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO, Mr. Haiou CHEN, the Intermediary Entities, Ms. Xuehong YANG, Yeed Holdings, Ms. Xiaojing GUO and Quanzhou Dingwo (LP) are deemed to be interested in a total of 215,372,730 Shares, representing 37.61% of interest in our Company as at December 31, 2022.

(3) Yeed Holdings holds 8,888,888 Shares in our Company, representing 1.55% of interest in our Company as at December 31, 2022. Yeed Holdings is wholly-owned by Ms. Xuehong YANG, the wife of our non-executive Director, Mr. Bingsen GUO.

(4) Quanzhou Dingwo (LP) holds 5,555,556 Shares in our Company, representing 0.97% of interest in our Company as at December 31, 2022. The general partner of Quanzhou Dingwo (LP) is Ms. Xiaojing GUO, the daughter of our non-executive Director, Mr. Bingsen GUO.

(5) China Medmaterial Limited holds 11,038,206 Shares in the Company. China Medmaterial Limited is indirectly wholly-owned by BVCF Realization Fund, L.P.. Prowell Ventures Pte. Ltd., a company wholly-owned by GIC (Ventures) Pte. Ltd., which is in turn wholly-owned by the Minister for Finance of the Government of Singapore, owns more than one-third interest in BVCF Realization Fund, L.P. GIC (Ventures) Pte. Ltd. is wholly-owned by GIC Special Investments Private Limited, which is in turn wholly-owned by GIC Private Limited. On the other hand, Loyal Valley Capital Advantage Fund II LP holds 22,222,244 Shares in the Company. Loyal Valley Capital Advantage Fund II LP is wholly-owned by Highbury Investment Pte Ltd, which is in turn wholly-owned by GIC (Ventures) Pte. Ltd.. Accordingly, each of GIC Private Limited, GIC Special Investments Private Limited and GIC (Ventures) Pte. Ltd. is deemed to be interested in a total of 33,260,450 Shares in the Company.

(6) As at December 31, 2022, the total issued share capital of the Company was 572,625,274 Shares.

Save as disclosed above and to the best knowledge of the Directors, as at December 31, 2022, the Company is not aware of any other person (other than the Directors or the chief executive of the Company) who had an interest or short position in the Shares or underlying Shares as recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO.

DIRECTORS' INTERESTS IN COMPETING BUSINESSES

During the Reporting Period, none of the Directors or their respective close associates (as defined in the Listing Rules) is considered to have interests in businesses which compete or are likely to compete, either directly or indirectly, with the businesses of the Group pursuant to the Listing Rules.

ARRANGEMENT FOR DIRECTORS TO ACQUIRE SHARES OR DEBENTURES

Save as disclosed in this report, at no time during the Reporting Period was the Company or any of its subsidiaries, the holding company, a party to any arrangement to enable a Director to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate.

DIRECTORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS

Save for the Contractual Arrangements as disclosed in this report, no Director nor an entity connected with a him/her had a material interest, whether directly or indirectly, in any transaction, arrangement or contract of significance to the business of the Group to which the Company or any of its subsidiaries was a party during the Reporting Period.

CONTINUING DISCLOSURE OBLIGATIONS PURSUANT TO THE LISTING RULES

Save as disclosed in the annual report, the Company does not have any disclosure obligations under Rule 13.20, 13.21 and 13.22 of the Listing Rules.

COMPLIANCE WITH THE RELEVANT LAWS AND REGULATIONS

The Group has compliance policies and procedures in place to ensure adherence to applicable laws, rules and regulations, in particular, those that have a significant impact on it. The Group would seek professional legal advice from its legal advisers to ensure that transactions and business to be performed by the Group are in compliance with the applicable laws and regulations. During the Reporting Period and up to the Latest Practicable Date, the Group was not aware of any non-compliance with the laws, regulations and regulatory requirements of the places where the Group operates in all material respects, including the requirements under the Companies Ordinance, the Listing Rules, the SFO and the Corporate Governance Code for, among other things, the disclosure of information and corporate governance.

EQUITY-LINK AGREEMENT

Save as disclosed in this report, the Company had not entered into any equity-linked agreement for the year ended December 31, 2022, nor did any equity-linked agreement subsist as at December 31, 2022.

CONTROLLING SHAREHOLDER'S INTERESTS IN SIGNIFICANT CONTRACTS

Save as disclosed in this report, at no time during the Reporting Period had the Company or any of its subsidiaries, and any of the controlling shareholders (as defined in the Listing Rules) of the Company or any of their subsidiaries (as the case may be) entered into any contract of significance or any contract of significance for the provision of services by any such controlling shareholders or their subsidiaries (as the case may be) to the Company or any of its subsidiaries.

MANAGEMENT CONTRACTS

Save for the Directors' service contracts and appointment letters, no contract of significance concerning the management and administration of the whole or any substantial part of business of the Company or any of its subsidiaries was entered into or subsisted during the Reporting Period.

MATERIAL LITIGATION

The Company was not involved in any material litigation or arbitration for the year ended December 31, 2022. The Directors are also not aware of any material litigation or claims that are pending or threatened against the Group for the year ended December 31, 2022.

PRE-EMPTIVE RIGHTS

There is no provision for pre-emptive rights under the articles of association of the Company or the laws of the Cayman Islands which would oblige the Company to offer new shares on a pro-rata basis to its existing shareholders.

PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES

During the Reporting Period, neither the Company nor any of its subsidiaries had purchased, sold or redeemed the Company's listed securities.

CONTINUING CONNECTED TRANSACTIONS

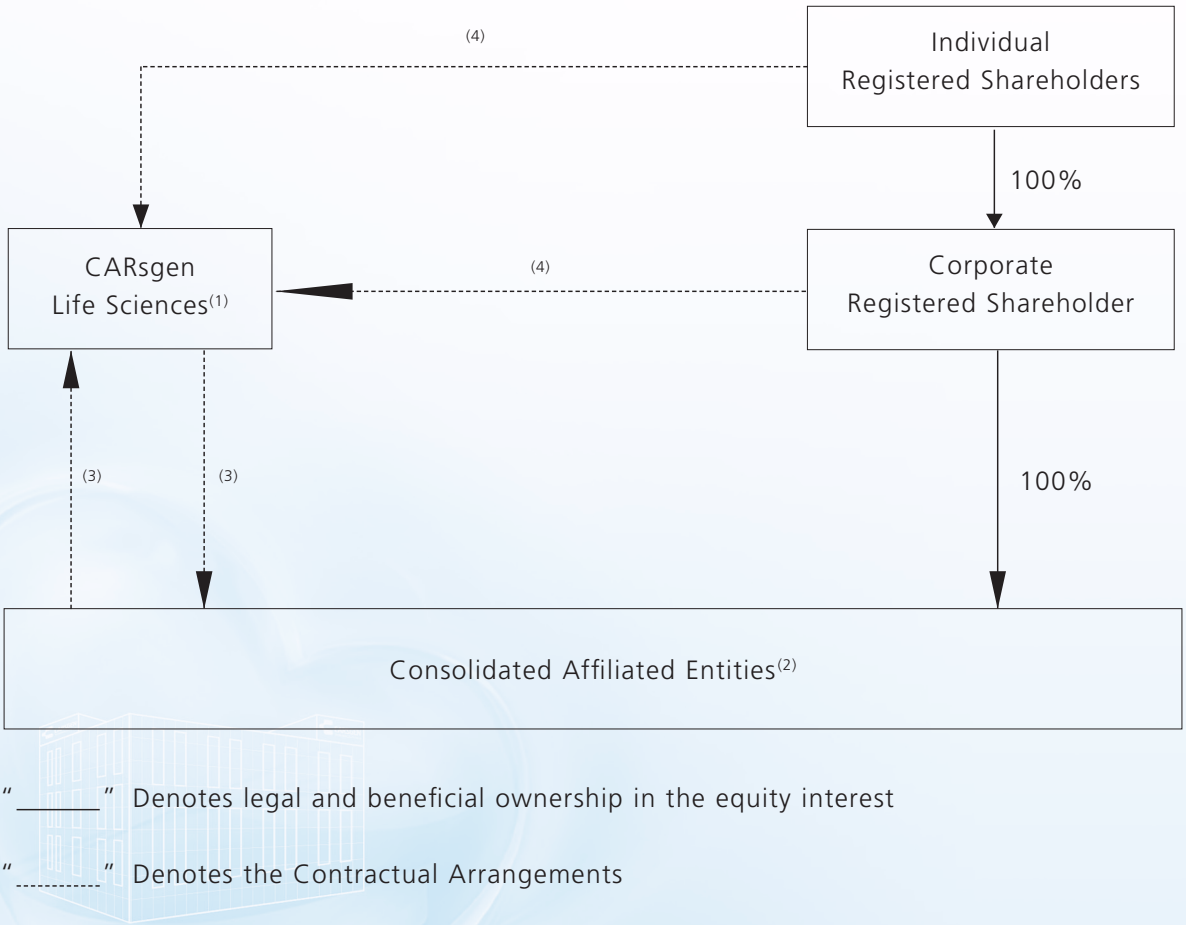
Contractual Arrangement

The Group entered into a series of Contractual Arrangements which would constitute non-exempt continuing connected transactions pursuant to Chapter 14A of the Listing Rules.

Background

In order to comply with the PRC laws and regulations and maintain effective control over all of our operations, we, through our wholly-owned subsidiary, CARsgen Life Sciences entered into the Contractual Arrangements with CARsgen Therapeutics (Shanghai), the Corporate Registered Shareholder (i.e. the shareholder of CARsgen Therapeutics (Shanghai)) and the Individual Registered Shareholders (i.e. the shareholders of the Corporate Registered Shareholder), pursuant to which CARsgen Life Sciences acquired effective control over the finance and operations of our Consolidated Affiliated Entities and is entitled to all the economic benefits derived from their operations.

The following simplified diagram illustrates the flow of economic benefits from our Consolidated Affiliated Entities to our Group stipulated under the Contractual Arrangements:



Note:

(1) CARsgen Life Sciences is wholly-owned by CARsgen Pharma Holdings Limited, which is in turn wholly-owned by our Company.

(2) Our Consolidated Affiliated Entities include CARsgen Therapeutics (Shanghai) and CARsgen Pharmaceuticals. CARsgen Pharmaceuticals is wholly-owned by CARsgen Therapeutics (Shanghai), which is in turn wholly-owned by the Corporate Registered Shareholder, which is in turn owned by the Individual Registered Shareholders, namely as to 69% by Dr. Zonghai LI, 10.2% by Mr. Bingsen GUO, 10% by Dr. Huamao WANG, 10% by Mr. Huaqing GUO and 0.8% by Mr. Haiou CHEN.

(3) CARsgen Life Sciences provides technology consultation services in exchange for service fees from CARsgen Therapeutics (Shanghai). See sub-section headed "Exclusive Business Cooperation Agreements" below.

(4) The Corporate Registered Shareholder executed the Corporate Exclusive Option Agreement (as defined below) in favour of CARsgen Life Sciences for the acquisition of 100% equity interests and/or assets in CARsgen Therapeutics (Shanghai). See sub-section headed "Exclusive Option Agreements". The Individual Registered Shareholders in turn executed the Individual Exclusive Option Agreement (as defined below) in favour of CARsgen Life Sciences for the acquisition of 100% equity interests and/or assets in the Corporate Registered Shareholder.

The Corporate Registered Shareholder pledged as first charge all of its equity interests in CARsgen Therapeutics (Shanghai) to CARsgen Life Sciences as security for its and CARsgen Therapeutics (Shanghai)' s performance under the Exclusive Business Cooperation Agreements (as defined below), the Corporate Exclusive Option Agreement (as defined below), the Corporate Share Pledge Agreement (as defined below) and the Corporate Powers of Attorney (as defined below), as applicable. The Individual Registered Shareholders in turn pledged as first charge all of their respective equity interests in the Corporate Registered Shareholder to CARsgen Life Sciences as security for their respective performance and the performance of the Corporate Registered Shareholder and CARsgen Therapeutics (Shanghai) under the Exclusive Business Cooperation Agreement, Exclusive Option Agreements, Powers of Attorney, Share Pledge Agreements (as applicable). See subsection headed "Share Pledge Agreements."

The Corporate Registered Shareholder executed the Corporate Powers of Attorney in favour of CARsgen Life Sciences. The Individual Registered Shareholders in turn executed the Powers of Attorney in favour of CARsgen Life Sciences in respect of their respective rights as shareholders of the Corporate Registered Shareholder.

Summary of Contractual Arrangements

Exclusive Business Cooperation Agreements

CARsgen Life Sciences and CARsgen Therapeutics (Shanghai) entered into the exclusive business cooperation agreements on April 18, 2018 and the amended and restated exclusive business cooperation agreements on February 2, 2021 (collectively, the "**Exclusive Business Cooperation Agreements**"), pursuant to which CARsgen Therapeutics (Shanghai) agreed to engage CARsgen Life Sciences as its exclusive provider of technology consultation, technical services and other related services, including but not limited to (i) technological support in relation to product development and testing, (ii) design, develop, update and maintenance service in relation to technology system, (iii) technological support in relation to research and development activities, (iv) technological consultation service (including but not limited to viability testing, technology prediction, investigation into specific technologies and producing analytical valuation reports), (v) personnel training services, (vi) onsite personnel supervision; and (vii) other related services requested by CARsgen Therapeutics (Shanghai) from time to time to the extent permitted under PRC law.

Pursuant to the Exclusive Business Cooperation Agreements, the service fee shall be paid annually to CARsgen Life Sciences. The annual service fees shall be reasonably determined by CARsgen Life Sciences based on certain factors, including, among other things, the complexity and difficulty of such services, time and commitment required to provide such services, actual service scope and the market value of comparable service.

The Exclusive Business Cooperation Agreements are for an initial term of 10 years and is automatically extended upon expiry for a term provided by CARsgen Life Sciences in writing unless terminated by CARsgen Life Sciences in the same manner, or otherwise terminated pursuant to the terms of the Exclusive Business Cooperation Agreements.

Powers of Attorney

CARsgen Life Sciences and CARsgen Therapeutics (Shanghai) entered into the powers of attorney with the Corporate Registered Shareholder and other related parties on April 18, 2018 and the amended and restated powers of attorney on February 2, 2021 with Corporate Registered Shareholder (the "**Corporate Powers of Attorney**") pursuant to which the Corporate Registered Shareholder irrevocably and exclusively granted CARsgen Life Sciences or its designee(s) (being the directors of the offshore parent company CARsgen Life Sciences and liquidators and other successors replacing such directors) the power to exercise all rights of the shareholders as set out in the then valid articles of association of CARsgen Therapeutics (Shanghai) and relevant laws and regulations.

The Corporate Powers of Attorney shall remain effective from the date of signing until the Corporate Registered Shareholder (including its successor(s)) ceases to be the shareholder of CARsgen Therapeutics (Shanghai) or otherwise terminated pursuant to the terms of the Corporate Powers of Attorney.

On the other hand, CARsgen Life Sciences also entered into the powers of attorney (the "**Individual Powers of Attorney**", and together with the Corporate Powers of Attorney, the "**Powers of Attorney**") on February 2, 2021 with the Individual Registered Shareholders, pursuant to which the Individual Registered Shareholders irrevocably and exclusively granted CARsgen Life Sciences or its designee(s) (being the directors of the offshore parent company of CARsgen Life Sciences and liquidators and other successors replacing such directors) the power to exercise all rights of the shareholders as set out in the then valid articles of association of the Corporate Registered Shareholder on similar terms as the Corporate Powers of Attorney.

Exclusive Option Agreements

CARsgen Life Sciences and CARsgen Therapeutics (Shanghai) entered into an exclusive option agreement with the Corporate Registered Shareholder and other related parties on April 18, 2018 and an amended and restated exclusive option agreement on February 2, 2021 (collectively the "**Corporate Exclusive Option Agreement**") with the Corporate Registered Shareholder, pursuant to which CARsgen Life Sciences (or a third party designated by it, the "**designee**") will be granted an irrevocable and exclusive right to acquire 100% of the equity interest in and/or assets of CARsgen Therapeutics (Shanghai), in whole or in part at the sole and absolute discretion of CARsgen Life Sciences, to the extent permitted under the PRC laws and regulations.

On the other hand, CARsgen Life Sciences also entered into an exclusive option agreement on February 2, 2021 (the "**Individual Exclusive Option Agreement**", and together with the Corporate Exclusive Option Agreement, the "**Exclusive Option Agreements**") with the Individual Registered Shareholders pursuant to which CARsgen Life Sciences will be granted an irrevocable and exclusive right to acquire 100% of the equity interest in and/or assets of the Corporate Registered Shareholder, in whole or in part at the sole and absolute discretion of CARsgen Life Sciences to the extent permitted under the PRC laws and regulations, on similar terms as the Corporate Exclusive Option Agreement.

The Exclusive Option Agreements shall remain effective for 10 years from the date of signing and shall extend at the election of CARsgen Life Sciences, except until (1) all of the equity interest in and the assets of CARsgen Therapeutics (Shanghai) have been transferred to CARsgen Life Sciences or its designees and (2) CARsgen Life Sciences could conduct the business operated by CARsgen Therapeutics (Shanghai) legally.

Share Pledge Agreements

CARsgen Life Sciences and CARsgen Therapeutics (Shanghai) entered into the share pledge agreement with the Corporate Registered Shareholder and other related parties on April 18, 2018 and the amended and restated share pledge agreement (the "**Corporate Share Pledge Agreement**") on February 2, 2021 with the Corporate Registered Shareholder, pursuant to which the Corporate Registered Shareholder agreed to pledge all of its equity interest in CARsgen Therapeutics (Shanghai) to CARsgen Life Sciences to secure performance of its and CARsgen Therapeutics (Shanghai)'s obligations under the Corporate Exclusive Business Cooperation Agreement, the Corporate Exclusive Options Agreement, the Corporate Share Pledge Agreement and the Corporate Powers of Attorney (as applicable).

On the other hand, CARsgen Life Sciences entered into the share pledge agreement (the "**Individual Share Pledge Agreement**", and together with the Corporate Share Pledge Agreement, the "**Share Pledge Agreements**") on February 2, 2021 with the Individual Registered Shareholders, pursuant to which the Individual Registered Shareholders agreed to pledge all of their respective equity interests in the Corporate Registered Shareholder to CARsgen Life Sciences to secure performance their respective performance and the performance of the Corporate Registered Shareholder and CARsgen Therapeutics (Shanghai) under the Exclusive Business Cooperation Agreement, Exclusive Option Agreements, Powers of Attorney, Share Pledge Agreements (as applicable), on similar terms as the Corporate Share Pledge Agreement. As of the Latest Practicable Date, we have registered the share pledges under the Individual Share Pledge Agreements with the relevant PRC governmental authority in accordance with PRC laws and regulations.

Spouse Undertakings

Each of the spouses of the Individual Registered Shareholders (as applicable) has executed an undertaking (collectively, the "**Spouse Undertakings**"), to the effect that (i) she acknowledges and consents to the execution of the Contractual Arrangements by the relevant Individual Registered Shareholder and acknowledges that she does not have any equity interest or rights with respect to the Contractual Arrangements; (ii) she undertakes not interfere with the performance of the Contractual Arrangements nor to make any assertions in connection with the equity interest of the Corporate Registered Shareholder held by the respective Individual Registered Shareholder; (iii) she has not participated and will not participate in the management of the Corporate Registered Shareholder and will not make any assertions in connection with the equity interest and assets of the Corporate Registered Shareholder; and (iv) in the event that she obtains any interests in the Corporate Registered Shareholder, she shall be bound by the Contractual Arrangements shall execute all necessary documents to comply with the Contractual Arrangements.

Reasons for Adoption of Contractual Arrangements

Foreign investment activities in the PRC are mainly governed by the Industry Guidelines on Encouraged Foreign Investment (2022) (《鼓勵外商投資產業目錄(2022年版)》) and the Special Administrative Measures (Negative List) for the Access of Foreign Investment (2022) (《外商投資准入特別管理措施(負面清單) (2022年版)》) (collectively, the "**Relevant PRC Regulations**") promulgated jointly by the MOFCOM and the NDRC, pursuant to which the industries listed therein are divided into four categories in terms of foreign investment, namely, "encouraged", "permitted", "prohibited" and "restricted". According to the Relevant PRC Regulations, foreign investment is prohibited in the development and application of human stem cells and genes diagnosis and treatment technologies.

Our Group engages in discovering, developing and commercializing innovative cell therapies for the treatment of hematological malignancies and solid tumors (the "**Relevant Business**"), which involves the development and application of gene therapeutic technologies and products, and therefore falls into the scope of the "prohibited" category of the Relevant PRC Regulations. In order to comply with the PRC laws and regulations and maintain effective control over the Relevant Business, our Group entered into the Contractual Arrangements with CARsgen Therapeutics (Shanghai), the Corporate Registered Shareholder (i.e. the shareholder of CARsgen Therapeutics (Shanghai)) and the Individual Registered Shareholders (i.e. the shareholders of the Corporate Registered Shareholder). Our Directors (including the independent non-executive Directors) are of the view that the Contractual Arrangements and the transactions contemplated therein are fundamental to our Group's legal structure and business.

Risks Relating to the Contractual Arrangements

There are certain risks that are associated with the Contractual Arrangements, including:

- If the PRC government finds that the agreements that establish the structure for operating our business in China do not comply with PRC laws and regulations, or if these regulations or their interpretations change in the future, we could be subject to severe consequences and the relinquishment of our interests in the Consolidated Affiliated Entities.

- There is substantial uncertainty with respect to the interpretation and implementation of the newly enacted Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations.

- Our Contractual Arrangements may not be as effective in providing operational control as direct ownership, and the Registered Shareholders and the Consolidated Affiliated Entities may fail to perform their obligations under our Contractual Arrangements.

- We may lose the ability to use the permits and licenses held by the Consolidated Affiliated Entities that are important to the operation of our business if the Consolidated Affiliated Entities declares bankruptcy or becomes subject to a dissolution or liquidation proceeding.

- Our Contractual Arrangements may be subject to scrutiny by the PRC tax authorities and additional taxes may be imposed. A finding that we owe additional taxes could substantially reduce our consolidated net income and the value of your Shares.

- The Registered Shareholders of CARsgen Therapeutics (Shanghai) may potentially have a conflict of interest with us, and they may breach their contracts with us or cause such contracts to be amended in a manner contrary to our interests.

- Certain of the terms of the Contractual Arrangements may not be enforceable under PRC laws.

- If we exercise the option to acquire equity ownership of CARsgen Therapeutics (Shanghai) and/or the Corporate Registered Shareholder, the ownership transfer may subject us to certain limitations and substantial costs.

Our Group has adopted measures to ensure the effective operation of our Group's businesses with the implementation of the Contractual Arrangements and our compliance with the Contractual Arrangements, including:

- major issues arising from the implementation and compliance with the Contractual Arrangements or any regulatory enquiries from government authorities will be submitted to our Board, if necessary, for review and discussion on an occurrence basis;

- our independent non-executive Directors will review the overall performance of and compliance with the Contractual Arrangements annually;

- our Company will disclose the arrangements in place and compliance with the Contractual Arrangements in our annual reports; and

- our Company will engage external legal advisors or other professional advisors, if necessary, to assist the Board in reviewing the implementation of the Contractual Arrangements.

Material Change

As of the Latest Practicable Date, there were no material changes in the Contractual Arrangements and/or the circumstances under which the Contractual Arrangements were adopted.

Unwinding of the Contractual Arrangements

As of the Latest Practicable Date, there has not been any unwinding of any Contractual Arrangements, nor has there been any failure to unwind any Contractual Arrangements when the restrictions that led to the adoption of the Contractual Arrangements are removed.

Waiver from the Stock Exchange

In relation to the Contractual Arrangements, we have applied to the Stock Exchange for, and the Stock Exchange has granted, a waiver from strict compliance with (i) the announcement, circular and independent shareholders' approval requirements under Chapter 14A of the Listing Rules in respect of the transactions contemplated under the Contractual Arrangements pursuant to Rule 14A.105 of the Listing Rules, (ii) the requirement of setting an annual cap for the transactions under the Contractual Arrangements under Rule 14A.53 of the Listing Rules, and (iii) the requirement of limiting the term of the Contractual Arrangements to three years or less under Rule 14A.52 of the Listing Rules, for so long as the Shares are listed on the Stock Exchange subject however to the following conditions:

(a) no change without independent non-executive Directors' approval;

(b) no change without independent shareholders' approval;

(c) the Contractual Arrangements shall continue to enable our Group to receive the entire economic benefits derived by CARsgen Therapeutics (Shanghai);

(d) on the basis that the Contractual Arrangements provide an acceptable framework for the relationship between our Company and its subsidiaries in which our Company has direct shareholding, on the one hand, and CARsgen Therapeutics (Shanghai), on the other hand, that framework may be renewed and/or reproduced upon the expiry of the existing arrangements or in relation to any existing or new wholly foreign owned enterprise or operating company (including branch company) engaging in the same business as that of our Group which the Group might wish to establish when justified by business expediency, without obtaining the approval of the shareholders, on substantially the same terms and conditions as the existing Contractual Arrangements; and

(e) our Group will disclose details relating to the Contractual Arrangements on an on-going basis.

For details, please refer to the section "Connected Transactions" in the Prospectus.

Confirmation from Independent Non-executive Directors

Our independent non-executive Directors have reviewed the Contractual Arrangements and confirmed that:

(i) no transaction has been carried out during Reporting Period, which have not been entered into in accordance with the relevant provisions of the Contractual Arrangements;

(ii) no dividends or other distributions have been made by the Consolidated Affiliated Entities to the holders of its equity interests which are not otherwise subsequently assigned or transferred to our Group, which is confirmed by the auditor of the Company;

(iii) no new contract has been entered into, renewed or reproduced between our Group and the Consolidated Affiliated Entities during the Reporting Period; and

(iv) the Contractual Arrangements had been entered into in the ordinary and usual course of business of our Group, and are on normal commercial terms and are fair and reasonable so far as our Group is concerned, and in the interest of our Company and its shareholders as a whole.

Further, the Consolidated Affiliated Entities undertakes that, for so long as the Shares are listed on the Hong Kong Stock Exchange, the Consolidated Affiliated Entities will provide our Group's management and our auditor with full access to its relevant records for the purpose of procedures to be carried out by our auditor on the connected transactions. For the year ended December 31, 2022, the net loss of CARsgen Therapeutics is approximately RMB892 million, and as at December 31, 2022, the total assets of CARsgen Therapeutics is approximately RMB2,763 million.

Confirmations from Company's Independent Auditor

The auditor of the Company confirmed that based on the foregoing, in respect of the disclosed continuing connected transactions (a) nothing has come to their attention that causes them to believe that the disclosed continuing connected transactions have not been approved by the Directors; (b) nothing has come to their attention that causes them to believe that the transactions were not entered into, in all material respects, in accordance with the relevant agreements governing such transactions; and (c) with respect of the disclosed continuing connected transactions with CARsgen Therapeutics (Shanghai) under the Contractual Arrangements, nothing has come to their attention that causes them to believe that dividends or other distributions have been made by CARsgen Therapeutics (Shanghai) to the holders of the equity interests of CARsgen Therapeutics (Shanghai) are not otherwise subsequently assigned or transferred to the Group.

RELATED PARTY TRANSACTIONS

Details of the related party transactions carried out in the normal course of business are set out in Note 33 to the Consolidated Financial Statements. During the Reporting Period, none of these related party transactions constitutes a connected transaction or continuing connected transaction as defined under the Listing Rules, and the Company has complied with the disclosure requirements under Chapter 14A of the Listing Rules and disclosed in this report.

FINANCIAL SUMMARY

Shares of the Company were listed on the Stock Exchange on June 18, 2021. A summary of the published results and of the assets, liabilities and equity of the Group for the last four financial years, as extracted from the published audited financial information and financial statements, is set out on page 212 of this report.

USE OF PROCEEDS FROM THE GLOBAL OFFERING

The Company's Shares were listed on the Stock Exchange on June 18, 2021 with a total of 94,747,000 offer shares issued and the net proceeds raised from the Global Offering were approximately HK$3,008 million. The net proceeds from the Listing (adjusted on a pro rata basis based on the actual net proceeds) have been and will be utilized in accordance with the purposes set out in the Prospectus. There was no change in the intended use of net proceeds as previously disclosed in the Prospectus as follows:

- approximately HK$902.4 million (US$115.7 million) (or approximately 30% of the net proceeds) to fund further development of our Core Product Candidate, BCMA CAR-T (CT053)

- approximately HK$932.5 million (US$119.6 million) (or approximately 31% of the net proceeds) to fund ongoing and planned research and development of our other pipeline product candidates

- approximately HK$601.6 million (US$77.2 million) (or approximately 20% of the net proceeds) for developing full-scale manufacturing and commercialization capabilities
- approximately HK$300.8 million (US$38.6 million) (or approximately 10% of the net proceeds) for continued upgrading of CAR-T technologies and early-stage research and development activities
- approximately HK$270.7 million (US$34.7 million) (or approximately 9% of the net proceeds) will be used for our working capital and other general corporate purposes.

The net proceeds from the Global Offering have been utilized in accordance with the purposes set out in the Prospectus. The table below sets out the applications of the net proceeds and actual usage up to December 31, 2022:

Use of proceeds	**Planned allocation of Net Proceeds** *(HKD million)*	**Planned allocation of Net Proceeds** *(RMB million)*	**Utilized amount (as at December 31, 2021)** *(RMB million)*	**Utilized for the twelve months ended December 31, 2022** *(RMB million)*	**Utilized amount (as at December 31, 2022)** *(RMB million)*	**Remaining amount (as at December 31, 2022)** *(RMB million)*
Further development of our Core Product Candidate, BCMA CAR-T (CT053)	902.4	806.1	90.8	211.5	302.3	503.8
Ongoing and planned research and development of our other pipeline product candidates	932.5	833.0	150.0	174.6	324.6	508.4
Developing full-scale manufacturing and commercialization capabilities	601.6	537.4	144.9	133.6	278.5	258.9
Upgrading of CAR-T technologies and early – stage research and development activities	300.8	268.7	19.9	48.1	68.0	200.7
Working capital and other general corporate purposes	270.7	241.8	–	93.9	93.9	147.9
Total	3,008.0	2,687.0	405.6	661.7	1,067.3	1,619.7

The unutilized amount of net proceeds is expected to be fully utilized by 2025, which is later than originally planned, due to cost savings achieved via improved operational efficiency and moving outsourced services internally.

EMOLUMENT POLICY AND DIRECTORS' REMUNERATION

Pursuant to Rule 3.25 of the Listing Rules and the Corporate Governance Code as set out in Appendix 14 to the Listing Rules, the Company has established the Remuneration Committee to formulate remuneration policies. The remuneration is determined and recommended based on the experience, qualification, position and seniority of each Director and senior management. As for the independent non-executive Directors, their remuneration is determined by the Board based on the recommendation from the Remuneration Committee. The Directors and the senior management are eligible participants of the applicable share incentive plans.

Details of the remuneration of the Directors and the five highest paid individuals are set out in Note 34 and Note 10 to the Consolidated Financial Statements of this report.

None of the Directors waived or agreed to waive any remuneration and there were no emoluments paid by the Group to any of the Directors, former directors of the Company or five highest paid individuals as an inducement to join, or upon joining the Group, or as compensation for loss of office.

The table below shows the emolument of senior management by band:

Emolument bands

	Year ended December 31, 2022
HKD5,500,001 to HKD6,000,000	**1**
HKD6,000,001 to HKD6,500,000	**1**
HKD6,500,001 to HKD7,000,000	**–**
HKD7,000,001 to HKD7,500,000	**1**
HKD7,500,001 to HKD8,000,000	**–**
HKD8,000,001 to HKD8,500,000	**1**
HKD8,500,001 to HKD9,000,000	**–**
HKD9,000,001 to HKD9,500,000	**–**
HKD9,500,001 to HKD10,000,000	**1**
Total	**5**

DISTRIBUTABLE RESERVES

The Company may pay dividends out of the share premium account, retained earnings and any other reserves provided that immediately following the payment of such dividends, the Company will be in a position to pay off its debts as and when they fall due in the ordinary course of business.

As of December 31, 2022, the Company did not have any distributable reserves.

Details of the movements in the reserves of the Company during the year ended December 31, 2022 are set out in the consolidated statement of changes in equity and Note 26 to the consolidated financial statements.

RESULTS AND DIVIDEND

Details of the consolidated loss of the Group for the year and the Group's financial position as at December 31, 2022 are set out in the Consolidated Financial Statements and their accompanying notes on pages 137 to 211.

No dividend was paid or declared by the Company or other members of the Group during the Reporting Period.

PROPERTY, PLANT AND EQUIPMENT

Details of the movements in the property, plant and equipment of the Group during the Reporting Period are set out in Note 15 to the Consolidated Financial Statements.

SHARE CAPITAL

Details of the movements in share capital of the Company during the Reporting Period are set out in note 23 to the Consolidated Financial Statements of this report.

TAX RELIEF AND EXEMPTION

The Directors are not aware of any tax relief and exemption available to the shareholders by reason of their holding of the Company's securities.

BANK BORROWINGS AND OTHER BORROWINGS

Details of the bank borrowings of the Group as at December 31, 2022 are set out in Note 27 to the Consolidated Financial Statements.

Save as disclosed, we did not have any material mortgages, charges, debentures, loan capital, debt securities, loans, unutilized banking facilities, bank overdrafts or other similar indebtedness, liabilities under acceptances (other than normal trade bills), acceptance credits, which are either guaranteed, unguaranteed, secured or unsecured, or guarantees.

CHARITABLE CONTRIBUTIONS

During the Reporting Period, the Group did not make charitable contributions.

SIGNIFICANT EVENTS AFTER THE REPORTING PERIOD

As at January 16, 2023, CARsgen Life Sciences, a wholly-owned subsidiary of the Company and Huadong Medicine (Hangzhou) Co., Ltd., a wholly-owned subsidiary of Huadong Medicine Co., Ltd. (SZ. 000963) ("**Huadong Medicine**") entered into a collaboration agreement (the "**Agreement**") for the commercialization of CARsgen's drug candidate, zevorcabtagene autoleucel ("**zevor-cel**", R&D code: CT053, an autologous CAR T-cell product candidate against BCMA) in mainland China. Pursuant to the Agreement, Huadong Medicine is granted the exclusive right to commercialize zevor-cel in mainland China. Under the terms of the Agreement, CARsgen Life Sciences will receive an upfront payment of RMB200 million and is eligible to receive regulatory and commercial milestone payments up to RMB1,025 million. CARsgen Life Sciences will continue to be responsible for the development, regulatory approval, and manufacturing of CT053 in mainland China.

MAJOR CUSTOMERS AND SUPPLIERS

The Group values long-standing relationships with its suppliers, customers, medical experts, and other business associates are key to the Group's success. The Group aims at delivering high quality products to its potential customers and developing mutual trust and enhancing communication and commitment between the Group and its suppliers to maintain sustainable growth. For more information, please refer to the "Environmental, Social and Governance Report" as part of this report.

During the year ended December 31, 2022, the Group had no revenues. For further details, please see Note 6 to the Consolidated Financial Statements of this report.

Purchases attributable to the Group's five largest suppliers and the largest supplier accounted for 47% and 13%, respectively, of the Group's total purchases for the Reporting Period.

None of the Directors or any of their close associates (as defined in the Listing Rules) or any shareholders of the Company (whom, to the best knowledge and belief of the Directors, own more than 5% of the Company's total issued share capital) had any beneficial interest in the Group's five largest suppliers for the Reporting Period.

INDEPENDENT AUDITOR

The Consolidated Financial Statements for the Reporting Period have been audited by PricewaterhouseCoopers who will retire and, being eligible, offer itself for re-appointment at the forthcoming AGM. Having been approved by the Board upon the Audit Committee's recommendation, a resolution for the re-appointment of PricewaterhouseCoopers as the Independent Auditor for the ensuing year will be put to the forthcoming AGM for shareholder's approval.

Since the Listing Date, the auditor of the Company has not changed.

ENVIRONMENTAL POLICIES AND PERFORMANCE

The Group is highly aware of the importance of environment protection and has not noted any material incompliance with all relevant laws and regulations in relation to its business including environmental protection, health and safety, workplace conditions, employment and the environment.

The Group has established detailed internal rules regarding environmental protection and adopted effective measures to achieve efficient use of resources, waste reduction and energy saving. For further details of the Group's environmental policies and performance, please refer to the Environmental, Social and Governance Report of the Company for the Reporting Period set out on pages 89 to 131, which has been prepared in accordance with Rule 13.91 and the Environmental, Social and Governance Reporting Guide contained in Appendix 27 of the Listing Rules.

SHARE INCENTIVIZATION SCHEMES

We have adopted three share incentive schemes, collectively referred to as Share Incentive Schemes.

2019 EQUITY INCENTIVE SCHEME

Our Company adopted the 2019 Equity Incentive Plan on January 22, 2019. The purpose of the 2019 Equity Incentive Plan is to attract, motivate, retain and reward certain employees, Directors, and certain other eligible persons of our Group. The 2019 Equity Incentive Plan (i) does not involve any grant of options of the Company to subscribe for new Shares after the IPO, and (ii) only involves the grant of restricted share units after the IPO.

On May 11, 2021, our Company allotted and issued 12,497,947 Shares to Carfa Unity Limited and 7,125,575 Shares to Carfe Unity Limited, both of which are wholly-owned by the 2019 Equity Incentive Plan Trustee. Such Shares have been held in trust by the 2019 Equity Incentive Plan Trustee to facilitate the transfer of Shares to the grantees upon vesting of the relevant options and share awards.

As of December 31, 2022, a total of 12,896,223 options were outstanding and 1,090,660 share awards (in the form of RSUs) were unvested under the 2019 Equity Incentive Plan. The numbers of share awards available for grant under the 2019 Equity Incentive Plan on January 1, 2022 and December 31, 2022 are 5,545,962 and 5,587,316 respectively. The numbers of Shares that may be issued in respect of options and share awards granted under the 2019 Equity Incentive Plan during the Reporting Period divided by the weighted average number of Shares in issue for the Reporting Period is 0.04%.

The table below shows the details of outstanding share options granted under the 2019 Equity Incentive Plan.

Name of Grantee	Number of options during the Reporting Period						Date of grant of share options	Exercise Period	Vesting Period	Weighted average closing price of the shares immediately before the dates on which the options were exercised	Exercise price *US$*
	Number of Shares subject to outstanding options as at January 1, 2022	Granted during the Reporting Period	Exercised during the Reporting Period	Cancelled during the Reporting Period	Lapsed during the Reporting Period	Number of Shares subject to outstanding options as at December 31, 2022					
1. Connected Person											
Dr. Hua JIANG	2,934,492	0	2,934,492	0	0	0	December 28, 2020	December 28, 2020 – December 27, 2028	March 31, 2017 – March 30, 2020	HK$16.06	0.04
Mr. Haiou CHEN	2,539,773	0	0	0	0	2,539,773	December 28, 2020	December 28, 2020 – December 27, 2028	March 31, 2017 – March 30, 2020	–	0.04
2. Service Providers	166,667	0	166,667	0	0	0	December 28, 2020	December 28, 2020 – December 27, 2028	Four years from the vesting commencement date stipulated in relevant grant letters	HK$16.94	0
3. Five Highest Paid Individuals *Note*	569,339	0	56,606	0	12,572	500,161	December 28, 2020	December 28, 2020 – December 27, 2028	Three or four years from the vesting commencement date stipulated in relevant grant letters	HK$14.46	0-1.39
4. Employees	13,716,570	0	3,425,859	0	434,422	9,856,289	December 28, 2020	December 28, 2020 – December 27, 2028	Three or four years from the vesting commencement date stipulated in relevant grant letters	HK$15.67	0-1.40
Total:	**19,926,841**	**0**	**6,583,624**	**0**	**446,994**	**12,896,223**					

Note: Only one of the five highest paid individuals during the Reporting Period was involved in the 2019 Equity Incentive Plan.

The table below shows the details of unvested share awards granted under the 2019 Equity Incentive Plan.

		Number of RSUs during the Reporting Period							
Name of Grantee	Number of Shares subject to unvested RSUs as at January 1, 2022	Granted during the Reporting Period	Vested during the Reporting Period	Cancelled during the Reporting Period	Lapsed during the Reporting Period	Number of Shares subject to unvested RSUs as at December 31, 2022	Date of grant of RSUs	Weighted average closing price of the shares immediately before the dates on which the share awards were vested	Vesting Period
1. Connected Person									
Mr. Haiou CHEN	16,000	0	4,999	0	0	11,001	July 22, 2021	HK$16.00	July 22, 2022-July 21, 2025
		232,977[ii]	0	0	0	232,977	March 24, 2022[iii]		March 24, 2023-March 23, 2026
2. Five Highest Paid Individuals [iv]	136,238	0	48,249	0	0	87,989	July 22, 2021	HK$16.01	July 22, 2022-July 21, 2025
3. Employees	1,416,719	0	383,695	0	274,331	758,693	July 22, 2021	HK$14.47	July 22, 2022-July 21, 2025
Total:	**1,568,957**	**232,977**	**436,943**	**0**	**274,331**	**1,090,660**			

Notes:

(i) The purchase price of all share awards mentioned in the table above is nil, and there is no performance target attached to these RSUs granted.

(ii) Please refer to the announcement of the Company dated March 24, 2022 for details.

(iii) The closing price per ordinary share of the Company is HK$14.50 on March 23, 2022, being the business day immediately before March 24, 2022. Fair value of RSUs granted on March 24, 2022 at the date of grant is HK$16.32, and as for relevant accounting standard and policy adopted, please refer to Note 24 to the consolidated financial statements.

(iv) Only one of the five highest paid individuals during the Reporting Period was involved in the 2019 Equity Incentive Plan.

POST-IPO RSU SCHEME

Our Company adopted the Post-IPO RSU Scheme on April 30, 2021. The purpose of the Post-IPO RSU Scheme is to align the interests of the eligible persons with those of our Group through ownership of Shares to encourage and retain them to make contributions to the long-term growth and profits of our Group.

As of December 31, 2022, a total of 1,846,438 share awards (in the form of RSUs) were unvested under the Post-IPO RSU Scheme. The numbers of share awards available for grant under the Post-IPO RSU Scheme on January 1, 2022 and December 31, 2022 are 22,648,808 and 20,802,370 respectively. The numbers of Shares that may be issued in respect of share awards granted under the Post-IPO RSU Scheme during the Reporting Period divided by the weighted average number of Shares in issue for the Reporting Period is 0.38%.

The table below shows the details of unvested share awards granted under the Post-IPO RSU Scheme.

		Number of RSUs during the Reporting Period						
Name of Grantee	Number of Shares subject to unvested RSUs as at January 1, 2022	Granted during the Reporting Period	Vested during the Reporting Period	Cancelled during the Reporting Period	Lapsed during the Reporting Period	Number of Shares subject to unvested RSUs as at December 31, 2022	Date of grant of RSUs	Vesting Period
Employees	0	1,719,000	0	0	34,000	1,685,000	October 21, 2022[(ii)]	October 22, 2023-October 21, 2026
	0	468,299	0	0	306,861	161,438	March 24, 2022[(iii)]	March 24, 2023-March 23, 2026
Total:	**0**	**2,187,299**	**0**	**0**	**340,861**	**1,846,438**		

Notes:

(i) The purchase price of all RSUs mentioned in the table above is nil, and there is no performance target attached to these RSUs granted.

(ii) The closing price per ordinary share of the Company is HK$13.26 on October 20, 2022, being the business day immediately before October 21, 2022. Fair value of RSUs granted on October 21, 2022 at the date of grant is HK$13.58, and as for relevant accounting standard and policy adopted, please refer to Note 24 to the consolidated financial statements.

(iii) The closing price per ordinary share of the Company is HK$14.50 on March 23, 2022, being the business day immediately before March 24, 2022. Fair value of RSUs granted on March 24, 2022 at the date of grant is HK$16.32, and as for relevant accounting standard and policy adopted, please refer to Note 24 to the consolidated financial statements.

(iv) Please refer to the announcements of the Company dated October 21, 2022 and March 24, 2022 for details.

POST-IPO SHARE OPTION SCHEME

Our Company adopted the Post-IPO Share Option Scheme on April 30, 2021. The purpose of the Post-IPO Share Option Scheme is to reward employees for their past contribution to the success of the Company and to provide incentives to them to further contribute to the Company.

As of December 31, 2022, a total of 5,795,963 options were outstanding under the Post-IPO Share Option Scheme The numbers of options available for grant under the Post-IPO Share Option Scheme on January 1, 2022 and December 31, 2022 are 44,573,120 and 39,501,654 respectively. The numbers of Shares that may be issued in respect of option granted under the Post-IPO Share Option Scheme during the Reporting Period divided by the weighted average number of Shares in issue for the Reporting Period is 1.06%.

The table below shows the details of outstanding options granted under the Post-IPO Share Option Scheme.

		Number of options during the Reporting Period								
Name of Grantee	Number of Shares subject to outstanding options as at January 1, 2022	Granted during the Reporting Period	Exercised during the Reporting Period	Cancelled during the Reporting Period	Lapsed during the Reporting Period	Number of Shares subject to outstanding options as at December 31, 2022	Date of grant of share options	Exercise Period	Vesting Period	Exercise price *HK$*
1. Connected Person										
Dr. Hua JIANG	0	36,164	0	0	0	36,164	March 24, 2022[iii]	The Options may be exercised during the period from the date of vesting to the 10th anniversary of the grant date.	March 24, 2023-March 24, 2026	HK$16.32 per Share
2. Employees	0	1,004,000	0	0	32,000	972,000	October 21, 2022[ii]	The Options may be exercised during the period from the date of vesting to the 10th anniversary of the grant date.	April 7, 2023-October 21, 2026	HK$13.58 per Share
	0	4,976,838	0	0	868,115	4,108,723	March 24, 2022[iii]	The Options may be exercised during the period from the date of vesting to the 10th anniversary of the grant date.	March 24, 2023-March 24, 2026	HK$16.32 per Share
	724,497	0	0	0	45,421	679,076	July 22, 2021	The Options may be exercised during the period from the date of vesting to the 10th anniversary of the grant date.	July 22, 2022-July 21, 2025	HK$31.00 per Share
Total:	**724,497**	**6,017,002**	**0**	**0**	**945,536**	**5,795,963**				

Notes:

(i) There is no performance target attached to above options granted.

(ii) The closing price per ordinary share of the Company is HK$13.26 on October 20, 2022, being the business day immediately before October 21, 2022. Fair value of options granted on October 21, 2022 at the date of grant is HK$7.01, and as for relevant accounting standard and policy adopted, please refer to Note 24 to the consolidated financial statements.

(iii) The closing price per ordinary share of the Company is HK$14.50 on March 23, 2022, being the business day immediately before March 24, 2022. Fair value of options granted on March 24, 2022 at the date of grant is HK$8.02, and as for relevant accounting standard and policy adopted, please refer to Note 24 to the consolidated financial statements.

(iv) Please refer to the announcements of the Company dated March 24, 2022 and July 22, 2021 for details.

The total numbers of Shares that may be issued in respect of options and awards granted under the 2019 Incentive Scheme, Post-IPO RSU Scheme and Post-IPO Share Option Scheme during the Reporting Period divided by the weighted average number of Shares in issue for the Reporting Period is 1.44%.

SUMMARY OF THE SHARE INCENTIVE SCHEMES

The principal terms and details of the Share Incentive Schemes are set out below:

Details	2019 Equity Incentive Plan	Post-IPO RSU Scheme	Post-IPO Share Option Scheme
1. Purpose	to secure and retain the services of eligible participants, to provide incentives for such persons to exert maximum efforts for the success of our Company and our affiliates, and to provide a means by which such eligible recipients may be given an opportunity to benefit from increases in value of the Shares through the granting of the Share Awards.	to align the interests of the eligible persons with those of our Group through ownership of Shares to encourage and retain them to make contributions to the long-term growth and profits of our Group.	to reward employees for their past contribution to the success of the Company and to provide incentives to them to further contribute to the Company.
2. Eligible Participants	Eligible persons include any person employed by our Company or our affiliates, any director of our Company or any of its subsidiaries, any person, including a consultant, who is (i) engaged by our Company or our affiliates to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of our affiliates and is compensated for such services.	Any individual, being an employee, director (including executive Directors, non-executive Directors and independent non-executive Directors) or officer, consultant, advisor, distributor, contractor, customer, supplier, agent, business partner, joint venture business partner or service provider of any member of the Group or any affiliate who the Board or its delegate(s) considers, in its sole discretion, to have contributed or will contribute to the Group is eligible to receive an award granted by the Board, by way of RSUs, which may vest in the form of Award Shares or the actual selling price of the Award Shares of RSUs in cash in accordance with the Post-IPO RSU Scheme. However, no individual who is resident in a place where the grant, acceptance or vesting of an Award pursuant to the Post-IPO RSU Scheme is not permitted under the laws and regulations of such place or where, in the view of the Board or its delegate(s), compliance with applicable laws and regulations in such place makes it necessary or expedient to exclude such individual, shall be entitled to participate in the Post-IPO RSU Scheme.	Any individual, being an employee, director or officer of any member of our Group who the Board may in its absolute discretion select to grant an Option to subscribe for such number of Shares as the Board may determine at the Subscription Price.

Details	2019 Equity Incentive Plan	Post-IPO RSU Scheme	Post-IPO Share Option Scheme
3. Maximum number of Shares that can be awarded	Subject to capitalization adjustments, the aggregate number of Shares that may be issued pursuant to Share Awards shall not exceed 27,519,380 Shares. As at the Latest Practicable Date, the total number of Shares available for issue under the 2019 Equity Incentive Plan is 4,804,579, representing approximately 0.84% of the total issued Shares.	The aggregate number of Shares underlying all grants made pursuant to the Post-IPO RSU Scheme (excluding Award which have been forfeited in accordance with the Post-IPO RSU Scheme) will not exceed 5% of the issued share capital of the Company as of the date of approval of the Post-IPO RSU Scheme without shareholders' approval, being 22,648,808 Shares. As at the Latest Practicable Date, the total number of Shares available for issue under the Post-IPO RSU Scheme is 20,802,370, representing approximately 3.63% of the total issued Shares.	The maximum number of Shares in respect of which Options may be granted under the Post-IPO Share Option Scheme when aggregated with the maximum number of Shares in respect of which Options may be granted under any other option scheme over Shares shall not exceed 10% of the issued share capital of the Company as of the date of approval of the Post-IPO Share Option Scheme (or of the refreshing of the 10% limit) by the shareholders of the Company, being 45,297,617 Shares. As at the Latest Practicable Date, the total number of Shares available for issue under the Post-IPO Share Option Scheme is 39,501,654, representing approximately 6.90% of the total issued Shares.
4. Maximum entitlement of each participant under the scheme	N/A	Save as prescribed in the scheme or as otherwise restricted by the Listing Rules, for any 12-month period, the aggregate number of Shares granted to any Selected Participant shall not exceed 1% of the total number of the issued Shares at the relevant time, without Shareholders' approval.	Except with the approval of Shareholders in general meeting, no Option may be granted to any one person such that the total number of Shares issued and to be issued upon exercise of Options and any other option over the Shares (including exercised, cancelled and outstanding options) granted and to be granted to such person in any 12-month period up to the date of the latest grant exceeds 1% of the Shares in issue from time to time.

Details	2019 Equity Incentive Plan	Post-IPO RSU Scheme	Post-IPO Share Option Scheme
5. Vesting Period	The total number of Shares subject to a Share Option may vest and therefore become exercisable in periodic installments that may or may not be equal. The Share Option may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of performance goals or other criteria) as the Board may deem appropriate. The vesting provisions (including the vesting period) of each Share Option may vary.	The Board or its delegate(s) may from time to time while the Post-IPO RSU Scheme is in force and subject to all applicable laws, determine such vesting criteria and conditions or periods for the Award to be vested.	The Board or its delegate(s) may from time to time while the Post-IPO Share Option Scheme is in force and subject to all applicable laws, determine such vesting criteria and conditions or periods for the Options to be vested.

Details	2019 Equity Incentive Plan	Post-IPO RSU Scheme	Post-IPO Share Option Scheme
6. Duration and remaining life	No Share Option shall be exercisable after the expiration of eight years from the date of its grant or such shorter period specified in a share award agreement. As at December 31, 2022, the remaining life of the 2019 Equity Incentive Plan was approximately four years.	The Post-IPO RSU Scheme shall terminate on the earlier of: (i) the end of the period of ten years commencing on the date on which the Post-IPO RSU Scheme is adopted except in respect of any non-vested RSUs granted hereunder prior to the expiration of the Post-IPO RSU Scheme, for the purpose of giving effect to the vesting in the form of Award Shares of such RSUs or otherwise as may be required in accordance with the provisions of the Post-IPO RSU Scheme; and (ii) such date of early termination as determined by the Board provided that such termination shall not affect any subsisting rights of any selected participant under the rules of the Post-IPO RSU Scheme, provided further that for the avoidance of doubt, the change in the subsisting rights of a selected participant in this paragraph refers solely to any change in the rights in respect of the RSUs already granted to a selected participant. As at December 31, 2022, the remaining life of the Post-IPO RSU Scheme was approximately eight years and six months.	The Post-IPO Share Option Scheme shall be valid and effective for a period of 10 years commencing on the date when the Post-IPO Share Option Scheme becomes unconditional, after which period no further Options will be granted by the provisions of the Post-IPO Share Option Scheme, but the provisions of this Post-IPO Share Option Scheme shall remain in full force and effect to the extent necessary to give effect to the exercise of any Options granted prior thereto or otherwise as may be required in accordance with the provisions of the Post-IPO Share Option Scheme. As at December 31, 2022, the remaining life of the Post-IPO Share Option Scheme was approximately eight years and six months.

Details	2019 Equity Incentive Plan	Post-IPO RSU Scheme	Post-IPO Share Option Scheme
7. Exercise price/ purchase price	The exercise price (or strike price) of each Share Option shall be determined in good faith by the Administrator and as set forth in a share award agreement. The consideration, if any, to be paid by the participant upon delivery of each Share subject to the restricted share unit award will be determined by the Board at the time of grant of such award.	No purchase price is to be paid by the participant upon vested of Awards granted under the Post-IPO RSU Scheme.	The amount payable for each Share to be subscribed for under an option in the event of the option being exercised shall be determined by the Board at its absolute discretion, but shall be not less than the greater of: (i) the closing price of a Share as stated in the daily quotations sheet issued by the Stock Exchange on the date of grant; (ii) the average closing price of our Shares as stated in the daily quotations sheets issued by the Stock Exchange for the five business days immediately preceding the date of grant; and (iii) the nominal value of a Share on the date of grant.
8. Exercise Period	No share option shall be exercisable after the expiration of eight years from the date of its grant or such shorter period specified in a share award agreement.	N/A	The period during which the option can be exercised as set forth in the relevant offer letters in accordance with the plan.
9. Consideration for Acceptance of Options or Awards	Each Option shall be in such form and shall contain such terms and conditions as the Administrator shall deem appropriate. All Options shall be separately designated Incentive Share Options or Nonstatutory Share Options at the time of grant, and, if certificates are issued, a separate certificate or certificates shall be issued for Shares purchased on exercise of each type of Option. Each Restricted Share Award will be evidenced by a Share Award Agreement that will specify the period of restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine.	The Company shall issue a letter to each Selected Participant in such form as the Board or the committee of the Board or person(s) to which the Board has delegated its authority may from time to time determine, specifying the Grant Date, the number of Award Shares underlying the Award, the vesting criteria and conditions, and the Vesting Date and such other details as the they may consider necessary.	An Option shall be deemed to have been granted and accepted and to have taken effect when the duplicate letter comprising acceptance of the offer of the grant of the Option duly signed by the Grantee together with a payment to the Company and/or any of its Subsidiaries of HK$1 (or the equivalent of HK$1 in the local currency of any jurisdiction where the company and/or its Subsidiaries operate, as the Board may in its absolute discretion determine) by way of consideration for the grant thereof is received by the Company within the time period specified in the offer of the grant of the Option. Such remittance shall not be refundable. To the extent that the offer of the grant of an Option is not accepted within 28 days after the Offer Date, it will be deemed to have been irrevocably declined and will lapse, unless the Board in its absolute discretion determines otherwise.

RETIREMENT BENEFITS SCHEME

Carsgen Therapeutics (Shanghai)'s full-time employees in the PRC, including some of our named executive officers, participate in a government mandated defined contribution plan, pursuant to which pension benefits, medical care, an employee housing fund and other welfare benefits are provided to employees. Chinese labor regulations require that our PRC subsidiaries make contributions to the government for these benefits based on percentages of the employees' salaries which are capped at 300 percent of the average local wage.

For employees in the United States, CARsgen Therapeutics Corporation (Employer) is helping to make saving for retirement under our 401(k) Plan easier by offering an Employer safe harbor matching contribution, which is another defined contribution plan of the Group. Employee's combined elective contributions and Roth 401(k) contributions are subject to a calendar year limit even though the Plan Year may not be the calendar year. The limit for the 2022 calendar year is US$20,500. The limit for catch-up contributions for the 2022 calendar year is US$6,500. Employer will be matching both employee's pre-tax and/or Roth elective contributions, dollar for dollar, up to 6% of employee's eligible pay. This contribution is called a safe harbor matching contribution. This contribution will be made on behalf of all eligible employees. Employer may choose to revoke or suspend the safe harbor contribution during the year. If this occurs, employee will be given 30 days advance notice of the suspension and employee will be given an opportunity to change employee's elective contribution rate.

Details of the pension obligations of the Company are set out in Note 2.21 to the Consolidated Financial Statements in this report. During the Reporting Period, there was no forfeiture of contributions under the defined contribution plans of the Group, and there were no forfeited contributions had been used by the Group to reduce the existing level of contributions.

RELATIONSHIPS WITH THE GROUP'S EMPLOYEES

The Group believes that employees are important and valuable assets. The Group will provide trainings for employees to enhance their knowledge in corporate values and culture and to implement them thoroughly. Meanwhile, the Group encourages staff on continuous learnings by sponsoring recognized development trainings. The Group also aims to provide competitive and attractive remuneration packages to retain its employees. Management reviews annually the remuneration package offered to the employees of the Group. Meanwhile, for the purpose of providing incentives and rewards to eligible participants who have contributed to the success of the Group's operations, the Company has adopted the 2019 Equity Incentive Plan, Post-IPO Share Option Scheme and Post-IPO RSU Scheme. Details of such schemes are set out in the sub-sections headed "Share Incentivization Schemes" in this report. For more information, please also refer to the "Environmental, Social and Governance Report" as part of this report.

On behalf of the Board
CARsgen Therapeutics Holdings Limited
Dr. Zonghai LI
Chairman

Corporate Governance Report

The Board hereby presents to the shareholders the corporate governance report for the year ended December 31, 2022 (the "**Corporate Governance Report**").

CORPORATE GOVERNANCE PRACTICES

The Company recognizes the importance of good corporate governance for enhancing the management of the Company as well as preserving the interests of the shareholders as a whole. The Company has adopted corporate governance practices based on the principles and code provisions as set out in Part 2 of the CG Code as contained in Appendix 14 to the Listing Rules as its own code of corporate governance practices.

The Board is of the view that during the Reporting Period, the Company has complied with all the applicable code provisions as set out in the CG Code, except for code provision C.2.1 described in the paragraph headed "C. Directors' Responsibilities, Delegation and Board Proceedings – C.2 Chairman and Chief Executive". The Board will continue to review and monitor the code of corporate governance practices of the Company with an aim to maintaining a high standard of corporate governance.

BOARD OF DIRECTORS

Responsibilities

The Board is responsible for the overall leadership of the Group, oversees the Group's strategic decisions and monitors business and performance. The Board has delegated the authority and responsibility for day-to-day management and operation of the Group to the senior management of the Group. To oversee particular aspects of the Company's affairs, the Board has established three Board committees including the audit committee (the "**Audit Committee**"), the remuneration committee (the "**Remuneration Committee**") and the nomination and corporate governance committee (the "**Nomination and Corporate Governance Committee**") (collectively the "**Board Committees**"). The Board has delegated to the Board Committees responsibilities as set out in their respective terms of reference.

All Directors have carried out duties in good faith and in compliance with applicable laws and regulations, and have acted in the interests of the Company and the shareholders at all times.

All Directors have full and timely access to all the information of the Company as well as the services and advice from the company secretary and senior management. The Directors may, upon request, seek independent professional advice in appropriate circumstances, at the Company's expenses for discharging their duties to the Company.

The Company has arranged appropriate liability insurance in respect of legal action against the Directors. The insurance coverage will be reviewed on an annual basis.

Corporate Governance Report

Responsibility, Accountabilities and Contributions of the Board and Management

The Board should assume responsibility for leadership and control of the Company and is collectively responsible for directing and supervising the Company's affairs. The Board directly, and indirectly through its committees, leads and provides direction to the management by laying down strategies and overseeing their implementation, monitors the Group's operational and financial performance, and ensures that sound internal control and risk management systems are in place.

All Directors, including independent non-executive Directors, have brought a wide spectrum of valuable business experience, knowledge and professionalism to the Board for its efficient and effective functioning. The independent non-executive Directors are responsible for ensuring a high standard of regulatory reporting of the Company and providing a balance in the Board for bringing effective independent judgement on corporate actions and operations.

The Board reserves for its decisions on all major matters relating to policy matters, strategies and budgets, internal control and risk management, material transactions (in particular those may involve conflict of interests), financial information, appointment of directors and other significant operational matters of the Company. Responsibilities relating to implementing decisions of the Board, directing and coordinating the daily operation and management of the Company are delegated to the management.

The Board has clearly set out the circumstances under which the management should report to and obtain prior approval from the Board before making decisions or entering into any commitments on behalf of the Company. The Board regularly reviews the above said circumstances and ensures they remain appropriate.

The Company has arranged appropriate liability insurance in respect of legal action against the Directors. The insurance coverage will be reviewed on an annual basis.

Continuous Professional Development of Directors

The Company believes education and training are important for maintaining an effective Board. Every Director has received formal and comprehensive trainings to ensure appropriate understanding of the business and operations of the Company and full awareness of Director's responsibilities and obligations under the Listing Rules and relevant statutory requirements.

The Company arranges continuous professional development trainings to Directors to ensure Directors keep abreast of regulatory developments and changes in order to effectively perform their responsibilities and to ensure that their contribution to the Board remains informed and relevant. Directors also regularly meet with the senior management team to understand the Group's businesses, governance policies and regulatory environment. All Directors are also encouraged to attend relevant training courses.

The Directors pursued continuous professional development to comply with C.1.4 of the CG Code and relevant details are summarised as follows:

Name of Director	Participated in continuous professional development*
Executive Directors	
Dr. Zonghai LI *(Chairman)*	√
Dr. Huamao WANG	√
Dr. Hua JIANG	√
Non-executive Directors	
Mr. Bingsen GUO	√
Ms. Yachao ZHAO *(resigned on May 27, 2022)*	√
Mr. Ronggang XIE	√
Mr. Huaqing GUO	√
Independent Non-executive Directors	
Dr. Chunhai FAN *(resigned on January 11, 2023)*	√
Dr. Guangmei YAN	√
Mr. Tak Young SO	√

* During the Reporting Period, our Company arranged trainings for the Directors related to updates and changes in regulatory requirements, business and market environment in a variety of ways from time to time.

** The Company has provided training materials to our newly appointed independent non-executive Director, Dr. Huabing LI, related to duties of a director and latest updates and changes in regulatory requirements.

Chairman and Chief Executive Officer

We do not have separate Chairman of the Board and Chief Executive Officer ("**CEO**") and Dr. Zonghai LI, the Chairman of our Board and CEO, currently performs these two roles. Our Board believes that, in view of his experience, personal profile and his roles in our Company as mentioned above, Dr. Zonghai LI is the Director best suited to identify strategic opportunities and focus of the Board due to his extensive understanding of our business as our CEO. Our Board also believes that the combined role of Chairman of the Board and CEO can promote the effective execution of strategic initiatives and facilitate the flow of information between management and the Board. Our Board will continue to review and consider splitting the roles of Chairman of the Board and the CEO at a time when it is appropriate by taking into account the circumstances of our Group as a whole.

Composition

As at the Latest Practicable Date, the Board is comprised of nine Directors, with three executive Directors, three non-executive Directors and three independent non-executive Directors. During the Reporting Period and up to the Latest Practicable Date, (i) Ms. Yachao ZHAO ceased to be a non-executive Director from May 27, 2022, (ii) Dr. Hua JIANG was appointed as an executive Director from August 1, 2022, (iii) Dr. Chunhai FAN ceased to be an independent non-executive Director from January 11, 2023, and (iv) Dr. Huabing LI was appointed to be an independent non-executive Director from March 9, 2023, and there is no other change to the composition of the Board. A list of Directors and their respective biographies are set out on pages 29 to 36 of this report. Save as disclosed in this report, to the best knowledge of the Company, there are no financial, business, family, or other material relationship among members of the Board.

The Board has established mechanisms to ensure independent views and input are available to the Board. The Board ensures the appointment of at least three independent non-executive directors and at least one-third of its members being independent non-executive directors. Further, independent non-executive directors will be appointed to committees of the Board as required under the Listing Rules and as far as practicable to ensure independent views and input are available. The Nomination and Corporate Governance Committee strictly adheres to the independence assessment criteria as set out in the Listing Rules with regard to the nomination and appointment of independent non-executive directors, and is mandated to assess annually the independence of independent non-executive directors to ensure that they can continually exercise independent judgement.

Following the resignation of Dr. Chunhai FAN on January 11, 2023, the number of the independent non-executive Directors has fallen below the minimum number required under Rules 3.10(1) and 3.10A of the Listing Rules, and following the appointment of Dr. Huabing LI on March 9, 2023 (within three months after failing to meet relevant requirements in accordance with Rule 3.11 of the Listing Rules), the number of the independent non-executive Directors has re-complied with the requirements as set out in Rules 3.10(1) and 3.10A of the Listing Rules. Save for the non-compliance mentioned above, during the period from January 1, 2022 and up to the Latest Practicable Date, the Board's composition is in compliance with the requirement under Rules 3.10(1) and (2), and 3.10A of the Listing Rules. The Board believes that the balance between the executive Directors and the non-executive Directors is reasonable and adequate to provide sufficient checks and balances that safeguard the interests of the shareholders and the Group.

The Board values the importance of professional judgment and advice provided by non-executive Directors to safeguard the interests of the shareholders. The non-executive Directors contribute diversified qualifications and experience to the Group by expressing their views in professional, constructive and informed manner, and actively participate in Board and committee meetings and to bring professional judgment and advice on issues relating to the Group's strategies, policies, performance, accountability, resources, key appointments, standards of conduct, conflicts of interests and management process, with the shareholders' interests being the utmost important factor. The non-executive Directors also exercise their professional judgment and utilise their expertise to scrutinise the Company's performance in achieving agreed corporate goals, and monitor performance reporting.

Further, in compliance with Rule 3.10 of the Listing Rules, one of the Company's independent non-executive Director (namely Mr. Tak Young SO) has the appropriate professional qualifications of accounting or related financial management expertise, and provide valuable advice from time to time to the Board. The Company has also received from each independent non-executive Director an annual confirmation of his independence and the Nomination and Corporate Governance Committee has conducted an annual review and considers that all independent non-executive Director are independent, taking into account of the independence guidelines set out in Rule 3.13 of the Listing Rules in the context of the length of service of each independent non-executive Director.

As part of the Company's corporate governance practice to provide transparency to the investor community and in compliance with the Listing Rules and the CG Code, the independent non-executive Directors are clearly identified in all corporate communications containing the names of the Directors. In addition, an up-to-date list of Directors identifying the independent non-executive Director and the roles and functions of the Directors is maintained on the Company's website and the Stock Exchange's website.

Appointments and Re-election of Directors

Each of our executive Directors and non-executive Directors has entered into a service contract with us under which the initial term of their service contracts shall be three years commencing from the date of their appointment until terminated in accordance with the terms and conditions of the service contract or by either party giving to the other not less than one months' prior notice. Pursuant to the service contracts entered into with us, none of our executive Directors and non-executive Directors will receive any remuneration as director's fee.

Each of our independent non-executive Directors has entered into an appointment letter with us. The initial term of their appointment letters shall commence from the date of their appointment for a period of three years or until the third annual general meeting of our Company after the Listing Date, whichever is earlier (subject always to re-election as and when required under the Articles of Association) until terminated in accordance with the terms and conditions of the appointment letter or by either party giving to the other not less than one month's prior notice in writing.

None of the Directors has entered into a service contract which is not determinable by the Group within one year without payment of compensation (other than statutory compensation).

In accordance with the Articles of Association, all Directors are subject to retirement by rotation at least once every three years and any new Director appointed to fill a casual vacancy shall submit himself for re-election by the shareholders at the first general meeting of the Company after appointment and new Directors appointed as an addition to the Board shall submit himself for re-election by the shareholders at the next following general meeting of the Company after appointment.

Director Nomination Policy

The Company has adopted a director nomination policy (the "**Director Nomination Policy**") which sets out the selection criteria and procedures in relation to nomination and appointment of Directors of the Company and aims to ensure that the Board has a balance of skills, experience and diversity of perspectives appropriate to the Company and the continuity of the Board and appropriate leadership at Board level.

The Director Nomination Policy sets out the factors for assessing the suitability and the potential contribution to the Board of a proposed candidate, including but not limited to the following:

- Integrity and reputation;
- Educational background, professional qualifications and work experience (including part-time jobs);
- Whether or not they have the necessary skills and experience;
- Whether or not they are able to spend sufficient time and energy to handle the Company's affairs;
- Whether or not they will promote the diversity of the Board in all aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and term of office;
- Whether or not the candidates for independent directors meet the requirements for independence under Rule 3.13 of the Listing Rules; and
- Any other relevant factors as determined by the Nomination and Corporate Governance Committee or the Board from time to time.

The Director Nomination Policy also sets out the procedures for the selection and appointment of new Directors and re-election of Directors at general meetings. The Nomination and Corporate Governance Committee and/or the Board may nominate candidates for directorship. Where the Board proposes a resolution to elect or re-elect a candidate as Director at the general meeting, the relevant information of the candidate will be disclosed in the circular to Shareholders and/or explanatory statement accompanying the notice of the relevant general meeting in accordance with the Listing Rules and/or applicable laws and regulations.

Shareholders who wish to propose a person for election as a Director at the general meeting shall follow the provisions in the Company's Articles of Association and the Company's policy on "Procedures for Shareholders to Propose a Person for Election as a Director of the Company".

During the year ended December 31, 2022, the Nomination and Corporate Governance Committee recommended to the Board the appointment of a new executive Director namely Dr. Hua JIANG at the meeting of the Nomination and Corporate Governance Committee. The appointment was subject to a nomination process in accordance with the Director Nomination Policy and the Board Diversity Policy, to ensure the Board possesses the necessary skills, experience and knowledge in alignment with the Company's strategy.

The Nomination and Corporate Governance Committee will review the Director Nomination Policy, as appropriate, to ensure its effectiveness.

Board Meetings

The attendance of each Director at Board and committee meetings of the Company, whether in person or by means of electronic communication, is detailed in the table below:

	Attendance/No. of Meetings held during the Reporting Period				
Name of Directors	**Board**	**Audit Committee**	**Remuneration Committee**	**Nomination and Corporate Governance Committee**	**General Meeting**
Executive Directors					
Dr. Zonghai LI	4/4	N/A	2/2	2/2	1/1
Dr. Huamao WANG	4/4	N/A	N/A	N/A	1/1
Dr. Hua JIANG *(appointed on August 1, 2022)*	3/3	N/A	N/A	N/A	N/A
Non-executive Directors					
Mr. Bingsen GUO	4/4	N/A	N/A	N/A	1/1
Ms. Yachao ZHAO *(resigned on May 27, 2022)*	1/1	N/A	N/A	N/A	1/1
Mr. Ronggang XIE	4/4	N/A	N/A	N/A	1/1
Mr. Huaqing GUO	4/4	4/4	N/A	N/A	1/1
Independent Non-executive Directors					
Dr. Chunhai FAN *(resigned on January 11, 2023)*	4/4	4/4	2/2	2/2	1/1
Dr. Guangmei YAN	4/4	N/A	2/2	2/2	0/1
Mr. Tak Young SO	4/4	4/4	N/A	N/A	1/1
Dr. Huabing LI *(appointed on March 9, 2023)*	N/A	N/A	N/A	N/A	N/A

At the Board meetings held during the Reporting Period, the Board discussed a wide range of matters, including annual results announcement, interim results announcement, appointment and remuneration of senior management and an executive director, and Auditors' reappointment and remuneration, etc.

The Chairman of the Board held one meeting with the independent non-executive Directors during the Reporting Period without the presence of other Directors.

On May 25, 2022, the Company held its annual general meeting to consider and approve the re-election of Directors, the grant of general mandates to issue and repurchase shares, and the re-appointment of the Auditor. All the proposed resolutions to the annual general meeting were taken by poll and the poll results were set out in the Company's announcement dated May 25, 2022. The Chairman as well as other members of the Board were available to respond to enquiries during the annual general meeting, which provided opportunities for communication between Directors, senior management and the Shareholders.

BOARD COMMITTEES

The Company has established the following committees under the Board of Directors: an Audit Committee, a Remuneration Committee and a Nomination and Corporate Governance Committee. The committees operate in accordance with terms of reference established by our Board of Directors.

Audit Committee

Our Company has established the Audit Committee with written terms of reference in compliance with Rule 3.21 of the Listing Rules and the Corporate Governance Code. During the Reporting Period, the Audit Committee consisted of two independent non-executive Directors, namely Mr. Tak Young SO and Dr. Chunhai FAN, and one non-executive Director, namely Mr. Huaqing GUO. After the Reporting Period, Dr. Chunhai FAN ceased to, and Dr. Huabing LI was appointed to, act as a member of the Audit Committee on January 11, 2023 and March 9, 2023, respectively. As at the Latest Practicable Date, the Audit Committee consisted of two independent non-executive Directors, namely Mr. Tak Young SO and Dr. Huabing LI, and one non-executive Director, namely Mr. Huaqing GUO. Mr. Tak Young SO, being the chairman of the Audit Committee, holds the appropriate professional qualifications as required under Rules 3.10(2) and 3.21 of the Listing Rules.

The primary duties of the Audit Committee are to assist the Board by providing an independent view of the effectiveness of the financial reporting process, internal control and risk management systems of our Group, overseeing the audit process and performing other duties and responsibilities assigned by our Board of Directors.

During the Reporting Period, the Audit Committee scheduled four meetings, during which matters such as financial reporting, operational and compliance controls, effectiveness of the risk management and internal control systems and internal audit function were discussed.

The attendance records of the members of the Audit Committee, during the Reporting Period, are as follows:

Name of Members of the Audit Committee	Attendance
Mr. Tak Young SO	4/4
Dr. Chunhai FAN	4/4
Mr. Huaqing GUO	4/4

Remuneration Committee

Our Company has established the Remuneration Committee with written terms of reference in compliance with Rule 3.25 of the Listing Rules and the Corporate Governance Code. During the Reporting Period, the Remuneration Committee consisted of two independent non-executive Directors, namely, Dr. Guangmei YAN and Dr. Chunhai FAN, and one executive Director, namely Dr. Zonghai LI, and Dr. Chunhai FAN was the chairman of the Remuneration Committee. After the Reporting Period, Dr. Chunhai FAN ceased to, and Dr. Huabing LI was appointed to act as the chairman of the Remuneration Committee on January 11, 2023 and March 9, 2023, respectively. As at the Latest Practicable Date, the Remuneration Committee consisted of two independent non-executive Directors, namely, Dr. Guangmei YAN and Dr. Huabing LI, and one executive Director, namely Dr. Zonghai LI and Dr. Huabing LI was the chairman of the Remuneration Committee.

The primary duties of the Remuneration Committee include, without limitation, making recommendations to the Board of Directors on our policy and structure for the remuneration of all Directors and senior management and on the establishment of a formal and transparent procedure for developing the policy on such remuneration and determining the specific remuneration packages of all Directors and senior management.

During the Reporting Period, the Remuneration Committee scheduled two meetings, during which matters such as remuneration of senior management and individual executive directors, policy and structure for the remuneration of all directors and senior management were discussed.

During the Reporting Period, no material matters relating to share schemes (as defined under Chapter 17 of the Listing Rules) required the Remuneration Committee to review or approve.

The attendance records of the members of the Remuneration Committee, during the Reporting Period, are as follows:

Name of Members of the Remuneration Committee	Attendance
Dr. Chunhai FAN	2/2
Dr. Guangmei YAN	2/2
Dr. Zonghai LI	2/2

Nomination and Corporate Governance Committee

Our Company has established the Nomination and Corporate Governance Committee with written terms of reference in compliance with the Corporate Governance Code. During the Reporting Period, the Nomination and Corporate Governance Committee consisted of two independent non-executive Directors, namely Dr. Guangmei YAN and Dr. Chunhai FAN, and one executive Director, namely, Dr. Zonghai LI. After the Reporting Period, Dr. Chunhai FAN ceased to, and Dr. Huabing LI was appointed to act as a member of the Nomination and Corporate Governance Committee on January 11, 2023 and March 9, 2023, respectively. As at the Latest Practicable Date, the Nomination and Corporate Governance Committee consisted of two independent non-executive Directors, namely, Dr. Guangmei YAN and Dr. Huabing LI, and one executive Director, namely Dr. Zonghai LI. Dr. Zonghai LI is the chairman of the Nomination and Corporate Governance Committee.

The primary duties of the Nomination and Corporate Governance Committee include, without limitation, reviewing the structure, size and composition of the Board of Directors, assessing the independence of the independent non-executive Directors, making recommendations to the Board of Directors on matters relating to the appointment of Directors, developing, reviewing and assessing the adequacy of our Company's policies and practices on corporate governance and reviewing our Company's compliance with the Corporate Governance Code and disclosure in the corporate governance report.

During the Reporting Period, the Nomination and Corporate Governance Committee scheduled two meetings, during which matters such as re-election of directors, appointment of senior management and executive director were discussed.

The attendance records of the members of the Nomination and Corporate Governance Committee, during the Reporting Period, are as follows:

Name of Members of the Nomination and Corporate Governance Committee	Attendance
Dr. Zonghai LI	2/2
Dr. Chunhai FAN	2/2
Dr. Guangmei YAN	2/2

COMPANY SECRETARY

Mr. Wing Yat Christopher LUI has been appointed as the Company Secretary on February 23, 2021 and has taken no less than 15 hours of relevant professional training during 2022 and has complied with Rule 3.29 of the Listing Rules in relation to the professional training requirements. The primary contact person of Mr. Wing Yat Christopher LUI at the Company is Mr. Haiou CHEN who is our executive vice president.

SHAREHOLDERS RIGHTS

The Company encourages shareholders' active participation in annual general meetings and other general meetings or other proper means. To safeguard shareholders' interests and rights, a separate resolution will be proposed for each issue at general meetings, including the election of individual Directors. All resolutions put forward at general meetings will be voted by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company and the Stock Exchange in a timely manner after each general meeting.

Convening of Extraordinary General Meeting

Any one or more members holding as of date of deposit of the requisition not less than one-tenth of the paid-up capital of the Company carrying the right of voting at general meetings of the Company shall at all times have the right, by written requisition, to require an extraordinary general meeting of the Company to be called by the Board for the matter specified in such requisition. A written requisition shall be deposited at 5/F, Manulife Place, 348 Kwun Tong Road, Kowloon, Hong Kong. If within 21 days of such deposit the Board fails to proceed to convene such meeting to be held within a further 21 days, the requisitionist(s) themselves or any of them representing more than one-half of the total voting rights of all of them, may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

Putting Forward Proposals at General Meetings

There are no provisions in the Articles of Association or in the Companies Law of the Cayman Islands for putting forward proposals or new resolutions by shareholders at general meetings. Shareholders who wish to move forward a resolution may request the Company to convene a general meeting in accordance with the procedures mentioned above.

COMMUNICATION WITH SHAREHOLDERS

Shareholders Communication Policy

To enable our shareholders to exercise their rights in an informed manner based on a good understanding of the Group's operations, businesses and financial information, the Company adopted the shareholders communication policy to provide effective communication with the Shareholders and other stakeholders. The policy sets out a number of ways to ensure effective and efficient communication with out shareholders and stakeholders is achieved, including but not limited to our corporate communications (in both English and Chinese, to facilitate shareholders' understanding) and posting of relevant information on the Company Website. To facilitate communication between the Company, our shareholders and stakeholders and solicit and understand the views of shareholders and stakeholders, investor and analyst briefings, roadshows, media interview and specialist industry forums are organized on a regular basis and are attended by our directors.

The Company has reviewed the implementation and is satisfied with the effectiveness of the shareholders' communication policy during the year ended December 31, 2022.

Enquiries to the Board

Shareholders who intend to put forward their enquiries or communicate their views about the Company to the Board could send written enquiries or materials to the Company. The Company will not normally deal with verbal or anonymous enquiries.

Shareholders may send their enquiries or requests as mentioned above to the following:

Address: 1F, Building 2,
No. 466 Yindu Road
Xuhui District
Shanghai
the PRC
(For the attention of the Board of Directors)

Email: IR@carsgen.com

DIRECTORS' RESPONSIBILITY IN RESPECT OF THE FINANCIAL STATEMENTS

The Directors acknowledge their responsibility for preparing the financial statements of the Company for the year ended December 31, 2022, and are not aware of any material uncertainties relating to events or conditions that may cast significant doubt upon the Company's ability to continue as a going concern.

The statement of the Auditors about their reporting responsibilities on the financial statements is set out in the section headed "Independent Auditor's Report".

DIVERSITY

The Board has adopted a board diversity policy which sets out the objective and approach to achieve and maintain diversity of our Board in order to enhance the effectiveness of our Board. Pursuant to the board diversity policy, we seek to achieve board diversity through the consideration of a number of measurable objectives, including but not limited to professional experience, skills, knowledge, gender, age, cultural and education background, ethnicity and length of service. The Nomination and Corporate Governance Committee and the Board are of the view that the current composition of the Board is in line with and achieves the measurable objectives in our board diversity policy. Nevertheless, in recognizing the particular importance of gender diversity, our Company confirms that our Nomination and Corporate Governance Committee will, within three years from the Listing Date, identify and recommend one female candidate to our Board for consideration on her appointment as Director of our Company. In 2022, the Nomination and Corporate Governance Committee has recommended and the Board has appointed Dr. Hua JIANG as an executive Director, but considering the resignation of Ms. Yachao ZHAO, the Nomination and Corporate Governance Committee will further identify and recommend a female candidate to our Board for consideration on her appointment as a Director of our Company.

We are also committed to adopting a similar approach to promote diversity within the management (including but not limited to the senior management) of our Company to enhance the effectiveness of corporate governance of our Company as a whole.

As at December 31, 2022, we hired 539 full-time employees, of which 192 were male and 347 were female. The gender ratio in the workforce (including senior management) was approximately 5 males to 10 females. The Company is aiming to achieve a more balanced gender ratio in the workforce in the future and will continue to monitor and evaluate the diversity policy from time to time to ensure its continued effectiveness.

Nomination and Corporate Governance Committee will review the board diversity policy from time to time to ensure its continued effectiveness.

DIVIDEND POLICY

The Company has adopted a policy on payment of dividends pursuant to code provision F.1.1 of the CG Code taking into consideration of various elements including but not limited to, among other things, the Company's profitability, operation and development plans, external financing environment, costs of capital, the Company's cash flows and other factors that the Directors may consider relevant. The policy sets out the factors in consideration, procedures, methods and intervals of the payment of dividends with an objective to provide the shareholders with continuing, stable and reasonable returns on investment while maintaining the Company's business operation and achieving its long-term development goal. Distribution of any interim or final dividends will be formulated by the Board, and will be subject to shareholders' approval.

As at December 31, 2022, no arrangement was reached pursuant to which the Shareholders waived or agreed to waive their dividends.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Insider Dealing Policy (the "**Policy**"), with terms no less exacting than the Model Code as set out in Appendix 10 to the Listing Rules as its own securities dealing policy to regulate all dealings by Directors and employees who, because of his/her office or employment, is likely to possess inside information in relation to the Group or the Company's securities.

Specific enquiries have been made to all Directors and the Directors have confirmed that they have complied with the Policy throughout the Reporting Period.

No incident of non-compliance of the Policy by the employees was noted by the Company for the Reporting Period.

CHANGE IN CONSTITUTIONAL DOCUMENTS

During the Reporting Period, there was no amendment to the constitutional documents of the Company. On March 21, 2023, the Board resolved to propose certain amendments to the sixth amended and restated memorandum and articles of association of Company, and for more details, please refer to the announcement of the Company dated March 21, 2023.

AUDITOR'S RESPONSIBILITY AND REMUNERATION

The Company appointed PricewaterhouseCoopers ("**PwC**") as the external auditor for the year ended December 31, 2022. A statement by PwC about their reporting responsibilities for the financial statements is included in the Independent Auditors' Report on pages 132 to 136.

The remuneration for the audit and non-audit services provided by the Auditor to the Group during the year ended December 31, 2022 was approximately as follows:

Type of Services	Amount *(RMB'000)*
Audit and audit related services	3,260
Non-audit services	185
Total	**3,445**

Note: Non-audit services are related to the 2022 ESG report.

RISK MANAGEMENT AND INTERNAL CONTROL

Risk Management

We recognize that risk management is critical to the success of our business operation. Key operational risks faced by us include changes in general market conditions and the regulatory environment of the PRC, the United States and global biologics market, our ability to develop, manufacture and commercialize our product candidates, and our ability to compete with other pharmaceutical companies operating in the same markets as ours. See "Risk Factors" in the Prospectus for a discussion of various risks and uncertainties we face. We also face various market risks. In particular, we are exposed to foreign exchange, cash flow and fair value interest rate, credit and liquidity risks that arise in the normal course of our business.

We have adopted a series of risk management policies which set out a risk management framework to identify, assess, evaluate and monitor key risks associated with our strategic objectives on an ongoing basis. Our senior management, and ultimately our Directors, supervise the implementation of our risk management policies. Risks identified by management will be analyzed on the basis of likelihood and impact, and will be properly followed up and mitigated and rectified by our Group and reported to our Directors.

The following key principles outline our approach to risk management:

- Our Audit Committee will oversee and manage the overall risks associated with our business operation, including (i) reviewing and approving our risk management policies to ensure that it is consistent with our corporate objectives; (ii) monitoring the most significant risks associated with our business operation and our management's handling of such risks; (iii) reviewing our corporate risk and (iv) monitoring and ensuring the appropriate application of our risk management framework across our Group.

- Our management team will be responsible for (i) formulating and updating our risk management policy and targets; (ii) reviewing and approving major risk management issues of our Group; (iii) promulgating risk management measures; (iv) providing guidance on our risk management approach to the relevant departments in our Group; (v) reviewing the relevant departments' reporting on key risks and providing feedback; (vi) supervising the implementation of our risk management measures by the relevant departments; (vii) ensuring that the appropriate structure, processes and competencies are in place across our Group; and (viii) reporting to our Audit Committee on our material risks.

- The relevant departments, including but not limited to the finance department, the internal audit department, the legal department and the human resources department, are responsible for developing and implementing our risk management policy and carrying out our day-to-day risk management practice, such as assessing risks on key business operations, advising risk responses and optimizing risk management policies. In order to standardize risk management across our Group and set a common level of transparency and risk management performance, the relevant departments will (i) gather information about the risks relating to their operation or function; (ii) conduct risk assessments, which include the identification, prioritization, measurement and categorization of all key risks that could potentially affect their objectives; (iii) continuously monitor the key risks relating to their operation or function; (iv) implement appropriate risk responses where necessary; and (v) develop and maintain an appropriate mechanism to facilitate the application of our risk management framework.

Internal Control

Our Board is responsible for establishing and ensuring effective internal controls to safeguard our Shareholder's investment at all times. Our internal control policies set out a framework to identify, assess, evaluate and monitor key risks associated with our strategic objectives on an ongoing basis.

Below is a summary of the internal control policies, measures and procedures we have implemented or plan to implement:

- We have adopted various measures and procedures regarding each aspect of our business operation, such as protection of intellectual property, environmental protection, and occupational health and safety. For example, we maintain a list of positions that require a certificate to undertake and require that the corresponding personnel to participate in trainings and pass the necessary assessment to obtain the certificate before they are allowed to commence their work. We provide periodic trainings on these measures and procedures to our employees as part of our employee training programs. From time to time, we are inspected for our compliance with environmental, health and safety laws and regulations by authorities such as the Public Security Bureau and the Health Commission. As of the Latest Practicable Date, we had not been subject to any administrative penalties in connection with environmental, health and safety matters.

- Our Directors (who are responsible for monitoring the corporate governance of our Group), with help from our legal advisors, will also periodically review our compliance status with all relevant laws and regulations after the Listing. We have established an Audit Committee in connection with the Listing, which (i) makes recommendations to our Directors on the appointment and removal of external auditors; and (ii) reviews the financial information and renders advice in respect of financial reporting as well as oversee internal control procedures of our Group.

- We have engaged Guotai Junan Capital Limited as our compliance advisor to provide advice to our Directors and management team until the date on which the Company complies with Rule 13.46 of the Listing Rules in respect of the financial results for the first full year commencing after the Listing (i.e. the year from January 1, 2022 to December 31, 2022). Our compliance advisor is expected to, upon our consultation, provide advice and guidance in respect of compliance with the applicable laws and the Listing Rules including various requirements of the financial reporting directors' duties and internal control in a timely fashion.

- We have engaged a PRC law firm to advise us on and keep us abreast of PRC laws and regulations after the Listing. We will continue to arrange various trainings sessions to be provided by external legal advisors from time to time when necessary, and/or any appropriate accredited institution to update our Directors, senior management and relevant employees on the latest PRC laws and regulations.

- We have established procedures to protect the confidentiality of clinical trial data. We clearly define the scope of the personnel who can access data generated from clinical trials and the information about the enrolled participants. Access to such data has been strictly limited to the authorized personnel according to the GCP and relevant regulations. We have also implemented measures to secure patients' privacy. For example, we only use anonymized code as a basis for patient identification. We require external parties and internal employees involved in clinical trials to comply with confidentiality requirements. Data are to be used only for the intended use, as agreed by the patients and consistent with the Informed Consent Form, or the ICF. We will obtain consent from patients for use of genetic materials or if any use of data falls outside the scope of the previously signed ICF. With regard to the use of genetic materials, our biological sample analysis laboratory has formulated standard procedures and strictly follow such procedures for the storage, use and destruction of biological samples of the clinical trial participants. In addition, our clinical operations team has standardized procedures for handling human genetic materials in compliance with the relevant laws and regulations, such as the HGR Regulation.

- We have developed the policy on information disclosure management which provide a general guide to the Directors, senior management and relevant employees of the Company in handling and dissemination of confidential information, monitoring information disclosure and responding to enquiries. Control procedures have been implemented to ensure that unauthorized access and use of inside information are strictly prohibited. The Board is aware of its obligations to announce any inside information in accordance with the Listing Rules.

- Our compliance policies are standard for our industry and apply to all of our employees. We have established and maintained strict anti-corruption and anti-bribery policies, which sets forth our internal policies and procedures with regard to business entertainment, provision of gifts and financial reimbursement. We also require all of our employees to attend the trainings on the anti-corruption and anti-bribery polices. In addition, we will periodically review and update the policies and provide trainings to our employees on such updates. We will also ensure that our business development team complies with applicable promotion and advertising requirements, which include restrictions on promoting products for unapproved uses or patient populations and limitations on industry-sponsored scientific and educational activities. Moreover, we have formulated an anti-corruption and anti-bribery integrity agreement which we require our suppliers, including CROs to execute before we enter into business relationship. All of these compliance policies can be readily applied to our future in-house sales and marketing team.

- We have complied with the Corporate Governance Code, except for the deviation from the code provision C.2.1 of the Corporate Governance Code. We have established three board committees, namely, the Audit Committee, the Nomination and Corporate Governance Committee and the Remuneration Committee, with respective terms of reference in compliance with the Corporate Governance Code.

- Our Directors believe that compliance creates value for us and dedicate to cultivating a compliance culture among all of our employees. To ensure such compliance culture is embedded into everyday workflow and set the expectations for individual behavior across the organization, we regularly conduct internal compliance checks and inspections, adopt strict accountability internally and conduct compliance training.

During the Reporting Period, we have regularly reviewed and enhanced our internal control system. We believe that our Directors and senior management possess the necessary knowledge and experience in providing good corporate governance oversight in connection with risk management and internal control matters.

Investment Risk Management

We engage in short-term investments with surplus cash on hand. Our primary objective for short-term investments is to preserve principal and increase fund-using efficiency and liquidity as well. Our finance department, under the supervision of our Senior Vice President of Finance, is responsible for managing our short-term investment activities. Before making a proposal to invest in wealth management products, our financial department must assess our cash flow and operational needs and capital expenditures.

We operate under a Board approved investment policy which governs the investment of our funds and is reviewed from time to time by our Board. We will make its investment decisions on a case-by-case basis after thoroughly considering a number of factors, including but not limited to macroeconomic environment, general market conditions and the expected profit or potential loss of the investment. Under the Company's investment policy, we are prohibited from investing in high risk products and the proposed investment must not interfere with its business operation or capital expenditure. As of the Latest Practicable Date, the Company's investment decisions did not deviate from its investment policy.

Our portfolio to date has been required to hold only instruments with an effective final maturity of 24 months or less, with effective final maturity being defined either as the obligation of the issuer to repay principal and interest or the discretionary ability of investor to put the security back in advance to the issuer. The initial target range for the average maturity of our portfolio is 24 months.

We believe that our internal investment policies and the related risk management mechanism are adequate. We may make investments that meet the above criteria after consultation and approval by our Board where we believe it is prudent to do so.

Effectiveness of Risk Management and Internal Control

The Board acknowledges that it is its responsibility to ensure that the Company establishes and maintains sound risk management and internal control systems within the Group and to review the effectiveness of the systems. Such systems are designed to manage and mitigate risks inherent in the Group's business faced by the Group to an acceptable level, but not to eliminate the risk of failure to achieve business objectives, and can only provide reasonable assurance against material misstatement, loss or fraud.

The Audit Committee, on behalf of the Board, continuously reviews the risk management and internal control systems. The review process has been conducted annually to confirm the effectiveness of management and internal control systems comprising, among other things, meetings with management of business groups, internal audit team, and the external auditors, reviewing the relevant work reports and information of key performance indicators, and discussing the major risks with the senior management of the Company. The Board has conducted a review over the risk management and internal control system of the Group for the year ended December 31, 2022, which covers financial, operational, compliance procedural and risk management functions, and considers them efficient and adequate.

In addition, the Board believes that the Company's accounting and financial reporting functions have been performed by staff of the appropriate qualifications and experience and that such staff receives appropriate and sufficient training and development. Based on the audit report of the Audit Committee, the Board also believes that sufficient resources have been obtained for the Company's internal audit function and that its staff qualifications and experience, training programs and budgets are sufficient.

ABOUT THE REPORT

CARsgen Therapeutics Holdings Limited ("**the Company**" or "**CARsgen Therapeutics**", stock code: 2171) has issued the 2022 Environmental, Social and Governance Report ("**ESG Report**") as the Company's second ESG report to introduce its management and performance concerning environmental protection, social responsibilities and corporate governance to stockholders.

REPORTING SCOPE

Unless otherwise stated, the Report covers CARsgen Therapeutics Holdings Limited, CARsgen Therapeutics Co., Ltd. ("**CARsgen Therapeutics (Shanghai)**"), CARsgen Pharmaceuticals Co., Ltd., CARsgen Life Sciences Co., Ltd. and CARsgen Diagnostics Co., Ltd. (jointly referred to as "**the Group**" or "**We**"). The period covered is from 1 January 2022 to 31 December 2022 (the "**Reporting Period**"), and some content may trace back to previous years or extend to future years.

REPORTING STANDARDS

The Report is prepared in compliance with the requirements of Appendix 27 *Environmental, Social and Governance Reporting Guide* (the "**ESG Reporting Guide**") to the Main Board Listing Rules ("**Listing Rules**") of Stock Exchange of Hong Kong Limited ("**HKEX**").

REPORTING PRINCIPLES

"Materiality": The ESG Report includes communication with stakeholders and materiality assessment in the preparation process as the basis for the determination of important ESG topics.

"Quantitative": The ESG Report adopts quantitative information to disclose the key performance indicators ("**KPI**") on environmental and social levels accompanied by a narrative, explaining its purposes and impacts.

"Balance": The ESG Report provides an unbiased picture of our ESG performance in compliance with the "Balance" principle.

"Consistency": The key performance indicators and statistical methods used in this report are consistent with the ones used in the 2021 ESG Report to ensure comparability.

REPORT AVAILABILITY

The Report is released in both print and online versions. The online version is available for viewing or download on the HKEX news website (http://www.hkexnews.hk) and the Company's official website (https://www.CARsgen.com).

BOARD STATEMENT

The Board of Directors values ESG management and assumes full responsibility for CARsgen Therapeutics' ESG strategies and reporting regarding the requirements of the ESG Reporting Guide. The Board actively explores and improves the Company's ESG management structure. Through more strict supervision on active engagement in ESG management, the Board strives to integrate the ESG concept into the business strategy and daily operations.

This report was approved by the Board of Directors on 21 March 2023 upon confirmation by the management.

CORPORATE HONORS

In 2022, key honors and rewards obtained were as follows:

- **May 2022** CARsgen Immune Cell R&D Team was granted "2022 National Worker Pioneer"
- **August 2022** "Top Ten Pioneer Companies in Drug Innovation of the Year" from Securities Times

  Dr. Zonghai LI was granted "Top Ten Drug Innovation Scientists of the Year" by Securities Times
- **November 2022** The First "High-value Patent Operation Competition: Patent Operation Investment Value" Award in Shanghai
- **December 2022** Healthcare Executive – "China's Top 100 Innovative Pharmaceutical Companies" Award

The certificate of the "Top Ten Pioneer Companies in Drug Innovation of the Year"

The certificate of the "Top Ten Drug Innovation Scientists of the Year"

The certificate of "China's Top 100 Innovative Pharmaceutical Companies"

1. ESG MANAGEMENT

1.1. Governance Structure

As a biochemical company with a vision of "Making Cancer Curable", we are highly aware of performing corporate social responsibilities to integrate the concept of sustainable development into our business strategy and daily operations. We continuously improve our corporate ESG governance, develop and operate in a more responsible way to achieve better performance in the economy, environment and society, and strive to create long-term value for stakeholders and society.

Since officially listed on HKEX in June 2021, the Company has adopted and applied related regulations on ESG governance in the Listing Rules. We have defined the ESG governance functions of the Board of Directors. In addition to assessing and developing ESG management policies and strategies, as well as overseeing ESG issues, the Board of Directors is fully responsible for the Company's ESG strategies and reporting, regularly reviewing ESG-related issues, ESG-related goals and progress, and approving annual ESG report. Meanwhile, to further implement top-down governance approach of ESG issues, we have set up ESG working groups, which plan and implement the Company's ESG management policies, put ESG policies into practice and report to the Board of Directors about ESG working progress. In future, we plan to further improve ESG management mechanism and continuously enhance our ESG performance.

1.2. Stakeholder Communication

We firmly believe that the effective participation of the stakeholders is of great importance to our long-term development. Therefore, we actively communicate with all stakeholders including shareholders, investors, regulators, suppliers, partners, employees, customers, patients, industry associations, communities and the public, to understand and respond to their demands, to collect their opinions and advice regarding our ESG strategies and performance, and include their critical concerns in our ESG management.

Stakeholders	Demands and expectations	Communication methods
Shareholders and investors	Return on investment Information disclosure Risk control	Annual reports, financial statements and announcements Company's website Meetings, road shows
Government administration	Operation compliance Tax payment in accordance with laws Making contribution to the society	Government research Thematic meeting of the government administration Written reports Industry forums
Potential customers/subjects	Product quality and safety Product R&D and innovation Rights & interests Protection Privacy protection	Customers' feedbacks Communication and discussion Survey on customer satisfaction

Stakeholders	Demands and expectations	Communication methods
Suppliers/partners	Supplier management Justice and fairness Win-win cooperation Anti-corruption	Business communication Regular meetings Field visits Assessment and evaluation
Employees	Training and development Well-established remuneration and benefits mechanism Equal opportunities and diversification Occupational health and safety	Labor union Internal meetings Performance assessment Team building
Industry associations	Communication and cooperation Fair competition Industry empowerment	Industry alliance Seminars and exchange conferences Project cooperation
Community and the public	Community care Social public benefit activities participation Environmental protection	Company's website Daily communication Public services Social media

1.3. Materiality Assessment

To identify key areas of ESG practice, we have regularly appointed third-party professional organizations to conduct materiality assessment to determine the materiality of ESG topics to the Company's business development and the stakeholders and used the assessment results as important references for ESG management strategies and ESG reporting.

Step 1 Identify ESG topics

Based on the requirements of the *ESG Guide* and taking the Company's actual business and industry characteristics into account, we have identified 17 ESG-related topics to which the stakeholders paid attention through a series of analysis, and confirmed that these topics already covered our ESG practice during the reporting period;

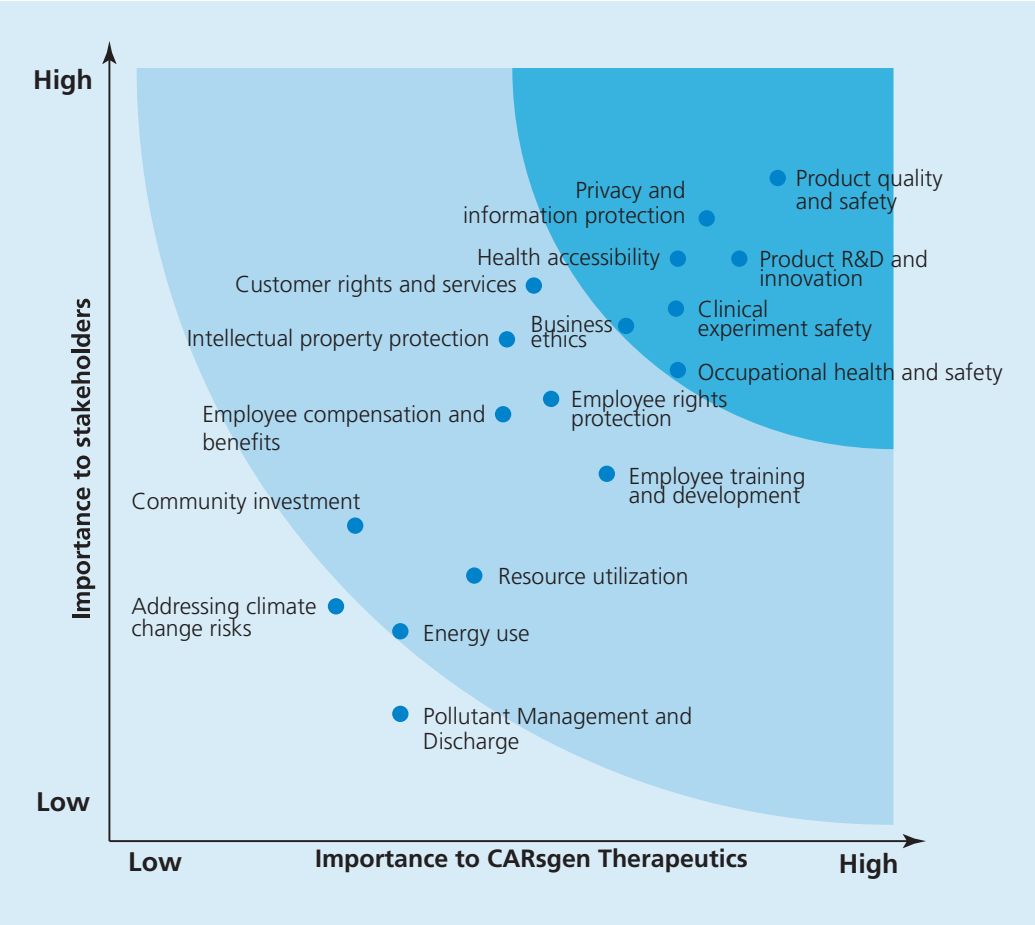
Step 2 Determine the materiality

We have assessed and adjusted the topics from the aspects of "importance to CARsgen Therapeutics" and "importance to stakeholders" through internal interviews and discussions as well as seeking external opinions, and generated a materiality assessment matrix based on the survey results to set the priority of the ESG topics;

Step 3 Verify assessment results

The Board of Directors and senior management of the Company have reviewed and confirmed the assessment results. 7 topics of high importance to the Company have been identified, including product quality and safety, privacy and information protection, product R&D and innovation, health accessibility and clinical experiment safety. We will respond to the topics of high importance in corresponding chapters of the Report in order to address the concerns of all stakeholders.

During the Reporting Period, as there were no significant changes in the Company's business operation model, after reviewing the ESG issues and materiality assessment results, the Company's materiality matrix is as follows:



Materiality assessment results of CARsgen Therapeutics

2. INNOVATION LEADS TO IMPROVE HEALTH AND WELL-BEING

Since starting operation in 2014, we have been committed to our mission of "becoming a global biopharmaceutical leader that brings innovative and differentiated cell therapies to cancer patients worldwide and makes cancer curable". We focus on innovative [1]CAR T-cell therapies for the treatment of hematological malignancies and solid tumors, dedicate ourselves to promoting the industry development and providing innovative and differentiated cell therapies as well as high-quality reliable CAR T-cell products for cancer patients around the world though our industry-leading R&D innovation capabilities, advanced automation technology, cutting-edge process schemes, as well as well-established quality management system.

2.1. Improving R&D Quality

2.1.1. R&D and Innovation

To achieve the corporate vision of "Making Cancer Curable", we keep on innovating and developing novel technologies. With unremitting efforts, now we have a product pipeline with global rights and have built up capabilities covering the early stage research, clinical development and production for end-to-end cell therapies to address major challenges of CAR T-cell therapies, and help improve the safety profile, increase the efficacy in treating solid tumors and reduce treatment costs.

We have formulated four strategic principles in terms of efficacy, safety, patient accessibility and target availability to continue to promote CAR T technology innovation and address the challenges. By the end of the Reporting Period, we had established an integrated R&D platform consisting of target discovery, hybridoma antibody humanisation platform, fully human phage-display antibody library platform, antibody identification platform, immune cell function assessment platform, plasmid and lentiviral vector preparation platform, cell therapy process development platform, analysis platform, biological sample testing platform, clinical scale and commercial scale CAR T manufacturing platform and clinical research platform, which covers the entire CAR T development cycle and includes internal functions of target discovery, antibody development, vector design, manufacturing, quality control and quality assurance. We are committed to further diversifying our product pipelines with support from a comprehensive platform and cutting-edge innovative technology and hope to propel our products to the clinical and commercial stage to benefit more patients around the world.

Case: CT041, a candidate product for solid tumor CAR T therapy, reaches confirmatory phase II clinical trial in China

On Q1 2022, our self-developed candidate product CT041 for CAR T-cell therapy was approved by the Center for Drug Evaluation (CDE) of the State Drug Administration (NMPA) of China to enter the confirmatory phase II clinical trial. The product is for the treatment of advanced gastric/esophagogastric junction adenocarcinoma (GC/GEJ) with Claudin 18.2 (CLDN18.2) positive patients who have failed at least second-line therapy, and the trial is designed to evaluate the efficacy and safety of CT041 in the treatment of advanced gastric/esophagogastric junction adenocarcinoma. By the end of the Reporting Period, CT041 was the first and only CAR T-cell product candidate in the world to enter a confirmatory phase II clinical trial for the treatment of solid tumors.

[1] CAR-T: Chimeric Antigen Receptor T-Cell Immunotherapy

Case: Entered into a commercial cooperation agreement with Huadong Medicine for zevorcabtagene autoleucel

Zevor-cel (CT053), as the leading pipeline product of CARsgen Therapeutics, is an autologous CAR T cell product used for the treatment of relapsed and refractory multiple myeloma. Its New Drug Application (NDA) was accepted by the National Medical Products Administration in October 2022. CT053 has demonstrated promising therapeutic efficacy in the clinical trial, and we hope to benefit more patients with multiple myeloma in China with CT053 through the strong commercialization capability of Huadong Medicine in the field of hematology to prolong their lifetime and improve their life quality.

Case: CARsgen Announces Collaboration Agreement to Evaluate AB011 in Combination with PD-L1 Checkpoint Inhibitor to Treat Gastric Cancer

On 31 January 2023, CARsgen Therapeutic and F. Hoffmann-La Roche ("Roche") collaborated to conduct combination treatment clinical trials for patients with gastric or gastroesophageal junction carcinoma, which aims to assess the safety and early efficacy of CARsgen's investigational drug AB011, the first humanized monoclonal antibody against Claudin18.2 (CLDN18.2) that received IND clearance globally, in combination with atezolizumab, Roche's PD-L1 checkpoint inhibitor, and enable more rapid and efficient development of novel cancer treatment combinations. We also hope to bring greater clinical benefits to gastric cancer patients though this collaboration.

Case: CARsgen Therapeutics's CGMP manufacturing facility in U.S. has been put into operation, greatly expanding the Group's global reach

On 21 February 2022, we started the clinical manufacturing and operation of our CGMP manufacturing facility in Research Triangle Park (RTP), North Carolina ("RTP Manufacturing Facility"). The RTP Manufacturing Facility is the first overseas facility of CARsgen Therapeutics to operate outside China, marking a new step ahead in our globalization landscape.

The manufacturing facility adopted an integrated project delivery approach that greatly shortens construction turnaround time and improves cost-effectiveness. It will enable us to serve 700 patients annually, which will significantly increase manufacturing capacity of autologous CAR T-cell products for and support the Company's clinical studies and early commercial launch in North America and Europe.

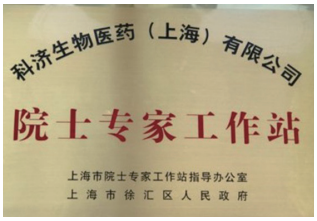
Grand Opening of RTP Manufacturing Facility

2.1.2. Industry-university-research Cooperation

To improve R&D and independent innovation capabilities, we actively carry out industry-university-research cooperation with government departments, well-known scientific research institutions and universities. We have established academician expert workstations, undergraduate industry-university-research practice bases and internship bases, and settled in Xuhui District postdoctoral innovation practice base, thus fully exploiting the joint advantages of scientific research workstations, the enterprise, innovative practice base and universities to assist in talents attraction and cultivation as well as promote industry, university and research integration and the commercialization of scientific and technological achievements.

Academician expert workstations

- The workstations were established under approval by Shanghai Association for Science and Technology and Shanghai Academician Expert Workstation Guidance Office in July 2017.



Post-doctoral innovative practice base

- The base was established under approval by Xuhui District Human Resources and Social Security Bureau in 2019.

During the Reporting Period, we published new technologies in T-cell therapy on the *Molecular Therapy Oncolytics* with Shanghai Cancer Institute, and results of the interim analysis of a phase I investigator-initiated trial on CAR T-cell product candidate CT041 on the *Nature Medicine* with Beijing Cancer Hospital. In addition, many of our research results, produced in cooperation with research institutes and hospitals, have published in professional journals, which greatly promote the Group's research on tumors and technologies in CAR T-cell therapy.

2.1.3. Management of Intellectual Property Rights

To effectively protect our intellectual property rights, we have formulated a series of management documents, including the *Intellectual Property Rights Management Manual*, the *Intellectual Property Rights Management Policy*, the *Intellectual Property Rights Obtaining Control Procedure*, the *Intellectual Property Rights Emergency Plan*, the *Intellectual Property Rights Archives Management Policy*, for specifying intellectual property rights related management specifications and operation process at all stages and enhancing our independent innovation capability and core competitiveness advantages.

We have developed the *Intellectual Property Rights Incentive Measures*, in order to specify the application of related intellectual property rights and incentive rules, and established incentive awards such as the "Technology Invention Award", "Achievement Transformation Award", "Golden Idea Award", "Mastermind Award" and "Major Innovation Award", thus motivating employees' enthusiasm and creativity and encouraging the output of intellectual property rights. During the Reporting Period, we introduced a new "Technology Invention Award" and granted awards totaling RMB99,100 to 25 patent-holding inventors.

As of the end of the Reporting Period, we had applied for more than 555 patents worldwide, including 87 issued patents.

2.1.4. Industry Communication and Development

We appreciate the value of industry cooperation and win-win cooperation, so we actively communicate with peers, suppliers and industry organizations to jointly build the new industry ecology. We put forward relevant opinions and suggestions to help the healthy development of the industry by attending on-site investigations and thematic meeting held by government administration, as well as submitting written reports to government administration, and participating in industry forums. Furthermore, we have offered feedbacks on the exposure draft issued by administrative departments including NMPA several times to promote the preparation and improvement of industry specifications and make a contribution to the high-quality development of the industry.

As of 31 December 2022, main industry associations we participated in were as follows.

Name of association	Position held	Entity
China Society for Drug Regulation (Specialized Committee on Cell Therapy)	Member unit	CARsgen Therapeutics (Shanghai)
Shanghai Biopharmaceutics Industry Association	Director unit	CARsgen Therapeutics (Shanghai)
Shanghai Medicine Industry Association	Member unit	CARsgen Therapeutics (Shanghai)
Shanghai Biopharmaceuticals Industry Innovation Alliance	Initiating unit	CARsgen Therapeutics (Shanghai)
Cell Immunotherapy Quality Management and Research Committee of Shanghai Medicine Quality Association	Member unit	CARsgen Therapeutics (Shanghai)
Shanghai Zhangjiang High-tech Park Development Affairs Consultation and Promotion Association – Biomedical branch	Executive director unit	CARsgen Therapeutics (Shanghai)
Shanghai Pudong International Chamber of Commerce – Biochemical Committee	Director unit	CARsgen Therapeutics (Shanghai)
Shanghai Jinshan Technology Enterprise Federation	Member unit	CARsgen Therapeutics
Maplewood Life & Health Industry Intellectual Property Alliance	Alliance unit	CARsgen Therapeutics (Shanghai)

During the Reporting Period, we participated in a number of industry exchange activities, including the second general meeting of the ninth session, the second council meeting of the ninth session vs the Asia Summit on Global Health (ASGH) organized by the Shanghai Medicine Industry Association, the eighth council meeting of the fifth session vs the fair trade report briefing by the Shanghai Biopharmaceuticals Industry Association, and the study session of the *Regulations on the Implementation of the Pharmaceutical Administration Law (Amended Draft for Consultation)* by the Tiantan Biology's online drug policy salon, etc. Meanwhile, we took the lead in the industry by becoming one of the first companies implementing the *Specification of Techniques for Producing in Single-use System of Bioprocess* and the *Validation Technical Requirements for Rapid Sterility Testing Method of Cellular and Gene Therapy Products* that were group standards issued by Shanghai Medicine Industry Association.

2.2. Strengthening Quality Management

We put product quality safety first, build up a well-established quality management system and strictly control the quality of all aspects including raw material procurement and acceptance, product development and manufacturing, warehousing and logistics etc., aiming to provide patients with safe and qualified products.

2.2.1. Quality Assurance

We continuously improve the quality management system in accordance with related laws and regulations including the *Pharmaceutical Administration Law of the People's Republic of China*, the *Regulations on the Implementation of the Pharmaceutical Administration Law of the People's Republic of China* and GMP (Good Manufacturing Practice), as well as industry specifications, to meet the quality management requirements throughout the full life cycle of product development.

We have built up a well-established quality management system and formulated various Standard Management Procedures (SMPs) and Standard Operation Procedures (SOPs) such as the *Quality Manual*, the *Quality Risk Management Procedure*, the *Management Procedure for Quality Management Review*, covering product full life cycle process to ensure the effective operation of product manufacturing, inspection and quality management measures. Meanwhile, we require that all material suppliers and external service providers shall sign the *Quality Agreement* with us to make sure they meet GMP and related quality requirements. During the Reporting Period, we have formulated and issued the *Medical Institutes Management Procedures*, *Commercial Carriers Management Procedures* and *DTP Pharmacy Management Procedures*, to provide institutional guarantee for product quality and safety on hospital management, cold-chain management, distributor and DTP pharmacy management.

In order to improve quality management, we have formulated the *Management Procedures for Annual Product Review* and set up the GMP team to conduct annual product quality review activity. Moreover, we organize quarterly quality management reviews and clarify the responsibilities of relevant personnel and SOPs for raw material procurement, acceptance, storage, and equipment, facility, production, inspection and product transportation management to prevent contamination and potential risks during the review period. We sign a quality agreement with hospitals we work with and provide full process operation training and simulation drills of products to medical institutes, trying to safeguard patients' health and safety.

We highly value the power of quality culture, so we conduct compulsory annual orientation training (such as quality training) for new employees before starting their work. And we conduct re-education training to provide interpretation of related laws and regulations and quality culture publicity concerning product manufacturing and quality management to ensure the products meet the requirements of quality regulations and standards at all times. We also carry out activities on a regular basis such as knowledge contests and skill competitions, in order to help employees learn and consolidate their quality management knowledge while improving their quality inspection skills. During the Reporting Period, we have conducted several departmental and company-level quality training activities, including but not limited to GMP inspection preparation and skills, quality statistical analysis tools, microbiological knowledge and personnel hygiene, guidance training on the implementation of GMP for cell therapy products, technical training on standards and regulations for pharmaceutical packaging materials, and training on key techniques for sterile drug production management and quality control, etc., effectively enhancing the quality awareness of all employees.

2.2.2. Quality Control

In order to effectively implement product quality control, we have set up professional quality control teams including physics and chemistry laboratory, microbiology laboratory, biochemistry laboratory, bioactivity laboratory and operating teams, which engage in establishing and maintaining quality standards and test methods, and conducting detection on raw materials and excipients, packaging materials, pharmaceutical waters, in process products and finished products.

We have established related quality specifications, procedures and developed sampling plans for various products and key raw materials and excipients involved, including quality specifications for final products and control requirements on in process products and solutions during the manufacturing process. During the Reporting Period, we adjusted the materials management strategy and revised the *Materials Management Procedures* according to the use and source of materials, and conduct refined management on raw materials, excipients, consumables and packaging materials by category and risk level. We complemented 16 quality evaluating specifications to AB-level raw materials and adjuvants, and revised the quality specifications and testing SOP of 62 materials, thus fully improving the materials management system.

For ensuring the accuracy and reliability of quality control results, we have established documents including the *QC Laboratory Management Procedures*, the *QC Samples Management Procedures* and the *Management Procedure for QC Records and Inspection Reports*, which specify inspection operations and report specifications corresponding to inspection methods. We have strictly managed the use and maintenance of quality control testing instruments, requiring that all the instruments should be necessarily confirmed, verified, measured or checked before being put into use. We have also confirmed the interval of the instruments and whether the instruments need to be confirmed or verified, measured or checked again based on risk assessment. After the process, the quality control team issues CoA to ensure that all data are accurate, compliant, complete and safe for record, review and filing. We require that employees sign the *Data Reliability Commitment*, to make sure that the related personnel record the situation and facts in an unbiased manner during manufacturing, inspection and GMP activities and retain the original data of the activities to ensure the traceability of the data. Moreover, we refine the management norms of classification and partitioning to improve laboratory management and optimize the sample information registration process to effectively enhance the level of quality tests.

As the production of cell therapies are still at the initial development stage, we continuously improve and optimize the product quality control process and methods by regular review of the problems arising during the product inspection process, to make full preparation for high-quality commercialized manufacturing.

2.3. Protecting Patient Health

We strictly abide by the laws and regulations and industry requirements in places where we operate, continuously improve our management level, and build up a sound mechanism for protecting patients' rights to provide patients with high-quality services and safeguard their lives and health.

2.3.1. R&D Ethics

In order to protect the lives and health safety of the subjects as well as respect and protect their lawful rights, we have respected to related moral principles of the *Declaration of Helsinki* and the laws and regulations including the *Consolidation Guidance of Good clinical practice (drug and medical device)*, and the *Review Methods for Biomedical Research Ethics Involving Human*, and CARsgen USA also complies with relevant laws and regulations including *US Code of Federal Regulations (CFR)*, moral principles of the *Declaration of Helsinki*, ICH (the International Council for Harmonization of Technical Requirements for Pharmaceuticals for Human Use)-related guidelines and *Good Clinical Practice* (GCP), committed to conduct ethical inspection on all the clinical projects to ensure related biomedical researches comply with ethical principles such as "informed consent", "control risks" and "privacy protection".

Informed consent
Respect and guarantee the rights of the subjects to decide whether to participate in the research, strictly implement informed consent procedures, avoid lying, inducing and threatening the subjects to get their consent to participation, and allow the subjects to quit unconditionally at any stages

Control risks
Put the personal safety and healthy rights first, followed by science and social interests. Research risks and benefits should be balanced, and avoid hurting the subjects as possible as we can

Free and compensation
Select the subjects in a fair and reasonable manner, charge no fees to the subjects for research participation, and give certain compensation on the subjects' fees spent during the process

Privacy protection
Practically protect the subjects' privacy, truthfully tell the subjects about the storage, utilization and confidential measures about their personal information, and do not expose the information to any third parties without authorization

Compensation in accordance with the laws
Where the subjects suffer any damage while participating in the study, they shall receive timely and free treatment and be compensated according to the laws, regulations and the agreement of both parties

Special protection
Give special protection to children, pregnant women, the mentally disabled and patients with mental disorders

We also require that all the designs of animal experiments shall comply with the "3R" principle, be good to animals, avoid or reduce animals' stress, pain and injury and respect their lives. We strictly abide by relevant requirements of standards and regulations like *Animal Experiment Management Regulations*, and formulate the *Standard Operating Procedures for Animal Experiment Barrier Environments* to specify the administrative rules concerning the selection and disposal of related experimental animals, laboratory conditions, professional competence of staff and operation methods.

[2] 3R principle for experimental animals refers to Reduction, Replacement and Refinement.

2.3.2. ***Drug Safety***

We have formulated the *Marketing Authorization Procedure for Pharmaceuticals* and strictly abided by the *Pharmaceutical Administration Law of the People's Republic of China* and the *Measures for the Administration of Drug Registration*. In addition, CARsgen USA also complies with the requirements of relevant laws and regulations including CFR, as well as the ICH-related guidelines and GCP in Canada. We strive to standardize the documentation preparation, submitting, review and approval for drug marketing authorization application and ensure the safety, efficacy and quality of the registered medicines.

We also build up relevant internal policies in accordance with ICH-related guidelines, *Good Pharmacovigilance Practices, Administrative Measures for the Reporting and Monitoring of Adverse Drug Reactions, Standards and Procedures for Expedited Reporting of Safety Data During Drug Clinical Trials* and other regulations, which clearly define the collection, handling, reporting, follow-up and other procedures regarding adverse reactions, to ensure the relevant adverse reactions can be processed properly in a timely manner, helping us understand the safety characteristics of the product and to protect patient health. In addition, we also continue to provide pharmacovigilance training to better fulfill our corporate-related responsibilities

2.3.3. ***Products and Services***

As of the end of the Reporting Period, most of our products stayed in the pre-market R&D stage and were not produced in large quantities, so we mainly obtained product feedback from CRO (contract research organization) and investigators involved in clinical trials. Once receiving serious adverse events (SAE) from clinical trials, Pharmacovigilance (PV) personnel will evaluate the case firstly, if the case is Suspected Unexpected Serious Adverse Reaction (SUSAR), and quality investigation is required after evaluation, PV personnel will raise quality investigation to Quality Assurance Department by using the relevant form. During the Reporting Period, total 16 quality investigations were conducted in China Mainland. After investigating, no quality abnormality that may cause adverse reactions was found, and all investigation results had been provided to PV department.

In order to assure the efficiency of communication channels and the well-organized processing of feedback, we established the *Complaint and Recall Management Procedure*, which defines the process and standards to deal with product complaints and recalls, so as to understand product deficiencies without delay and make timely improvements. During the Reporting Period, in China Mainland, we received a total of 1 complaint about malfunction of product QR code label. Immediately, we designated engineers to follow up and solve the problem by providing QR code sequence to clinicians timely and ensuring delivering work complete successfully. According to follow-up confirmation, this complaint did not affect the quality of the final product and the use of the patient, the patient received drug treatment and achieved good results. As of the end of the Reporting Period, we had no product recall incident.

3. UPHOLDING INTEGRITY TO CREATE LONG-TERM VALUE

Following the idea of business integrity, we constantly improve the compliance management mechanism and enhance the information security management level, as well as practice responsible communication. To this end, we can protect the rights and interests of our stakeholders, thus promoting the stable and long-term development of the Company. We also strive to build a transparent and trusted partnership with suppliers to create a resilient supply chain and achieve long-term development with win-win operation.

3.1. Compliance Operation

We strictly abide by the *Anti-Unfair Competition Law of the People's Republic of China*, the *Code of Conduct for Personnel of Medical Institutions*, the *Interim Provisions on Banning Commercial Bribery*, the *Foreign Corrupt Practices Act*, and relevant laws and regulations. Following the internal policies and procedures comprising the *Code of Conduct*, the *Anti-Corruption and Anti-Commercial Bribery Management Policy*, the *Anti-Fraud Management Policy*, and the *Anti-Money Laundering Management Policy*, the Company guides our employees to conduct themselves in the right way through strict anti-corruption work, in line with the Company's code of ethics. During the Reporting Period, we formulated and issued the *Compliance Management Policy* to systematically advance compliance management, thus effectively preventing compliance risks. We also entrusted a third-party agency to identify the compliance risks of overseas companies and formulated the *CARsgen US Gifts and Gratuities Policy* in light of the risks identified and the improvement suggestions, to ensure that related management work meets legal and compliance requirements, which further improved our compliance risk prevention and control system.

We adopt the "Zero Tolerance" principle for any corruption and bribery, unjust enrichment and disclosure of business information to implement compliance management in business activities. During the business cooperation, we require all qualified suppliers to sign the *Integrity Co-construction Agreement* and the *Confidentiality Agreement* according to the *Supplier Compliance Notice*, in which the clauses regarding anticorruption, confidentiality, personal privacy, and retention of audit jurisdiction are specified. In addition, we conduct questionnaire surveys on the service and engineering suppliers in terms of conflicts of interest to eliminate compliance risks.

We build up a complete reporting channel and handling process to facilitate employees at all levels and all parties in the community to report unprofessional conduct or related incidents via the report mailbox and physical mailbox. If any violation has been confirmed upon investigation, we will take immediate action according to relevant policies, and the final disciplinary results will be published and archived for future reference. In the *Anti-Fraud Management Policy*, we stipulate measures to protect whistle-blowers and forbid disclosure of any whistle-blower's information and report contents.

We are committed to cultivating a sound corporate environment featuring compliance, integrity, and self-discipline. During the Reporting Period, we organized all Board of Directors, management, and employees to participate in multiple compliance and anti-fraud training. All employees who received the training signed the Annual Compliance Training Conformation to guarantee compliance awareness. Moreover, we urged them to abide by the compliance policy and practice the Company's moral standards during their work. We also organize some of our employees to join the Association of China Compliance Professionals ("ACCP") and regularly participate in its activities to understand the compliance standards and operational practices of the pharmaceutical industry. During the Reporting Period, the Group had no cases related to corruption, money laundering, or fraud.

3.2. Information Security Protection

The Group attaches great importance to the information security and personal privacy protection. Stringently following the *Cybersecurity Law of the People's Republic of China*, the *Data Security Law of the People's Republic of China*, the *Personal Information Protection Law of the People's Republic of China* and relevant laws and regulations, we establish and continuously improve the information security system suitable for our business development to guarantee the information and data security at the maximum extent and protect personal privacy.

We formulate the *Computer System Management Procedures*, the *Computer System Change Management Procedures*, the *Management Procedures for Computer Viruses Prevention and Control*, the *Computer Room Management Procedures* and other policies, to standardize the work flow of computerized system management, reinforce system permission management and ensure data security and integrity. To address potential risks of hacker attack and data leakage, we further optimize the hardware facilities in the computer room, and install antivirus software on all clients against the virus invasion, to ensure the data security to the greatest extent. We also back up the data in accordance with the *Disaster Recovery Management Procedures* and the *Data Backup and System Operation Recovery Procedures*, as well as normalize the management and utilization of the Company's data backup and system recovery to prevent data loss and other information security events, thereby ensuring the business continuity effectively.

We respect and protect the information and privacy data of patients, employees and business partners. We standardize data retention and utilization process to minimize the collection of unnecessary data. We desensitize and encrypt patient data as required by the *Good Clinical Practice* (GCP), and provide patients with instructions for privacy protection. We require all related employees to sign confidentiality agreements with partners to avoid leakage of patients' privacy and information.

During the Reporting Period, we conducted 2 training sessions on the use of information system and information security, further strengthening employees' skills and security awareness.

3.3. Practicing Responsible Marketing

To protect consumers' rights and interests, we avoid exaggeration and deceitful and misleading information in strict compliance with the *Advertising Law of the People's Republic of China* and relevant laws and regulations. We establish the *External Communication Management Policy*, which standardizes the management of internal promotional materials, review of external publicity contents and relevant work processes, clarifies the responsibilities of relevant departments and the principle of information disclosure, and elucidates the principle of external publicity for all employees, thus ensuring the accuracy of external publicity and product information.

We practice unified and standardized management of news output, media interviews, advertising and image identity. To strengthen and standardize the management of external publicity channels and contents, we release the *Issuance Standard and Management Policy of the WeChat Official Account* to ensure the authenticity, timeliness and preciseness of contents published by the official account. During the Reporting Period, we optimized the review process of the news release and other external publicity content. We revised the *CARsgen Therapeutics Style Guidelines (or "CARsgen Therapeutics VI Manual")* and formulated the *CARsgen Therapeutics Common Text Writing Guide* to ensure that the visual information was completely and inerrably delivered to audiences and improve brand consistency.

We continue to improve the establishment of our communication channels. Relying on the Company's platforms including the official website, WeChat official account and overseas operations, we conduct media communication in a compliant and efficient way to create a favorable public opinion environment and brand image. We also pay attention to related potential risks in real time and handle crises by the public opinion classification mechanism. In addition, we provide internal and external compliance publicity training on a regular basis to reduce and avoid potential risks.

3.4. Building a Resilient Supply Chain

3.4.1. Supplier Admission

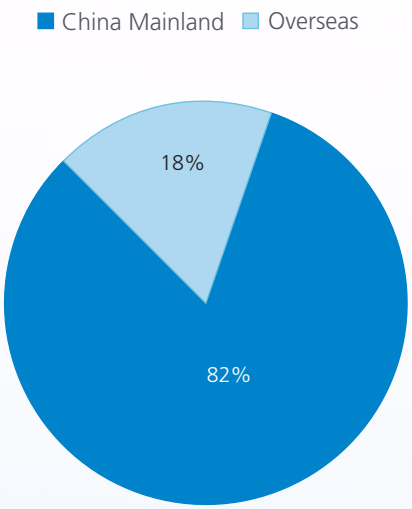
In order to ensure the stable quality of products and services and business continuity, we constantly optimize supplier screening, appraisal and management mechanism, and improve the safety level of supply chain. We strictly abide by the *Good Manufacturing Practices for Pharmaceutical Products* and relevant laws and regulations, and formulate and continuously improve the *Supplier Management Policy*, the *Procurement and Bidding Procedures*, the *Indirect Procurement Management Policy*, the *Material Inventory Coding Management Process* and other internal policies to define our procurement strategy and procedures, and normalize the relevant standards and processes of supplier screening, management and assessment. Meanwhile, we continuously optimize the admission and appraisal standards for clinical development service providers. We also emphasize the development and maintenance of qualified suppliers. While ensuring the product quality, service capability, business status, production capacity, quality management system, price, reputation and geographical location of supplier candidates are consistent with the relevant admission requirements, we also provide suppliers with an open, fair and impartial platform for competition. In addition, we continue to optimize the admission management of clinical development service providers to further strengthen the screening.

Supplier admission process

3.4.2. ***Supplier Evaluation***

We conduct on-site reviews and performance evaluations for suppliers at regular intervals in accordance with the *Supplier Management Policy*, the *On-site Review Procedures of Suppliers*, the *Performance Assessment Standards for Service Suppliers*, the *Performance Assessment Standards for Material Suppliers*, etc. Suppliers are classified by assessment results into four levels, i.e., strategic suppliers, key suppliers, mature suppliers and suppliers to be eliminated. For key suppliers, we assign reviewers (PSO) of relevant key suppliers to conduct annual appraisals and classification. For the suppliers to be eliminated, we require them to take corrective and preventive actions, and timely follow-up rectifications; otherwise, we will stop sourcing materials and services from them. We also establish the *Supplier Audit Practice Procedures*. We review the suppliers governed by GCP, GMP and *Good Laboratory Practice* (GLP) on a quarterly basis, to ensure the quality of the raw materials purchased. During the Reporting Period, we reviewed 48 related suppliers.

As of the end of the Reporting Period, the Group had over 500 suppliers. The geographical distribution is as below:



3.4.3. Management of Supply Chain Risks

We proactively identify and control the environmental and social risks in all links of supply chain, and commit to building a sustainable supply chain demonstrating the Company's responsibility for society and environment. For the admission of new suppliers, we require them to complete the questionnaire on environmental and social performance related to the environmental protection, occupational health and safety, labor rights, safe construction and EHS management, and conduct a corporate background survey via the third-party platform. In doing so, we identify potential environmental and social risks of new suppliers, and preferably cooperate with those having good performance. We also specify the relevant requirements for suppliers to fulfill the social responsibility in the *Supplier Management Policy*. For example, the occupational health and safety, labor rights protection and other relevant provisions are clearly listed in the procurement contract, and suppliers are required to shoulder the responsibility for social and environmental impacts arising from their decisions and activities. Besides, we draw up the *Supplier Compliance Notice* to clarify and standardize supplier procurement work flow and code of business ethics, and require qualified suppliers to sign the *Confidentiality Agreement* and the *Integrity Co-construction Agreement* to further guarantee the fairness, impartiality and openness of procurement projects and prevent the violations of disciplines and laws. During the Reporting Period, we organized compliance training for suppliers to clarify the Group's compliance requirements to them. As of the end of the Reporting Period, there were approximately 70% of suppliers holding ISO 45001, ISO 9001, GXP and other system certifications.

To reduce the business risks and impacts arising from uncertain emergencies such as global public health crisis, we have prepared a *Business Continuity Plan* (BCP), arranged internal stock check, and purchased the required raw materials in advance. Meanwhile, we actively communicate with suppliers and assist them in developing the BCP to ensure the material supply and achieve the purpose of ensuring the continuous and stable business operation.

3.4.4. Communication with Suppliers

We pay attention to building long-term and healthy partnership with high-quality suppliers to deliver mutual benefit and win-win results. For this purpose, we actively facilitate the communication with suppliers. We hold the Quarterly Business Review (QBR) meetings at regular intervals, and organize in-depth exchanges between key employees and suppliers to brief and review the performance assessment results and the problems arising from past cooperation, helping solve their bottlenecks. Meanwhile, we share the future development plans with suppliers to promote the coordinated development with them.

4. ADHERING TO THE VALUE OF PEOPLE-ORIENTATION TO BUILD A BETTER SOCIETY

"People-orientation" has always been one of the key values of the Group. We are dedicated to cultivating a healthy and harmonious work atmosphere with innovation and diversity for our employees to stimulate the joint growth of our employees and our company. We also actively assume the social responsibility, and carry out public welfare undertakings with our own resources and technological advantages to build a harmonious and better society with sustainability together with all sectors of society.

4.1. Growth with Employees

4.1.1. Employees' Rights and Interests and Employment

We strictly adhere to the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China* and the *Provisions on the Prohibition of Child Labor*. We establish a series of rules and regulations regarding employment including the *Planning of Human Resources Demands and Recruitment Process*, *Overtime and Leave Management Policy* and *Employee Internal Recruitment Management Policy* to effectively safeguard the basic legal rights and interests of each employee or applicant. We explicitly prohibit the recruitment of child labor, and practice stringent recruitment process in accordance with the regulations issued by the labor protection authorities. We require all candidates to go through qualification review, interview and other basic recruitment procedures, and provide the relevant supporting materials truthfully. During the Reporting Period, the Group had no violations involving child labor or forced labor.

We believe that the uniqueness of our employees and partners is a key element of our success, and we pursue fairness and impartiality while deeply promoting diversified and inclusive corporate culture. We provide employees with equal opportunities in employment, training, remuneration, welfare and career development. We prohibit all forms of discriminations as all employees and applicants are not subject to gender, age, race and ethnicity, color, religious belief, nationality, sexual orientation, physical condition and other factors, and any behavior that may be detrimental to personal dignity is forbidden.

As of the end of the Reporting Period, the Group had a total of 547 employees (539 full-time employees and 8 part-time employees), with 64.5% of them female.

Employee structure	Number of employees in 2022
Total	547
By gender	
Male	195
Female	352
By employment type	
Full-time	539
Part-time	8
By age	
Under 30 years old	217
30-50 years old	295
Over 50 years old	35
By region	
China mainland	452
Overseas	95

❖ **Recruitment**

Talents are the foundation for the enterprise to survive and develop. We attract applicants via a variety of sourcing channels such as online & campus recruitment and internal referral, and identify suitable candidates by proper interview approach, to provide fair and reasonable opportunities for all candidates. We develop the *Planning of Human Resources Demands and Recruitment Process* to carry out the recruitment in a standardized and procedural way and define the responsibilities of the HR Department and other related departments. We plan the human resource demands orderly to assist the strategic development of the Company. During the Reporting Period, we launched the international talent reservation – management trainee program relying on university-enterprise cooperation, in an effort to better cultivate and reserve international talents and support the "Going Out" strategy. Through the complete training system, we hope to help new graduates develop job skills and become primary managers quickly, thus contributing to the international development of the business.

❖ Working Hours

We have formulated the *Overtime and Leave Management Policy*, which standardizes the management of working hours and ensures employees reasonably adequate rest time to achieve a better balance between work and life. We prohibit forced labor and encourage employees to complete their work within normal working hours. Overtime work in special cases is required to obtain prior approval from the department manager and to be reviewed by Human Resources Department. Our employees are entitled to all kinds of leaves, including national statutory holidays, annual leave, sick leave, maternity leave, personal leave, marriage leave, paternity leave, parental leave, bereavement leave, etc.

❖ Remuneration and Incentives

We have developed a fair, reasonable and market-competitive compensation and benefits system and established the *Remuneration Control Process* to illustrate emolument structure and consideration criteria and standardize the payroll management workflow.

Emolument structure

We pay for social insurance and housing funds for employees per the relevant regulations of the state and local governments and provide employees with various welfare benefits. For example, we provide special allowances to employees who stuck to their positions during the pandemic lockdown.

Mandated benefits	Medical insurance, maternity insurance, pension insurance, unemployment insurance, employment injury insurance and housing funds, etc.
Other benefits	Overtime meal subsidy, mission allowance, employee dormitory benefits, marriage and maternity allowance, employee recommendation bonus, blood donation subsidy, transportation subsidy, overtime pay, home leave, additional welfare leave, etc.

Composition of welfare benefits

Amongst all the benefits, CARsgen USA offers 13 medical plan options for our employees to select from, as well as disability insurance (short and long term), life and accidental death and dismemberment insurance and disability, unemployment insurance, worker's compensation insurance and social security retirement plan. We also subsidize our employee contribution premiums based on position level. In addition, CARsgen USA has set up generous 401-K contributory retirement plan, overtime pay, shift differential premiums, incentive compensation for exempt employees and additional welfare leave to satisfy the daily and extra demands of all employees.

Furthermore, in order to further encourage all employees to continuously improve their professional competitiveness, and drive the Company to maintain a leading position in the industry, we have formulated the Employee Honor and Reward Policy and implemented an employee equity incentive plan. We have set up various awards such as CEO Award, Outstanding Contribution Award, Innovation Award, Dedication Award, Long-term Service Award, etc., to reward outstanding employees who have made great contributions to the company's development and are able to reflect the company's values, and annually granted equity to eligible employees to attract, retain and motivate outstanding talents.

During the Reporting Period, our turnover rate of employees was 27.4%.

Employees turnover rate structure indicator	Turnover rate in 2022 (%)
Total	27.4
By gender	
Male	30.1
Female	25.7
By age	
Under 30 years old	32.2
30-50 years old	23.8
Over 50 years old	23.9
By region	
Chinese Mainland	28.6
Overseas	20.8

Note: Employees turnover rate = Turnover number during the Reporting Period/(Turnover number during the Reporting Period + Number of employees at the end of the Reporting Period) *100%.

4.1.2. Employee Training and Development

We strive to provide a broad platform for employees' continuous learning and career development and promote common development together with employees in the belief that talents are the core competitiveness of an enterprise. During the Reporting Period, we have formulated and issued the *Training Management Policy* to ensure systematic and effective training.

According to different work requirements and training needs, we develop a series of courses and development projects and work out a training system. We provide employees with offline customized development projects and online supporting course resources to comprehensively improve employees' professional skills, management capabilities and organizational development capabilities, thereby promoting the realization of the Company's strategies and goals. What's more, in order to further encourage all employees to continuously improve their professional competitiveness, CARsgen USA has partnered with LinkedIn Learning, featuring a content library of over 18,000 courses for our employees. During the Reporting Period, we have developed an upgraded training plan and a centralized training system for new employees. We have also optimized and enriched forms and contents of online and offline training under standardized management. By the end of the Reporting Period, we had successfully held two training sessions for new employees, with approximately 40 participants.

During the Reporting Period, the Group's trainings involved 74.8% of employees, and the average annual training time of employees was 37.7 hours.

Indicator	Proportion of employees receiving training (%)	Training hours per employee (hours)
By gender		
Male	69.2	40.5
Female	77.8	36.2
By employment type		
Senior management	33.3	0.5
Middle management	86.3	25.0
Junior employees	70.2	46.4

Note:

1. Proportion of employees receiving training = Employees receiving training/Total number of employees *100
   Proportion of employees by category = Employees receiving training under this category/Total number of employees under this category *100

2. Average training hours per employee = Total number of training hours/Total number of employees
   Average training hours per employee by category = Total number of training hours of employees under a particular category/Total number of employees under a particular category

We have established a sound mechanism for performance management and promotion to provide employees with a clear and open path to career development. We endeavor to integrate closely our development with employee growth through scientific and effective performance management, thereby promoting common growth of individual and organizational performance. During the Reporting Period, we have revised the *Performance Management Policy* to identify, motivate and develop internal talents by introducing reasonable organizational, departmental and individual objectives, and performance evaluation and communication at irregular intervals throughout the year. We have formulated the *Employee Hierarchy Development System and Plan* to clarify the promotion process, the evaluation standards and key behavior indicators. In doing so, we expect to build a fair, open and just promotion system for employees, and provide them with opportunities for job shift & transfer and dual channels for technical and management development, thus helping them make continuous progress along their career path.

We provide a platform for the diverse development requirements of our employees. We have formulated the *Employee Internal Recruitment Management Policy* to encourage employees to apply internally. Based on the development intention of key employees and the Company's business needs, we arrange staff for job-transition, job-rotation and multiple-job holding. We have carried out global talent allocation, started to send employees to CARsgen USA for work, learning and communication, and provided employees with various kinds of training, including but not limited to the knowledge, professional skills and English language required for the positions.

4.1.3. Occupational Health and Safety

We are committed to protecting the health and safety of our employees and taking responsibility for environmental protection, continuously improving the Company's environmental health and safety management level, and striving to provide a safe working environment for all our employees and people who come to the company's premises. We strictly abide by relevant laws and regulations including the *Labor Law of the People's Republic of China*, the *Work Safety Law of the People's Republic of China*, and the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*. We have also established a complete EHS (Environment, Health, Safety) management system covering factors such as leadership and commitment, policies, management structure and responsibilities, hazard identification, risk evaluation and control, operational control, inspection, corrective and preventive actions, incident investigation, emergency response, review.

Safety first, focusing on prevention, comprehensive control;
Scientific approach, sufficient risk control, prevent incident;
People oriented, caring for health and safety;
Protect the environment,
Conserve natural resources, sustainable development.

EHS policy of CARsgen Therapeutics

The EHS committee is the highest management organization for our EHS work with the company president being the chairman of the committee, department heads of relevant departments being the committee members, and the EHS specialist as the coordinator. The responsibilities of relevant personnel at all levels and the requirements of supervision and inspection are clearly defined, and compliance with EHS-related regulations is ensured. At the same time, we require all relevant departments to assign safety officers to assist and participate in the Company's safety management work, thoroughly implement EHS management practices, and ensure the health and safety of employees.

We continuously collect, update, manage and implement the latest EHS laws and regulations requirement to ensure that EHS-related work is in full compliance. During the Reporting Period, we further refined the key elements of EHS management, updated the EHS management system SOPs, and issued internal procedures such as the *EHS Management Manual*, the *Occupational Health and Safety Management Requirements*, and the *Environmental Compliance Management Procedures*, enabling the efficient implementation of the EHS management system.

We also attach great importance to EHS risk control, carry out comprehensive risk identification and evaluation at each process of R&D and production, and implement a dual prevention mechanism for risk control, and thus ensuring the protection of the health and safety of personnel in business activities. In the past three years, there were no work-related fatalities in the Group. During the Reporting Period, the number of lost days due to work injury was zero.

❖ **Safety Management**

We continue to promote the development of standardized production safety management to identify, classify and evaluate the potential safety risks in our daily operations. A series of corresponding safety management measures are adopted to further enhance the level of safety management. By the end of the Reporting Period, we have obtained the Work Safety Standardization Level 3 Certificate.

We have gradually refined procedures on biosafety, laboratory safety, production safety, chemical management and construction safety, including the *Work Safety Code of Conduct*, the *Laboratory Personnel Management Policy*, the *Production Safety Responsibility Policy* and the *EHS Management Requirements for Contractors and Suppliers*. We also implemented the workplace access control procedure and the work permits for high-risk operations, require external personnel to sign relevant safety management agreements; carry out EHS inspections and supervision, identify hazard sources, conduct risk analysis regarding whole process of the Company's production and operation activities, and timely implement risk control measures. In order to be prepared for sudden incidents or emergencies, we have formulated relevant documents such as the *Emergency Response Plan* and the *Comprehensive Emergency Plan for Production Safety Incidents*, as well as established the emergency response organization and defined the responsibilities, standardized emergency response processes, to prevent and deal with the situations timely and effectively. In regard to fire safety management, we strictly follow the *Fire Protection Law of the People's Republic of China*. We have entrusted professional third parties to carry out regular inspection and maintenance of the fire safety systems.

❖ Health Management

We attach great importance to occupational health management. The *Occupational Health Management Procedures* formulated by us by relevant laws and regulations clarify the specific responsibilities of relevant departments and standardizes the occupational health management process to control and eliminate occupational disease risks existing in the workplace, eradicate and reduce the occurrence of occupational diseases, and protect the health of employees.

We strictly implement the health care policy, have established the *Occupational Health Examination and Management Requirements*, and provide pre-job, on-the-job and exiting-the-job health examinations for all personnel exposed to occupational health hazards. During the Reporting Period, there were no abnormalities found in the results of the physical examinations.

We conduct regularly monitoring of the occupational health hazard factors in the workplace, and timely rectify unqualified issues if identified. During the Reporting Period, the testing results were all well below the regulatory limits. We continue to strengthen the establishment and management of occupational disease hazard warning signs, safety risk instructions and necessary protective measures in various workplaces, and provide and distribute safety, hygiene and other personal protective equipment (PPE) to employees according to the post and work exposure to risk factors, including head, eye and face, hearing protection, respiratory, torso, hand, foot protection PPEs, anti-fall safety devices, cleaning and skin care supplies to protect employees' work safety and occupational health. We also, based on the *PPE Management Procedure*, clarified the responsibilities of relevant departments to effectively ensure the provision and management of personal protective supplies within the Company from PPE provision, procurement, storage, and distribution, to wearing requirements and usage methods, to reduce the production safety and occupational health risks.

❖ EHS Training and Drills

In order to reinforce safety, health and environmental awareness, we have established the *EHS Training Management Procedure* and an annual EHS training plan, stipulating the internal and external EHS training courses. We standardized work processes of training records and training effectiveness assessment to make sure all employees understand relevant laws, regulations and requirements and risk control measures are implemented. We have posted safety alert and notification signs at the production workshops, laboratories and office areas. We carried out different types of emergency response training and drills annually, including fire prevention training and drills. During the Reporting Period, we organized all personnel to participate in the general safety training, and in addition, organized specific training for personnel exposed to specific risks, covering various aspects of biosafety, chemical management, hazardous waste management, occupational health, high risk operation safety and special equipment management. For contractors and service providers working on site, we also conduct safety notification training and supervise the whole process of high-risk operations. During the Reporting Period, EHS training amounted to approximately 2,500 people*time.

Fire drill activity

4.1.4. Employee Communication and Caring

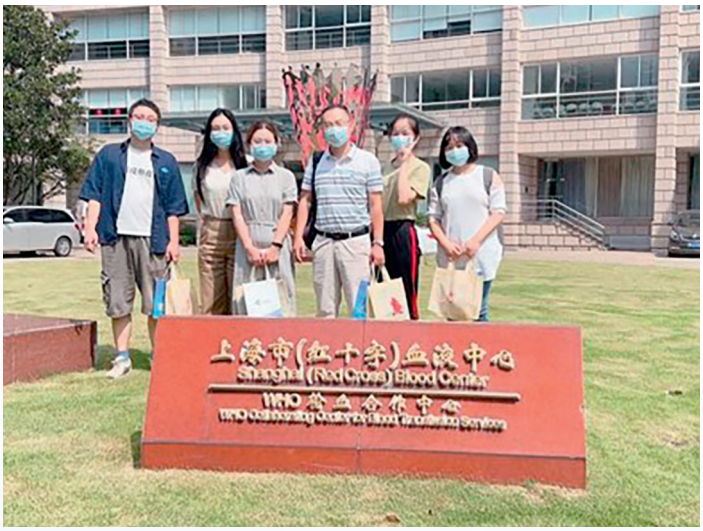
We provide employees with diversified communication channels, encourage open and frank communication between two parties, regularly conduct employee surveys to collect employees' opinions, understand organizational health and employee engagement, and resolve employees' claims, thus creating a workplace of happiness. During the Reporting Period, we held various activities, such as communication meetings between the CEO and employees, communication meeting for dispatched employees, commendation conference for frontline employees and logistical support personnel, celebration for acceptance of new drug application and online activities on emotional management, parent-child, and fitness during working from home. These activities have strengthened communication and interaction, and enhanced employees' sense of belonging and identity.

In order to enrich employees' leisure time and cultural life, we have established a union organization to regularly organize various types of team activities including team-building tour, birthday parties, care activities for women, fun outward-bound sports games and public welfare lectures, deepening the relationship between employees and improving the team cohesion. We have given support to employees in difficulties who suffer from serious illnesses and disasters. In addition, we organized lectures on psychology and online karaoke, online yoga, displays of pets and other online activities to fully protect employees' physical and psychological health.

4.2. Contributing to People's Livelihood

Our vision is to become a global biopharmaceutical leader that brings innovative and differentiated cell therapies to cancer patients worldwide and makes cancer curable. We promote the integration of corporate strategy and social responsibility, continue to seek breakthroughs and expand our manufacturing capabilities to support the clinical trials and future commercialization of our candidate products, thereby making cell therapy more accessible and affordable, and contributing to the fight against ongoing and persistent threats to human health.

At the same time, we continue to care for the well-being of the people and make contributions to the industry and society. During the Reporting Period, we actively responded to the call of the state and conducted actions through consumption for poverty alleviation, adopting the model of "purchase instead of donation". A total of RMB227,000 was invested in purchasing 454 sets of consumption for poverty alleviation products in Yunnan, Xinjiang, Qinghai and other poverty-stricken areas as employee benefits covering 9 producing regions and 11 types of products. While contributing to rural revitalization, we also enhanced all employees' sense of social participation. During the Reporting Period, we have actively responded to the call of the Shanghai Municipal Government to encourage employees to participate in blood donation and apheresis activities for scientific research and medical activities, and provide gifts to employees who participate, sharing love and care with employees.



Group photo of voluntary blood donation

Support Poverty alleviation through product consumption

5. PRACTICING LOW-CARBON OPERATION TO PROTECT THE ECOSYSTEM

We always adhere to the principle of "Green Operation", integrate low carbon strategy into daily operations, and continue to reduce the impact of the operations on the environment by improving our management and technology. We are dedicated to enhancing environmental management, and accelerating the optimization and iterations of processes and technology to promote the efficient use of energy and resources. We also actively identify climate risks associated with our operations and develop adaptation plans, striving to achieve the harmonious development of the enterprise and the environment through responsible R&D, production and operation.

5.1. Consolidating Environmental Management

We strictly abide by the *Environmental Protection Law of the People's Republic of China* and other relevant laws and regulations on environmental protection. We have set up an EHS management team to arrange the Group's environmental governance, and clarified personnel responsibilities of the EHS team and EHS management process in accordance with the *EHS Policy*, the *Requirements for EHS Management* and other policies. During the Reporting Period, we have formulated and issued the *EHS Management Manual*, the *Management Requirements for Response to Climate Change* and other procedures to optimize the construction of EHS management mechanism and improve environmental management. We also identified and assessed environmental risks at each operation location, compiled environmental impact assessment reports and contingency plans, and implemented procedures and control measures for environmental risks. During the Reporting Period, there were no environmental protection violations.

Following the relevant laws and regulations including the *Law of the People's Republic of China on the Prevention and Control of Water Pollution*, the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste*, the *Law of the People's Republic of China on Soil Pollution Prevention and Control, and the Regulations on the Management of Medical Waste*, we regularly test waste water and waste gas emission to ensure the discharge meeting the standard. For the treatment of solid waste, we have formulated the *Medical Waste Management Procedures*, the *Hazardous Waste Management Regulations*, and other documents to stipulate the classification, collection, temporary storage, transfer and treatment processes of various wastes. We also entrust qualified third parties to conduct the final disposal of different types of hazardous waste, thus avoiding potential environmental pollution.

We have adopted a series of measures, e.g., improving management and technology, and retrofitting the wastewater treatment facility, to reduce the negative impact of production and operation on the atmosphere and the water environment.

Waste gas treatment	• Activated carbon adsorption of waste gas containing volatile organic solvents generated in the process of production, research and development • Use of high-efficiency filter for exhaust air that may contain microorganism
Waste water treatment	• Discharge of production waste water in compliance with the emission standard after waste water is treated by the chemical & biological treatment facilities • Upgrading and renovation of the wastewater treatment facility, including operation optimization, upgrading of the automatic dosing system and upgrading of the online monitoring system, etc.
Waste treatment	• Pre-treatment measures utilizing high temperature and high pressure steam sterilization of all biohazardous risks, and entrusting qualified third parties to conduct final disposal

5.2. Optimizing Resource Utilization

5.2.1. Energy Conservation and Carbon Reduction

We follow the *Energy Conservation Law of the People's Republic of China* and other relevant laws and regulations to standardize the management rules for energy use. The energies we consume mainly include purchased electricity, purchased steam, gasoline, and diesel (mainly for transport vehicles). To realize the scientific and efficient utilization of energy, we investigated the energy consumption during the Reporting Period. We evaluated and analyzed energy consumption and the operation of projects for energy conservation and consumption reduction to optimize refrigerating system and reduce electricity consumption. In addition, we have incorporated low-carbon and environmental protection into the Group's daily administration. To reduce corporate carbon footprint, we launched a "green office" campaign. Specifically, we adopted various energy-saving measures and implemented publicity activities on improving employees' environmental awareness.

Practice of "green office"	• Post signs of energy saving: Post signs beside each lighting switch and air conditioner panel to remind employees to save electricity, turn off the power in time, and set proper temperature range of the air conditioners
	• Reduce electricity wasting: Arrange for security personnel to inspect the factory area after work to check whether the lighting facilities and equipment are closed as required
	• Reduce the carbon footprint of employees: Arrange for the employees engaged in data analysis and others to work from home, and provide a shuttle bus for the employees who come to work at the office
	• Encourage no-paper office and reduce printing; set the computers in default printing mode of double-sided printing in black and white; set an upper limit of papers in color printing that can be printed
	• Cancel the provision of bottled water in meeting rooms to reduce plastic waste
	• Organize publicity activities on improving employees' awareness of environmental protection and energy saving, e.g., Tree Planting Day activities

5.2.2. Water Resource Management

We strictly abide by the *Water Law of the People's Republic of China* to standardize the water use management process. Aimed to improve water consumption efficiency during the production and operation process, we actively develop water-saving technologies and raise water-saving awareness by posting water-saving slogans to help improve the efficiency of water use during production and operation and avoid water waste. During the year, the Group did not have any illegal water use incidents.

5.3. Response to Climate Change

In recent years, with the acceleration of global warming and increasing frequency and intensity of global extreme weather accidents, how to respond to climate change has become a major challenge concerning the environment and development that all human beings must face together. In order to adapt to climate change and mitigate its possible impacts on the Group's operation, we continue to focus on global climate change trends, and actively identify operation risks brought by climate change.

In order to manage the major physical risks caused by extreme weather accidents such as typhoons and storms, and avoid the negative events of production interruption or safety accidents, we have formulated the *Requirements for Business Continuity Management, Emergency Response Plan and Business Continuity Plan* to clarify the Company's emergency organizational structure, as well as the responsibilities of related departments and personnel, and provide standardized procedures for accident reporting, emergency response and crisis management, so as to protect the health and safety of employees and the Company's properties. During the Reporting Period, we have brought the *Management Requirements for Response to Climate Change* into effect and implemented it, and specified emergency plans for response to extreme weather in the *Emergency Response Plan*. During the Reporting Period, we replenished and prepared flood prevention materials including sandbags, leakage treatment kits for chemicals and biological materials, and other emergency response materials, as well as conducted emergency response drills to effectively cope with emergencies and accidents.

5.4. Environmental KPIs

During the Reporting Period, the Group's products were still in the stage of clinical research and have not been put into production on a large scale. Therefore, the environmental KPIs are expected to fluctuate in the coming years. The Group's environmental KPIs in 2022 are as follows:

Pollutant emissions	Unit	2022	2021
Waste water emissions			
Total waste water emissions	Tons	12,897.8	54,233.3
Including: COD	Tons	2.57	1.02
NH_3-N	Tons	0.20	0.06
Waste gas emissions			
Total waste gas emissions	Tons	2.24	/
Including: Hydrogen chloride	Tons	1.84	0.25
Sulfuric acid mist	Tons	0.09	0.02
Ammonia	Tons	0.32	/

Waste emissions	Unit	2022	2021
Total hazardous waste	Tons	24.9	24.2
Hazardous waste intensity	Ton/product batch	0.10	0.08
Total non-hazardous waste	Tons	12.70	10.14
Non-hazardous waste intensity	Tons/product batch	0.05	0.04

Energy consumption	Unit	2022	2021
Direct energy consumption			
Including: Diesel	MWh	55.60	392.67
Gasoline	MWh	169.05	68.75
Natural gas	MWh	34,597.65	/
Indirect energy consumption			
Including: Purchased electricity	MWh	13,444.03	8,325.18
Purchased steam	MWh	9,278.48	8,615.28
Total energy consumption	MWh	26,406.92	17,009.21
Energy consumption intensity	MWh/product batch	110.49	59.68

Greenhouse gas emissions	Unit	2022	2021
Total greenhouse gas emissions	tCO_2e	17,179.52	9,385.52
Including: Direct greenhouse gas emissions (Scope 1)	tCO_2e	5,031.79	117.10
Indirect greenhouse gas emissions (Scope 2)	tCO_2e	12,147.73	9,268.41
Greenhouse gas emission intensity	tCO_2e/product batch	71.88	32.92

Resource consumption	Unit	2022	2021
Water consumption			
Total water consumption	Tons	76,102	63,327
Water consumption intensity	Tons/product batch	318.41	222.20
Packaging material consumption			
Total packaging material consumption	kg	13.38	15.84
Packaging material consumption intensity	kg/product batch	0.056	0.056

Note:

1. Environmental KPIs for the current year cover offices, laboratories and factories in Shanghai, and overseas factories.

APPENDIX I: HKEX ESG GUIDE INDEX

Subject Areas, Aspects, General Disclosures and KPIs

Aspect	Disclosure Requirement		Sections in ESG Report
A. Environmental			
Aspect A1: Emissions	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.		
	KPI A1.1	The types of emissions and respective emissions data.	
	KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	**PRACTICING LOW-CARBON OPERATION TO PROTECT THE ECOSYSTEM**
	KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
	KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
	KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	
	KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	

Aspect	Disclosure Requirement		Sections in ESG Report
A. Environmental			
Aspect A2: Use of Resources	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.		
	KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	**PRACTICING LOW-CARBON OPERATION TO PROTECT THE ECOSYSTEM**
	KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	
	KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	
	KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	
	KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	
Aspect A3: The Environment and Natural Resources	General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.		
	KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	**PRACTICING LOW-CARBON OPERATION TO PROTECT THE ECOSYSTEM**
Aspect A4: Climate Change	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.		
	KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	

Aspect	Disclosure Requirement	Sections in ESG Report
B. Social		
Aspect B1: Employment	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	**ADHERING TO THE VALUE OF PEOPLE-ORIENTATION TO BUILD A BETTER SOCIETY**
	KPI B1.1 Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	
	KPI B1.2 Employee turnover rate by gender, age group and geographical region.	
Aspect B2: Health and Safety	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	**ADHERING TO THE VALUE OF PEOPLE-ORIENTATION TO BUILD A BETTER SOCIETY**
	KPI B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	
	KPI B2.2 Lost days due to work injury.	
	KPI B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	
Aspect B3: Development and Training	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work.Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer	**ADHERING TO THE VALUE OF PEOPLE-ORIENTATION TO BUILD A BETTER SOCIETY**
	KPI B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	
	KPI B3.2 The average training hours completed per employee by gender and employee category.	

Aspect	Disclosure Requirement	Sections in ESG Report
B. Social		
Aspect B4: Labour Standards	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	**ADHERING TO THE VALUE OF PEOPLE-ORIENTATION TO BUILD A BETTER SOCIETY**
	KPI B4.1 Description of measures to review employment practices to avoid child and forced labour.	
	KPI B4.2 Description of steps taken to eliminate such practices when discovered.	
Aspect B5: Supply Chain Management	General Disclosure Policies on managing environmental and social risks of the supply chain.	
	KPI B5.1 Number of suppliers by geographical region.	
	KPI B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	**UPHOLDING INTEGRITY TO CREATE LONG-TERM VALUE**
	KPI B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	
	KPI B5.4 Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	
Aspect B6: Product Responsibility	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	**UPHOLDING INTEGRITY TO CREATE LONG-TERM VALUE**
	KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	
	KPI B6.2 Number of products and service related complaints received and how they are dealt with.	**INNOVATION LEADS TO IMPROVE HEALTH AND WELL-BEING**
	KPI B6.3 Description of practices relating to observing and protecting intellectual property rights.	
	KPI B6.4 Description of quality assurance process and recall procedures.	
	KPI B6.5 Description of consumer data protection and privacy policies, and how they are implemented and monitored.	

Aspect	Disclosure Requirement		Sections in ESG Report
B. Social			
Aspect B7: Anti-corruption	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.		
	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	**UPHOLDING INTEGRITY TO CREATE LONG-TERM VALUE**
	KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	
	KPI B7.3	Description of anti-corruption training provided to directors and staff.	
Aspect B8: Community Investment	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.		**ADHERING TO THE VALUE OF PEOPLE-ORIENTATION TO BUILD A BETTER SOCIETY**
	KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	
	KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	

Independent Auditor's Report

羅兵咸永道

To the Shareholders of CARsgen Therapeutics Holdings Limited
(incorporated in the Cayman Islands with limited liability)

OPINION

What we have audited

The consolidated financial statements of CARsgen Therapeutics Holdings Limited (the "Company") and its subsidiaries (the "Group"), which are set out on pages 137 to 211, comprise:

- the consolidated statement of financial position as at December 31, 2022;
- the consolidated statement of comprehensive loss for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include significant accounting policies and other explanatory information.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at December 31, 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

PricewaterhouseCoopers, 22/F Prince's Building, Central, Hong Kong
T: +852 2289 8888, F: +852 2810 9888, www.pwchk.com

Independence

We are independent of the Group in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants ("IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

The key audit matter identified in our audit is related to research and development expenses.

Key Audit Matter	How our audit addressed the Key Audit Matter
Research and development expenses Refer to Note 2.9 and Note 9 to the consolidated financial statements. The Group incurred research and development ("R&D") expenses of RMB680 million for R&D activities, such as testing and clinical expenses for the year ended December 31, 2022. We considered R&D expenses a key audit matter because the amount of the R&D expenses incurred is significant to the consolidated financial statements, and significant audit effort was involved in auditing the R&D expenses.	We performed the following audit procedures on R&D expenses: 1. Understanding, evaluating and testing the key controls related to R&D expenses; 2. Testing R&D expenses, on a sample basis, to supporting evidence such as contracts, invoices and payment slips; 3. For the service fees paid to outsourced service providers, primarily related to testing and clinical expenses, assessing whether the service fees were recorded based on the respective contract terms and service progress, on a sample basis, by reading the key terms set out in the agreements with such service providers, and evaluating the completion status with reference to the progress reports provided by outsourced service providers; and 4. Performing cut-off test on R&D expenses, on a sample basis, to assess whether the R&D expenses are recorded in the proper financial reporting period, by examining relevant supporting evidence such as contracts, invoices, delivery notice and progress reports. Based on the procedures performed, we found that R&D expenses tested were supported by the audit evidence we obtained.

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises all of the information included in the annual report other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND THE AUDIT COMMITTEE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

Independent Auditor's Report

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Wong Kam Chin.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong,
March 21, 2023

Consolidated Statement of Comprehensive Loss

For the year ended December 31, 2022

		Year ended December 31,	
	Note	**2022** **RMB'000**	2021 RMB'000
Revenue	6	**–**	25,813
Cost of sales		**–**	–
Gross profit		**–**	25,813
Administrative expenses	9	**(135,795)**	(125,831)
Research and development expenses	9	**(680,301)**	(501,721)
Other income	7	**35,595**	21,793
Other (losses)/gains – net	8	**(100,796)**	6,041
Operating loss		**(881,297)**	(573,905)
Finance income		**5,866**	3,568
Finance costs		**(15,521)**	(10,869)
Finance costs – net	11	**(9,655)**	(7,301)
Fair value changes in financial instruments issued to investors		**–**	(4,155,572)
Loss before income tax		**(890,952)**	(4,736,778)
Income tax expense	13	**(1,295)**	(7,645)
Loss for the year and attributable to the equity holders of the Company		**(892,247)**	(4,744,423)
Other comprehensive income/(loss) for the year:			
Items that may be reclassified to profit or loss			
Exchange differences on translation of subsidiaries		**(63,456)**	20,312
Items that will not be reclassified to profit or loss			
Exchange differences on translation of the Company		**377,717**	(11,328)
Fair value changes relating to financial instruments issued to investors due to the Company's own credit risk		**–**	(25,093)
Other comprehensive income/(loss) for the year, net of tax		**314,261**	(16,109)
Total comprehensive loss for the year and attributable to the equity holders of the Company		**(577,986)**	(4,760,532)
Loss per share for the loss attributable to owners of the Company			
Basic and diluted loss per share (in RMB)	14	**(1.62)**	(12.26)

The above consolidated statement of comprehensive loss should be read in conjunction with the accompanying notes.

Consolidated Statement of Financial Position

As at December 31, 2022

	Note	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
ASSETS			
Non-current assets			
Property, plant and equipment	15	**363,850**	300,898
Right-of-use assets	16	**77,533**	85,291
Intangible assets	17	**14,476**	20,133
Other non-current assets and prepayments	18	**6,321**	28,460
		462,180	434,782
Current assets			
Other receivables	19	**11,834**	41,885
Other current assets and prepayments	20	**20,769**	22,030
Term deposits with original maturity between three and twelve months	21	**–**	2,315,654
Cash and cash equivalents	21	**2,268,036**	691,284
		2,300,639	3,070,853
Total assets		**2,762,819**	3,505,635
EQUITY AND LIABILITIES			
Equity attributable to the equity holders of the Company			
Share capital	23	**1**	1
Reserves	26	**2,473,173**	2,996,659
Total equity		**2,473,174**	2,996,660

Consolidated Statement of Financial Position

As at December 31, 2022

	Note	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
LIABILITIES			
Non-current liabilities			
Borrowings	27	**2,523**	7,375
Lease liabilities	28	**94,938**	97,312
Deferred income	29	**21,180**	15,116
		118,641	119,803
Current liabilities			
Lease liabilities	28	**17,134**	14,027
Accruals and other payables	30	**141,114**	138,025
Current income tax payable		**1,341**	7,645
Deferred income	29	**6,565**	10,144
Borrowings	27	**4,850**	219,331
		171,004	389,172
Total liabilities		**289,645**	508,975
Total equity and liabilities		**2,762,819**	3,505,635

The above consolidated statement of financial position should be read in conjunction with the accompanying notes.

The financial statement on page 137 to 211 were approved by the Board of Directors on March 21, 2023 and were signed on its behalf.

Zonghai LI
Director

Huamao WANG
Director

Consolidated Statement of Changes in Equity

For the year ended December 31, 2022

	Note	Attributable to equity holders of the Company			
		Share capital *RMB'000*	Other reserves *RMB'000 (Note 26)*	Accumulated losses *RMB'000*	Total *RMB'000*
Balance at January 1, 2021		–	146,675	(1,822,803)	(1,676,128)
Loss for the year		–	–	(4,744,423)	(4,744,423)
Other comprehensive loss	*26*	–	(16,109)	–	(16,109)
Total comprehensive loss		–	(16,109)	(4,744,423)	(4,760,532)
Transactions with owners					
Share-based compensation	*24*	–	13,504	–	13,504
Conversion of Preferred Shares to Common Shares upon Global Offering		1	6,913,526	17,438	6,930,965
Gross proceeds from Global Offering		–	2,576,082	–	2,576,082
Listing fees through equity		–	(88,349)	–	(88,349)
Exercise of option related to employee share-based payment		–*	1,118	–	1,118
Total transactions with owners		1	9,415,881	17,438	9,433,320
Balance at December 31, 2021		1	9,546,447	(6,549,788)	2,996,660
Balance at January 1, 2022		**1**	**9,546,447**	**(6,549,788)**	**2,996,660**
Loss for the year		**–**	**–**	**(892,247)**	**(892,247)**
Other comprehensive income	*26*	**–**	**314,261**	**–**	**314,261**
Total comprehensive income/(loss)		**–**	**314,261**	**(892,247)**	**(577,986)**
Transactions with owners					
Share-based compensation	*24*	**–**	**43,995**	**–**	**43,995**
Issue of shares held in trust	*23*	**–***	**–***	**–**	**–***
Issue of shares to employees under Employee Incentive Schemes	*23*	**–***	**8,034**	**–**	**8,034**
Transfer of treasury shares to employees under Employee Incentive Schemes	*23*	**–***	**2,471**	**–**	**2,471**
Total transactions with owners		**–***	**54,500**	**–**	**54,500**
Balance at December 31, 2022		**1**	**9,915,208**	**(7,442,035)**	**2,473,174**

* The amounts are less than RMB1,000.

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

Consolidated Statement of Cash Flows

For the year ended December 31, 2022

	Note	Year ended December 31, 2022 RMB'000	2021 RMB'000
Cash flows from operating activities			
Cash used in operations	31	**(641,267)**	(515,890)
Interest received		**5,866**	3,568
Income tax paid		**(7,647)**	–
Net cash used in operating activities		**(643,048)**	(512,322)
Cash flows from investing activities			
Payments for acquisition of property, plant and equipment		**(135,406)**	(175,841)
Proceeds from disposals of property, plant and equipment		**26**	11
Proceeds from collection of term deposits with original maturity between three and twelve months		**5,925,683**	2,443,168
Payments for term deposits with original maturity between three and twelve months		**(3,482,681)**	(4,758,822)
Lease incentive received		**33,657**	–
Interest received from term deposit with original maturity between three and twelve months		**21,700**	5,235
Payment for acquisition of intangible assets		**(3,208)**	(2,612)
Refund of input VAT related to acquisition of non-current assets		**17,104**	–
Government grant received in relation to acquisition of non-current assets		**10,115**	17,540
Net cash generated from/(used in) investing activities		**2,386,990**	(2,471,321)

Consolidated Statement of Cash Flows

For the year ended December 31, 2022

	Note	Year ended December 31, 2022 RMB'000	2021 RMB'000
Cash flows from financing activities			
Proceeds from issuance of ordinary shares		–	2,576,082
Proceeds from issuance of financial instruments to investors		–	64,900
Proceeds from issue of shares to employees under Employee Incentive Schemes		8,034	–
Proceeds from transfer of treasury shares to employees under Employee Incentive Schemes		2,471	–
Principal element of lease payments		(11,821)	(16,079)
Interest paid for lease liabilities		(4,980)	(2,846)
Proceeds from bank borrowings		108,415	293,219
Repayments of bank borrowings		(327,748)	(146,865)
Interest paid for bank borrowings		(10,885)	(7,839)
Payment for listing expenses through equity		–	(86,540)
Net cash (used in)/generated from financing activities		(236,514)	2,674,032
Net increase/(decrease) in cash and cash equivalents		1,507,428	(309,611)
Cash and cash equivalents at beginning of the year		691,284	1,042,969
Exchange gains/(losses) on cash and cash equivalents		69,324	(42,074)
Cash and cash equivalents at end of the year		2,268,036	691,284

The above consolidated statement of cash flows should be read in conjunction with the accompanying notes.

1. GENERAL INFORMATION

CARsgen Therapeutics Holdings Limited (hereinafter the "Company") was incorporated under the law of Cayman Islands as a limited liability company on February 9, 2018. The address of the Company's registered office is P.O. Box 31119 Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1 – 1205 Cayman Islands.

The Company is an investment holding company. The Company and its subsidiaries (hereinafter collectively referred to as the "Group") are a global clinical-stage biopharmaceutical company discovering, researching and developing cell therapies in the People's Republic of China (the "PRC") and United States of America (the "US").

The Company's shares began to list on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") on June 18, 2021 (the "Listing").

The consolidated financial statements are presented in thousands of Renminbi ("RMB"), unless otherwise stated, and were approved and authorized for issue by the Board of Directors of the Company on March 21, 2023.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

This note provides a list of the significant accounting policies adopted in the preparation of these consolidated financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated. The financial statements are for the Group consisting of the Company and its subsidiaries.

2.1. Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards ("IFRSs") issued by International Accounting Standards Board ("IASB") and disclosure requirements of the Hong Kong Companies Ordinance Cap. 622 ("HKCO"). The consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of financial assets and liabilities at fair value through profit or loss, which are carried at fair value.

The preparation of the consolidated financial statements in conformity with IFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4 below.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.1. Basis of preparation (continued)

(i) New and amended standards adopted by the Group

The Group has applied the following amendments for the first time for their annual reporting period commencing January 1, 2022:

- Property, Plant and Equipment: Proceeds before intended use – Amendments to IAS 16
- Reference to the Conceptual Framework – Amendments to IFRS 3
- Annual Improvements to IFRSs 2018 – 2020
- Onerous Contracts – Cost of Fulfilling a Contract – Amendments to IAS 37

The amendments listed above did not have any impact on the amounts recognized in prior periods and are not expected to significantly affect the current or future periods.

The following new standards and amendments to existing standards have been issued but are not yet effective for the annual period after January 1, 2023 and which the Group has not early adopted.

(ii) New standards and interpretation not yet adopted

Standards	Key requirements	Effective for annual periods beginning on or after
IFRS 17	Insurance contracts	January 1, 2023
Amendments to IAS 1	Classification of Liabilities as Current or Non-current	January 1, 2023
Amendments to IFRS 10 and IAS 28	Sale or contribution of assets between an investor and its associate or joint venture	To be determined
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies	January 1, 2023
Amendments to IAS 8	Definition of Accounting Estimates	January 1, 2023
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023

The Group has already commenced an assessment of the impact of these new or revised standards and amendments, certain of which are relevant to the Group's operations. According to the preliminary assessment made by the directors, these standards and amendments are not expected to have a significant impact on the Group's financial performance and position.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.2. Contractual arrangement

Due to the restrictions imposed by the relevant laws and regulatory regime of the PRC on foreign ownership of companies engaged in the gene therapy business carried out by subsidiaries of the Group, namely CARsgen Therapeutics Co., Ltd. (科濟生物醫藥(上海)有限公司) ("CARsgen Therapeutics") and its wholly owned subsidiary, CARsgen Pharmaceuticals Co., Ltd. (上海科濟製藥有限公司), hereinafter collectively "CARsgen Therapeutics Group", CARsgen Life Sciences Co., Ltd. (愷興生命科技(上海)有限公司) ("CARsgen Life Sciences") entered into the contractual arrangements (the "Contractual Arrangements") with CARsgen Therapeutics and its registered shareholders who collectively hold 100% equity interests of CARsgen Therapeutics on April 18, 2018, which enable CARsgen Life Science and the Group to:

- expose, or have rights, to variable returns from their involvement with the investee and have ability to affect those returns through its power over CARsgen Therapeutics Group;
- exercise equity holders' controlling voting rights of CARsgen Therapeutics Group;
- receive substantially all of the economic interest returns generated by CARsgen Therapeutics Group in consideration for the business support, technical and consulting services provided by CARsgen Therapeutics Group;
- obtain an irrevocable and exclusive right to purchase all or part of equity interests in CARsgen Therapeutics Group from its equity holders at the same amount of its registered capital. CARsgen Life Science may exercise such options at any time until it has acquired all equity interests and/or all assets of CARsgen Therapeutics Group. In addition, CARsgen Therapeutics Group is not allowed to sell, transfer, or dispose of any assets, or make any distributions to its equity holders without prior consent of CARsgen Life Science; and
- obtain a pledge over the entire equity interest of CARsgen Therapeutics Group from its equity holders as collateral security to guarantee performance of their contractual obligations under the Contractual Arrangements.

The Group does not have any legal equity interest in CARsgen Therapeutics Group. However, as a result of the Contractual Arrangements, the Group has power over CARsgen Therapeutics Group, has rights to variable returns from its involvement with CARsgen Therapeutics Group and has the ability to affect those returns through its power over CARsgen Therapeutics Group and is considered to have control over CARsgen Therapeutics Group. Consequently, the Company regards CARsgen Therapeutics Group as controlled structure entities and consolidated the financial position and result of operations of CARsgen Therapeutics Group.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.3. Principles of consolidation

(i) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Intercompany transactions, balances and unrealized gains on transactions between entities within the Group are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset.

2.4. Business combination

The acquisition method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the:

- fair values of the assets transferred
- liabilities incurred to the former owners of the acquired business
- equity interests issued by the Group
- fair value of any asset or liability resulting from a contingent consideration arrangement, and
- fair value of any pre-existing equity interest in the subsidiary.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

Acquisition-related costs are expensed as incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.4. Business combination (continued)

The excess of the:

- consideration transferred,
- amount of any non-controlling interest in the acquired entity, and
- acquisition-date fair value of any previous equity interest in the acquired entity

over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognized directly in profit or loss as a bargain purchase.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions. Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognized in profit or loss.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognized in profit or loss.

2.5. Separate financial statements

Investments in subsidiaries are accounted for at cost less impairment. Cost includes direct attributable costs of investment. The results of subsidiaries are accounted for by the Company on the basis of dividend received and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.6. Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the executive directors that makes strategic decisions.

2.7. Foreign currency translation

(i) Functional and presentation currency

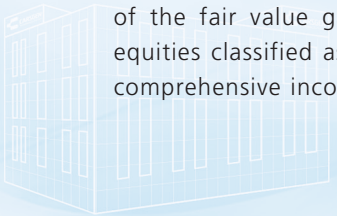
Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The Company's functional currency is United States Dollars ("USD"); however the consolidated financial statements are presented in RMB. As the major operations of the Group are within the PRC, the Group determined to present its consolidated financial statements in RMB (unless otherwise stated).

(ii) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognized in profit or loss. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the statement of comprehensive income, within finance costs. All other foreign exchange gains and losses are presented in the statement of comprehensive income on a net basis within other gains/(losses).

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as fair value through other comprehensive income are recognized in other comprehensive income.



2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.7. Foreign currency translation (continued)

(iii) Group companies

The results and financial position of foreign operations (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
- income and expenses for each statement of comprehensive income are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions), and
- all resulting exchange differences are recognized in other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings and other financial instruments designated as hedges of such investments, are recognized in other comprehensive income. When a foreign operation is sold or any borrowings forming part of the net investment are repaid, the associated exchange differences are reclassified to profit or loss, as part of the gain or loss on sale.

2.8. Property, plant and equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Cost may also include transfers from equity of any gains or losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to the statement of profit or loss during the financial period in which they are incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.8. Property, plant and equipment (continued)

Depreciation of property, plant and equipment is calculated using the straight-line method to allocate their costs less their residual values over their estimated useful lives, as follows:

• Building	10-20 years
• Equipment	5-10 years
• Electronic equipment	3 years
• Fixture	5 years
• Furniture	5-7 years
• Vehicles	4 years
• Leasehold improvements	Over the shorter of the lease term or the estimated useful life

The assets' residual value and useful life are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.10).

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in profit or loss. When revalued assets are sold, it is Group policy to transfer any amounts included in other reserves in respect of those assets to retained earnings.

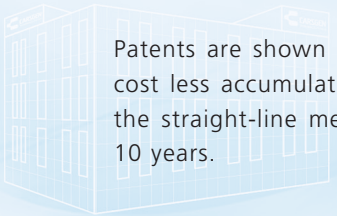
Construction in progress represents unfinished construction and equipment under construction or pending installation, and is stated at cost less impairment losses. Cost comprises direct costs of construction including borrowing costs attributable to the construction during the period of construction. No provision for depreciation is made on construction in progress until such time as the relevant assets are completed and ready for intended use.

2.9. Intangible assets

(i) Software

Computer software is recognized at historical cost and subsequently carried at cost less accumulated amortization and accumulated impairment losses. The Group amortized on a straight-line basis over their estimated useful lives of 3-5 years.

(ii) Patent



Patents are shown at fair value when acquired. Patents have a finite life and are carried at cost less accumulated amortization and impairment, if any. Amortization is calculated using the straight-line method to allocate the cost of patents over their estimated useful lives of 10 years.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.9. Intangible assets (continued)

(iii) Research and development

The Group incurs significant costs and efforts on research and development activities, which include expenditures on drug products. Research expenditures are charged to the profit or loss as an expense in the period the expenditures are incurred. Development costs are recognized as assets if they can be directly attributable to a newly developed drug products and all the followings can be demonstrated:

- the technical feasibility of completing the intangible assets so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible assets;
- the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The cost of an internally generated intangible asset is the sum of the expenditures incurred from the date the asset meets the recognition criteria above to the date when it is available for use. The costs capitalized in connection with the intangible asset include costs of consumables and services used or consumed, employee costs incurred in the creation of the asset and an appropriate portion of relevant overheads. The Group generally considers capitalization criteria for internally generated intangible assets is met when obtaining regulatory approval of new drug license.

Capitalized development expenditures are amortized using the straight-line method over the life of the related drug products. Amortization shall begin when the asset is available for use. Subsequent to initial recognition, internally generated intangible assets are reported as cost less accumulated amortization and accumulated impairment losses (if any).

Development expenditures not satisfying the above criteria are recognized in the profit or loss as incurred and development expenditures previously recognized as an expense are not recognized as an asset in a subsequent period.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.10. Impairment of non-financial assets

Intangible assets, right-of-use assets and property, and plant and equipment that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2.11. Financial assets

(i) Classification

The Group classifies its financial assets in the following measurement categories:

- Those to be measured subsequently at fair value (either through other comprehensive income or through profit or loss), and
- Those to be measured at amortized cost.

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income ("FVOCI").

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

(ii) Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss ("FVPL"), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.11. Financial assets (continued)

(ii) Measurement (continued)

Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

- Amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in income using the effective interest method.

- FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss and recognized in "other gains/losses". Interest income from these financial assets is included in finance income using the effective interest method. Foreign exchange gains and losses and impairment expenses are presented in "Other gains – net".

- FVPL: Assets that do not meet the criteria for amortized cost or FVOCI are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognized in profit or loss and presented net in the consolidated statements of comprehensive loss within "Other gains – net" in the period in which it arises.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.11. Financial assets (continued)

(ii) Measurement (continued)

Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognized in profit or loss as other income when the Group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognized in other gains – net in the consolidated statements of comprehensive loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

2.12. Offsetting financial assets and liabilities

Financial assets and liabilities are offset and the net amount reported in the consolidated balance sheets when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

2.13. Impairment of financial assets

The Group assesses on a forward-looking basis the expected credit loss associated with its debt instruments carried at amortized cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk. Note 3.1(b) details how the Group determines whether there has been a significant increase in credit risk.

Impairment on other receivables is measured as either 12-month expected credit loss or lifetime expected credit loss, depending on whether there has been a significant increase in credit risk since initial recognition. If a significant increase in credit risk of a receivable has occurred since initial recognition, then impairment is measured as lifetime expected credit loss.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.14. Derivatives

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period.

2.15. Cash and cash equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks and other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

2.16. Share capital and share held for employee share scheme

Ordinary shares are classified as equity. Preferred shares are classified as liabilities based on the respective contract terms.

Incremental costs directly attributable to the issue of equity instruments are shown in equity as a deduction, net of tax, from the proceeds.

Shares held for the share award scheme are disclosed as "Issue of shares held in trust" and deducted from equity until the shares are vested or cancelled.

2.17. Accruals and other payables

Accruals and other payables mainly represent the obligations to pay for consumables and services that have been acquired in the ordinary course of business. Accruals and other payables are presented as current liabilities unless payment is not due within one year or less after the reporting period.

Accruals and other payables are recognized initially at their fair value and subsequently measured at amortized cost using the effective interest method.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.18. Borrowings

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized in consolidated statements of comprehensive loss over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

2.19. Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale. Other borrowing costs are expensed as incurred.

2.20. Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

(i) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Company and its subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Group measures its tax balances either based on the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.20. Current and deferred income tax (continued)

(ii) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss and does not give rise to equal taxable and deductible temporary differences. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax liabilities and assets are not recognized for temporary differences between the carrying amount and tax bases of investments in foreign operations where the Company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred tax assets and liabilities are offset where there is a legally enforceable right to offset current tax assets and liabilities and where the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.21. Employee benefits

(i) Short-term obligations

Liabilities for wages and salaries, including non-monetary benefits and accumulating sick leave that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognized in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the balance sheet.

(ii) Pension obligations

Full-time employees in the PRC are covered by various government-sponsored defined contribution pension plans under which the employees are entitled to a monthly pension based on certain formulas. The relevant government agencies are responsible for the pension liability to these retired employees. The Group contributes on a monthly basis to these pension plans. Under these plans, the Group has no further payment obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred and contributions paid to the defined-contribution pension plans for an employee are not available to reduce the Group's future obligations to such defined-contribution pension plans even if the employee leaves.

(iii) Housing funds, medical insurance and other social insurance

Employees in the PRC are entitled to participate in various government-supervised housing funds, medical insurance and other employee social insurance plans. The Group contributes on a monthly basis to these funds based on certain percentages of the salaries of the employees, subject to certain ceiling. The Group's liability in respect of these funds is limited to the contribution payable.

(iv) Bonus plan

The expected cost of bonus is recognized as a liability when the Group has a present legal or constructive obligation for payment of bonus as a result of services rendered by employees and a reliable estimate of the obligation can be made. Liabilities for bonus plans are expected to be settled within 12 months and are measured at the amounts expected to be paid when they are settled.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.22. Share-based payment

(i) Equity-settled share-based payment transactions

The Group operates stock options granted to employees, under which the Group receives services from employees as consideration for equity instruments of the Group. The fair value of the employee services received in exchange for the grant of equity instruments (options) is recognized as an expense in the consolidated financial statements. The total amount to be expensed is determined by reference to the fair value of the equity instruments granted:

- including any market performance conditions;
- excluding the impact of any service and non-market performance vesting conditions; (for example, the requirement for employees to serve);
- including the impact of any non-vesting conditions.

At the end of each reporting period, the Group revises its estimates of the number of options that are expected to vest based on the non-market vesting performance and service conditions. It recognizes the impact of the revision to original estimates, if any, in the consolidated statements of comprehensive loss, with a corresponding adjustment to equity.

In addition, in some circumstances employees may provide services in advance of the grant date and therefore the grant date fair value is estimated for the purposes of recognizing the expense during the period between service commencement date and grant date.

Where there is any modification of terms and conditions which increases the fair value of the equity instruments granted, the Group includes the incremental fair value granted in the measurement of the amount recognized for the services received over the remainder of the vesting period. The incremental fair value is the difference between the fair value of the modified equity instrument and that of the original equity instrument, both estimated as at the date of the modification. An expense based on the incremental fair value is recognized over the period from the modification date to the date when the modified equity instruments vest in addition to any amount in respect of the original instrument, which should continue to be recognized over the remainder of the original vesting period.

The grant by the Company of options over its equity instruments to the employees of subsidiaries in the Group is treated as a capital contribution. The fair value of employee services received, measured by reference to the grant date fair value, is recognized over the vesting period as an increase to investment in subsidiaries undertakings, with a corresponding credit to equity in separate financial statements of the Company.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.23. Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are not recognized for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The discount rate used to determine the present value is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognized as interest expense.

2.24. Revenue recognition

Licence fee income

The Group provides licence of its patented intellectual property ("IP") or commercialisation licence to customers and revenue is recognized when the customers obtain rights to access or use the underlying IP or licence. Licence fee income is recognized at a point of time upon the customer obtains control of IP.

The consideration for licence comprises a fixed element (the upfront payment) and variable elements (including but not limited to development milestones and royalties).

For licence that the Group provided for customers' right to access, upfront fee is recognized as revenue when customers have ability to use the underlying IP of the licence and variable consideration is recognized only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future.

For licence associate with customers' right to use, upfront fee and variable consideration received are recorded under contract liabilities and recognized as revenue only when customers have ability to use the licence and variable consideration is recognized only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future.

During the year ended December 31, 2021, the Group received an upfront payment up to an aggregate amount of USD4,000,000 (equivalent to RMB25,813,000).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.25. Loss per share

Basic loss per share is calculated by dividing the loss of the Group attribute to equity holders of the Company by weighted average number of ordinary shares outstanding during the year.

Diluted loss per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares.

2.26. Leases and right-of-use assets

The Group leases various properties. Property leases are typically made for fixed periods of one to five years. Lease terms are negotiated on an individual basis and contain various different terms and conditions.

Leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the lessee under residual value guarantees;
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.26. Leases and right-of-use assets (continued)

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk for leases held by the Group, which does not have recent third-party financing, and
- makes adjustments specific to the lease, eg term, country, currency and security.

If a readily observable amortizing loan rate is available to the individual lessee (through recent financing or market data) which has a similar payment profile to the lease, then the Group use that rate as a starting point to determine the incremental borrowing rate.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liabilities;
- any lease payments made at or before the commencement date, less any lease incentive received;
- any initial direct costs; and
- restoration costs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

2.26. Leases and right-of-use assets (continued)

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of less than 12 months. Low-value assets comprise equipment and small items of office furniture.

2.27. Dividend distribution

Provision is made for the amount of any dividend declared, being appropriately authorized and no longer at the discretion of the entity, on or before the end of the reporting period but not distributed at the end of reporting period.

2.28. Government grants

Government grants are recognized at their fair value where there is a reasonable assurance that the grant will be received, and the Group will comply with all the attached conditions.

Government grants relating to costs are deferred and recognized in consolidated statements of comprehensive loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to property, plant and equipment are included in non-current liabilities as deferred income and are credited to consolidated statements of comprehensive loss over the estimated useful lives of the related assets using the straight-line method.

2.29. Interest income

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets, the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes. Any other interest income is included in other income.

3. FINANCIAL RISK MANAGEMENT

3.1. Financial risk factors

The Group's risk management is predominantly controlled by the treasury department under policies approved by the board of directors. The Group treasury identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units. The board provides written principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

(a) Market risk

(i) Foreign exchange risk

Foreign exchange risk arises when future commercial transactions or recognized assets and liabilities are denominated in a currency that is not the functional currency of the relevant group entity.

The Group has entities operating in the United States of America and in the People's Republic of China and there are certain cash and cash equivalent, other receivables, accruals and other payables denominated in a currency that is not the functional currency of the relevant group entity. The Group constantly reviews the economic situation and its foreign exchange risk profile, and will consider appropriate hedging measures, as may be necessary.

At December 31, 2022 and 2021, if the USD strengthened/weakened by 5% against the RMB with all other variables held constant, net loss for the years would have been RMB77,949,203 higher/lower and RMB44,237,000 higher/lower, respectively.

3. FINANCIAL RISK MANAGEMENT (continued)

3.1. Financial risk factors (continued)

(a) ***Market risk*** (continued)

(ii) *Cash flow and fair value interest rate risk*

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's interest-bearing borrowings. Borrowings obtained at variable rates expose the Group to cash flow interest-rate risk. The Group has not hedged its cash flow or fair value interest-rate risk.

If interest rates on borrowings had been 50 basis point higher with all other variables held constant, the Group's loss would approximately increase RMB61,854 and RMB402,000 for each of the years ended December 31, 2022 and 2021, respectively.

(b) ***Credit risk***

The carrying amounts of cash and cash equivalents, other receivables included in the consolidated statements of financial position represent the Group's maximum exposure to credit risk in relation to its financial assets.

As at December 31, 2022 and 2021, cash and cash equivalents were all deposited with high quality financial institutions without significant credit risk. While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial.

Management has assessed that during the years ended December 31, 2022 and 2021, other receivables have not had a significant increase in credit risk since initial recognition. Thus, a 12-month expected credit loss approach that results from possible default event within 12 months of each reporting date is adopted by management. The Group does not expect any losses from non-performance by the counterparties of other receivables and no loss allowance provision for other receivables was recognized.

3. FINANCIAL RISK MANAGEMENT (continued)

3.1. Financial risk factors (continued)

(c) Liquidity risk

The Group aims to maintain sufficient cash and cash equivalents. Due to the dynamic nature of the underlying business, the policy of the Group is to regularly monitor the Group's liquidity risk and to maintain adequate cash and cash equivalents or adjust financing arrangements to meet the Group's liquidity requirements.

The table below analyzes the Group's non-derivative financial liabilities that will be settled into relevant maturity grouping based on the remaining period at each balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

	Less than 1 year *RMB'000*	Between 1 and 2 years *RMB'000*	Between 2 and 5 years *RMB'000*	Over 5 years *RMB'000*	Total *RMB'000*
As at December 31, 2022					
Accruals and other payables	86,003	–	–	–	86,003
Borrowings	5,097	2,546	–	–	7,643
Lease liabilities	21,451	18,936	50,332	39,580	130,299
Total	112,551	21,482	50,332	39,580	223,945
As at December 31, 2021					
Accruals and other payables	89,568	–	–	–	89,568
Borrowings	225,921	5,470	2,789	–	234,180
Lease liabilities	18,446	19,853	49,842	43,698	131,839
Total	333,935	25,323	52,631	43,698	455,587

3. FINANCIAL RISK MANAGEMENT (continued)

3.2. Capital management

The Group's objectives of managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for equity holders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may return capital to equity holders, issue new shares, make borrowings or sell assets to reduce debt.

The Group monitors capital (including share capital and reserves, and preferred shares on an as-if-converted basis) by regularly reviewing the capital structure. As a part of this review, the Company considers the cost of capital and the risks associated with the issued share capital. In the opinion of the directors of the Company, the Group's capital risk is low.

3.3. Fair value estimation

(i) Fair value hierarchy

This section explains the judgements and estimates made in determining the fair values of the financial instruments that are recognized and measured at fair value in the financial statements. To provide an indication about the reliability of the inputs used in determining fair value, the Group has classified its financial instruments into the three levels prescribed under the accounting standards.

Level 1: The fair value of financial instruments traded in active markets (such as trading and available-for-sale securities) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the Group is the current bid price.

Level 2: The fair value of financial instruments that are not traded in an active market is determined using valuation techniques which maximize the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

As at December 31, 2022 and 2021, the Group has no assets or liabilities that are measured at fair value:

There were no transfers between levels 1, 2 and 3 for recurring fair value measurements for the year ended December 31, 2022.

3. FINANCIAL RISK MANAGEMENT (continued)

3.3. Fair value estimation (continued)

(ii) Valuation techniques used to determine fair values

Specific valuation techniques used to value financial instruments include Binomial option-pricing model or discounted cash flow analysis.

There were no changes in valuation techniques for the years ended December 31, 2022 and 2021.

(iii) Valuation processes

The finance department of the Group has a team that performs the valuation of financial instruments required for financial reporting purposes, including level 3 fair values. On an annual basis, the team adopts various valuation techniques to determine the fair value of the Group's level 3 instruments. This team reports directly to the chief finance officer and the board of directors.

4. CRITICAL ESTIMATES, JUDGEMENTS

The preparation of financing statements requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgement in applying the Group's accounting policies.

Estimates and assumptions are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

4.1. Critical accounting estimates

(i) Impairment of non-current asset

The Group assesses impairment based on its subjective judgement and determines the separate cash flows of a specific group of assets, useful lives of assets and the future possible income and expenses arising from the assets depending on how assets are utilized and industrial characteristics. Any changes of economic circumstances or estimates due to the change of Group strategy might cause material impairment on assets in the future.

4. CRITICAL ESTIMATES, JUDGEMENTS (continued)

4.1. Critical accounting estimates (continued)

(ii) Recognition of deferred tax assets

The Group recognizes deferred tax assets based on estimates that is probable to generate sufficient taxable profits in the foreseeable future against which the deductible losses will be utilized. The recognition of deferred tax assets mainly involved management's judgements and estimations about the timing and the amount of taxable profits of the companies who had tax losses. During the years ended December 31, 2022 and 2021, deferred tax assets have not been recognized in respect of these accumulated tax losses and other deductible temporary differences based on the fact that there were several drug candidates of the Group and most of them were in earlier research and development stage and the future taxable profits would be uncertain.

(iii) Accruals of research and development expenses

Research and development expenses include costs related to clinical trials paid to hospitals and third-party contract research organizations (CROs). The estimate of accrual of research and development expenses related to clinical trials is complex because billing terms under relevant contracts often do not coincide with the timing of when the work is performed, which in turn requires estimates of outstanding obligations as of period end. These estimates are based on a number of factors, including management's knowledge of the research and development ("R&D") programs and activities associated with timelines, invoicing to date, and the provisions in the contracts.

4.2. Critical accounting judgements

(i) Capitalization of research and development expenses

Development costs incurred on the Group's drug product pipelines are capitalized only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, the Group's intention to complete and the Group's ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the pipeline and the ability to measure reliably the expenditure during the development. Development costs which do not meet these criteria are expensed when incurred. Determining the amounts to be capitalized requires management to make judgement regarding the expected future cash generation of the assets, discount rates to be applied and the expected period of benefits. During the years ended December 31, 2022 and 2021, all expenses incurred for research and development activities were regarded as research expenses and therefore were expensed when incurred.

4. CRITICAL ESTIMATES, JUDGEMENTS (continued)

4.2. Critical accounting judgements (continued)

(ii) Contractual arrangement

The Group conducts its business through CARsgen Therapeutics Group in the PRC. Due to the regulatory restrictions on the foreign ownership of the Listing Business in the PRC, the Group does not have any legal equity interest in CARsgen Therapeutics Group. The Directors assessed whether or not the Group has control over CARsgen Therapeutics Group by assessing whether it has the rights to variable returns from its involvement with CARsgen Therapeutics Group and has the ability to affect those returns through its power over CARsgen Therapeutics Group. After assessment, the Directors concluded that the Group has control over CARsgen Therapeutics Group as a result of the Contractual Arrangements and accordingly the financial position and the operating results of CARsgen Therapeutics Group are included in the Group's consolidated financial statements throughout the years ended December 31, 2022 and 2021. Nevertheless, the Contractual Arrangements may not be as effective as direct legal ownership in providing the Group with direct control over CARsgen Therapeutics Group and uncertainties presented by the PRC legal system could impede the Groups beneficiary rights of the results, assets and liabilities of CARsgen Therapeutics Group. The Directors, based on the advice of its legal counsel, consider that the Contractual Arrangements with CARsgen Therapeutics Group and its equity holders are in compliance with the relevant PRC laws and regulations and are legally enforceable.

5. SEGMENT INFORMATION

The Group's business activities are regularly reviewed and evaluated by the chief operating decision-makers. The chief operating decision-makers, who is responsible for allocating resources and assessing performance of the operating segment, has been identified as the executive directors of the Group.

As a result of this evaluation, the executive directors of the Group consider that the Group's operations are operated and managed as a single operating segment. Since this is the only reportable operating segment of the Group, no further operating segment analysis thereof is presented.

6. REVENUE

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Revenue from customers recognized at a point in time		
License fee	–	25,813

CAFA Therapeutics Limited, a subsidiary of CARsgen Therapeutics, has entered into a license agreement with HK inno.N Corporation, a pharmaceutical company, during the year ended December 31, 2021 to develop and commercialize two Chimeric Antigen Receptor T cell (CAR-T cell) product candidates, CT032 and CT053, targeting CD19 and BCMA respectively, for the potential treatment of various cancers in South Korea. Under the terms of the agreement, CARsgen will receive an upfront of USD4 million and additional milestone payments totalling up to USD50 million as well as royalties on net sales in South Korea. As of December 31, 2021, the transfer of the related documentation, technology and other efforts have been completed and hence revenue was recognized amounted to RMB25,813,000 (equivalent to USD4,000,000) for the year ended December 31, 2021. During the year ended December 31, 2022, no license fee was recognized since no additional milestone has been achieved.

There was no material assets and liabilities related to contracts with customers which shall be recognized as at December 31, 2022 and 2021.

Contract liabilities are recognized when payments are received before the transfer of goods. As at December 31, 2022 and 2021, there are no material unsatisfied performance obligations resulting from contracts.

During the years ended December 31, 2022 and 2021, there were no significant incremental costs to obtain or fulfil a contract, and accordingly no asset was recognized.

Majority of the cost related to the licence fee was incurred and recorded in research and development expenses in prior years, hence, no cost of sales was recognized during the year ended December 31, 2021.

7. OTHER INCOME

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Government grants (i)	**13,815**	14,513
Interest income on term deposits with original maturity between three and twelve months	**21,700**	6,043
Others	**80**	1,237
Total	**35,595**	21,793

(i) The government grants mainly represent subsidies received from the government in relation to the support on certain research and development projects. There are no unfulfilled conditions or other contingencies attached to these grants.

Government grants relating to costs are deferred and recognised in profit or loss over the period necessary to match them with the costs that they are intended to compensate. Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred income and they are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

8. OTHER (LOSSES)/GAINS – NET

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Net foreign exchange (losses)/gains – net	**(97,351)**	7,451
Others	**(3,445)**	(1,410)
Total	**(100,796)**	6,041

9. EXPENSE BY NATURE

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Employee benefit expenses *(Note 10)*	**353,228**	235,435
Testing and clinical expenses	**252,470**	204,309
Depreciation of property, plant and equipment *(Note 15)*	**51,619**	29,647
Research and development consumables	**51,494**	53,456
Professional service expenses	**24,407**	23,500
Depreciation of right-of-use assets *(Note 16)*	**22,997**	16,799
Utilities	**20,061**	11,183
Office expenses	**15,433**	10,789
Travelling and transportation expenses	**6,988**	3,781
Amortization of intangible assets *(Note 17)*	**6,917**	6,000
Auditors' remuneration	**3,445**	3,793
– Audit service	**3,260**	3,585
– Non-audit service	**185**	208
Short term lease and low value lease expenses *(Note 16)*	**1,537**	791
Listing expenses through statement of profit and loss	**–**	26,580
Other expenses	**5,500**	1,489
Total	**816,096**	627,552
Administrative expenses	**135,795**	125,831
Research and development expenses	**680,301**	501,721
Total	**816,096**	627,552

10. EMPLOYEE BENEFIT EXPENSES

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Wages and salaries	**250,072**	178,613
Pension costs (a)	**21,472**	13,020
Share-based compensation *(Note 24)*	**43,995**	13,504
Other employee benefits	**37,689**	30,298
Total	**353,228**	235,435

(a) Pension costs

Employees of the Group's PRC subsidiaries are required to participate in a defined contribution scheme administrated and operated by government. The Group's PRC subsidiaries contribute funds which are calculated on certain percentages of the employee salary as agreed by the local government to the scheme to fund the retirement benefits of the employees. There were no forfeited contributions under this pension plan to reduce the contributions for the years ended December 31, 2022 and 2021.

Employees of CARsgen Therapeutics Corporation ("CARsgen USA") participate in a defined contribution scheme 401(K) plan in which the Company matches 6% of the employees' contribution. There were no forfeited contributions under this pension plan to reduce the contributions for the years ended December 31, 2022 and 2021.

The Group has no other material obligation for the payment of retirement benefits associated with these schemes beyond the annual contributions described above.

10. EMPLOYEE BENEFIT EXPENSES (continued)

(b) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group include nil directors for the year ended December 31, 2022 (2021: nil), whose emoluments are reflected in the analysis shown in Note 34. The emoluments payable to the remaining 5 individuals (2021: 5) during the year are as follows:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Basic salaries, housing allowances, share options, other allowances and benefits in kind	**29,924**	14,554
Contribution to pension scheme	**451**	269
Discretionary bonuses	**3,087**	2,326
Total	**33,462**	17,149

The emoluments fell within the following bands:

	Year ended December 31,	
	2022	2021
Emolument bands		
HKD3,000,001 to HKD3,500,000	**–**	1
HKD3,500,001 to HKD4,000,000	**–**	2
HKD4,000,001 to HKD4,500,000	**–**	–
HKD4,500,001 to HKD5,000,000	**–**	–
HKD5,000,001 to HKD5,500,000	**–**	2
HKD5,500,001 to HKD6,000,000	**1**	–
HKD6,000,001 to HKD6,500,000	**1**	–
HKD6,500,001 to HKD7,000,000	**–**	–
HKD7,000,001 to HKD7,500,000	**1**	–
HKD7,500,001 to HKD8,000,000	**–**	–
HKD8,000,001 to HKD8,500,000	**1**	–
HKD8,500,001 to HKD9,000,000	**–**	–
HKD9,000,001 to HKD9,500,000	**–**	–
HKD9,500,001 to HKD10,000,000	**1**	–
Total	**5**	5

11. FINANCE COSTS – NET

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Finance Income		
Interest income	**5,866**	3,568
Finance costs		
Interest expense on lease liabilities	**(4,980)**	(2,846)
Interest expense on bank borrowings	**(10,541)**	(8,023)
Total finance cost	**(15,521)**	(10,869)
Total finance costs – net	**(9,655)**	(7,301)

12. SUBSIDIARIES

The Group's principal subsidiaries at December 31, 2022 are set out below. Unless otherwise stated, they have share capital consisting solely of ordinary shares that are held directly by the Group. And the proportion of ownership interests held equals the voting rights held by the Group. The country of incorporation or registration is also their principal place of business.

Name of entity	Place of incorporation and kind of legal entity	Principal activities and place of operation	Registered/ issued and paid-up capital	Ownership interest held by the Group		Ownership interest held by non-controlling interests	
				2022	2021	**2022**	2021
				%	%	**%**	%
Directly hold							
CARsgen Pharma Holdings Limited	Hong Kong, February 21, 2018, Limited liability company	Holding company, Hong Kong	HKD10	**100**	100	**–**	–

12. SUBSIDIARIES (continued)

Name of entity	Place of incorporation and kind of legal entity	Principal activities and place of operation	Registered/ issued and paid-up capital	Ownership interest held by the Group		Ownership interest held by non-controlling interests	
				2022 %	2021 %	2022 %	2021 %
Indirectly hold							
Cleanings Biotech Limited	British Virgin Islands, September 11, 2018, Limited liability company	Holding company, British Virgin Islands	USD1	100	100	–	–
Excelsiory Biotech Limited	British Virgin Islands, September 11, 2018, Limited liability company	Holding company, British Virgin Islands	USD1	100	100	–	–
Panzenith Biotech Limited	British Virgin Islands, September 11, 2018, Limited liability company	Holding company, British Virgin Islands	USD1	100	100	–	–
CARsgen USA	United States of America, May 4, 2016, Limited liability company	Drug research and development and manufacturing and import and export handling, United States of America	USD1,000	100	100	–	–
CARsgen Life Sciences Co., Ltd. 愷興生命科技(上海)有限公司#	the PRC, March 22, 2018, Limited liability company (Registered as wholly foreign owned enterprises under PRC law)	Drug research and development and manufacturing and import and export handling, the PRC	USD40,000,000	100	100	–	–

12. SUBSIDIARIES (continued)

Name of entity	Place of incorporation and kind of legal entity	Principal activities and place of operation	Registered/ issued and paid-up capital	Ownership interest held by the Group		Ownership interest held by non-controlling interests	
				2022 %	2021 %	2022 %	2021 %
Indirectly hold							
CARsgen Diagnostics Co., Ltd. 上海愷興診斷技術有限公司#	the PRC, November 23, 2020, Limited liability company	Drug research and development and manufacturing and import and export handling, the PRC	RMB10,000,000	100	100	–	–
CARsgen Therapeutics (Beijing) Co., Ltd. 科濟生物醫藥(北京)有限公司#	the PRC, February 11, 2022, Limited liability company	Drug research and development and manufacturing and import and export handling, the PRC	RMB15,000,000/ RMB7,000,000	100	–	–	–
CAFA Therapeutics Limited 佈琺藥業有限公司	Ireland, January 8, 2021, Limited liability company	Drug research and development and manufacturing and import and export handling, Ireland	Euro1,000	100	100	–	–
CRAGE Medical Co., Limited 克萊格醫學有限公司	Hong Kong, December 9, 2021, Limited liability company	Drug research and development and manufacturing and import and export handling, Hong Kong	HKD1,000	100	100	–	–
Controlled by the Company pursuant to the Contractual Agreements (Note 2.2)							
CARsgen Therapeutics Co., Ltd 科濟生物醫藥(上海)有限公司	the PRC, October 30, 2014, Limited liability company	Drug research and development and manufacturing and import and export handling, the PRC	RMB40,000,000	100	100	–	–
CARsgen Pharmaceuticals Co., Ltd 上海科濟製藥有限公司 ("CARsgen Pharmaceuticals")	the PRC, November 15, 2017, Limited liability company	Drug research and development and manufacturing and import and export handling, the PRC	RMB50,000,000/ RMB35,082,900	100	100	–	–

Registered as wholly foreign owned enterprises under PRC law

All the subsidiaries are limited liabilities companies.

Save for disclosed in this annual report, none of the subsidiaries had issued any debt securities at the end of the year.

13. INCOME TAX EXPENSE

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Current income tax		
– PRC Corporate Tax	**–**	–
– Ireland Capital Gains Tax	**1,295**	7,645
Deferred income tax	**–**	–
	1,295	7,645

Current income tax

The Group is subject to income tax on an entity basis on profits arising in or derived from the jurisdictions in which members of the Group are domiciled and operated.

(a) Cayman Islands income tax

The Company was incorporated in the Cayman Islands as an exempted company with limited liability under the Companies Law of the Cayman Islands and accordingly, is exempted from Cayman Islands income tax.

(b) Hong Kong income tax

No provision for Hong Kong profits tax has been provided for at the rate of 16.5% as the Company has no estimated assessable profit.

(c) PRC corporate income tax

Subsidiaries in Mainland China are subject to income tax at a rate of 25% pursuant to the Corporate Income Tax Law of the PRC and the respective regulations (the "CIT Law"), with the exception of CARsgen Therapeutics obtained its High and New Technology Enterprises status in year 2020 and hence is entitled to a preferential tax rate of 15% for a three-year period commencing 2020.

No provision for Mainland China corporate income tax was provided for, as there's no assessable profit.

13. INCOME TAX EXPENSE (continued)

Current income tax (continued)

(d) The US corporate income tax

CARsgen USA, which was incorporated in Delaware, the United States on May 4, 2016, was subject to statutory U.S. Federal corporate income tax at a rate of 21% for the years ended December 31, 2022 and 2021. CARsgen USA was also subject to the state income tax during for the years ended December 31, 2022 and 2021.

No provision for US corporate income tax was provided for as there's no assessable profit.

(e) British Virgin Islands income tax

Under the current laws of BVI, the subsidiary incorporated in BVI is not subject to tax on income or capital gains. In addition, upon payments of dividends by our BVI subsidiaries to us, no BVI withholding tax is imposed.

(f) Ireland corporation income tax and Ireland capital gains tax

Subsidiary in Ireland is subject to income tax at a rate of 12.5% on the estimated assessable profit and 33% on the capital gains. Provision for Ireland capital gain tax has been provided as the subsidiary has realized capital gain for the years ended December 31, 2022 and 2021.

(g) The taxation of the Group's loss before taxation differs from the theoretical amount that would arise using the rates prevailing in the jurisdictions in which the Group operates as follows:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Loss before income tax	**(890,952)**	(4,736,778)
Tax calculated at Mainland China tax rate of 25%	**(222,738)**	(1,184,195)
Effect of different tax rate	**25,794**	13,870
Expenses not deductible for taxation purposes	**1,973**	1,049,921
Tax loss not recognized as deferred tax assets	**269,955**	204,987
Super deduction for research and development expenses	**(73,689)**	(76,938)
	1,295	7,645

13. INCOME TAX EXPENSE (continued)

Current income tax (continued)

(h) Deferred tax assets not recognized:

The Group has not recognized any deferred tax assets in respect of the following items:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Deductible losses	**3,085,988**	1,862,740

(i) Deductible losses that are not recognized as deferred tax assets will be expired are analyzed as follows:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
2024	**75,757**	75,757
2025	**134,188**	134,188
2026	**793,032**	793,032
2027	**859,763**	859,763
Later than 2028	**1,223,248**	–
Unrecognized tax losses carried forward	**3,085,988**	1,862,740

The tax losses of the Company's Mainland China subsidiaries with the exception of those of CARsgen Therapeutics will expire within five years. CARsgen Therapeutics, as a High and New Technology Enterprise can carry forward losses for 10 years. The tax losses of the Company's other subsidiaries can be carried forward indefinitely. No deferred tax asset has been recognized in respect of the tax losses due to the unpredictability of future profit streams.

14. LOSS PER SHARE

(a) Basic loss per share

Basic loss per share is calculated by dividing the loss of the Group attributable to the equity holders of the Company by weighted average number of ordinary shares outstanding during the periods.

	Year ended December 31,	
	2022	2021
Loss attributable to the ordinary equity holders of the Company *(RMB'000)*	**(892,247)**	(4,744,423)
Weighted average number of ordinary shares in issue (in thousand)	**551,626**	386,835
Basic loss per share *(RMB)*	**(1.62)**	(12.26)

(b) Diluted loss per share

Diluted loss per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. For the years ended December 31, 2022 and 2021, the Company had outstanding potential ordinary shares in relation to share-based payments. As the Group incurred losses for the years ended December 31, 2022 and 2021, the potential ordinary shares were not included in the calculation of diluted loss per share as their inclusion would be anti-dilutive. Accordingly, diluted loss per share for the years ended December 31, 2022 and 2021 are the same as basic loss per share of the respective periods.

15. PROPERTY, PLANT AND EQUIPMENT

	Building *RMB'000*	Equipment *RMB'000*	Electronic equipment *RMB'000*	Furniture *RMB'000*	Vehicle *RMB'000*	Fixture *RMB'000*	Leasehold improvements *RMB'000*	Construction in progress *(Note) RMB'000*	Total *RMB'000*
As at 1 January 2021									
Cost	36,823	93,106	4,347	1,995	741	37,304	3,017	–	177,333
Accumulated depreciation	(1,841)	(31,858)	(2,258)	(1,233)	(618)	(7,472)	(2,423)	–	(47,703)
Net book amount	34,982	61,248	2,089	762	123	29,832	594	–	129,630
For the year ended December 31, 2021									
Opening net book amount	34,982	61,248	2,089	762	123	29,832	594	–	129,630
Additions	–	31,039	2,984	760	–	–	2,701	163,525	201,009
Completion of construction in progress	–	–	–	–	967	4,354	6,069	(11,390)	–
Disposals	–	(42)	–	(52)	–	–	–	–	(94)
Depreciation charges	(1,876)	(16,398)	(1,592)	(404)	(90)	(7,834)	(1,453)	–	(29,647)
Closing net book amount	33,106	75,847	3,481	1,066	1,000	26,352	7,911	152,135	300,898
As at December 31, 2021									
Cost	36,823	123,745	7,331	2,251	1,708	41,658	11,787	152,135	377,438
Accumulated depreciation	(3,717)	(47,898)	(3,850)	(1,185)	(708)	(15,306)	(3,876)	–	(76,540)
Net book amount	33,106	75,847	3,481	1,066	1,000	26,352	7,911	152,135	300,898

15. PROPERTY, PLANT AND EQUIPMENT (continued)

	Building *RMB'000*	Equipment *RMB'000*	Electronic equipment *RMB'000*	Furniture *RMB'000*	Vehicle *RMB'000*	Fixture *RMB'000*	Leasehold improvements *RMB'000*	Construction in progress *(Note)* *RMB'000*	Total *RMB'000*
As at 1 January 2022									
Cost	36,823	123,745	7,331	2,251	1,708	41,658	11,787	152,135	377,438
Accumulated depreciation	(3,717)	(47,898)	(3,850)	(1,185)	(708)	(15,306)	(3,876)	–	(76,540)
Net book amount	33,106	75,847	3,481	1,066	1,000	26,352	7,911	152,135	300,898
For the year ended December 31, 2022									
Opening net book amount	33,106	75,847	3,481	1,066	1,000	26,352	7,911	152,135	300,898
Exchange differences	(37)	3,831	(30)	(43)	(17)	–	(329)	11,966	15,341
Additions	–	15,075	1,817	1,002	620	406	2,166	78,147	99,233
Completion of construction in progress	16,947	32,596	4,605	7,354	–	2,028	166,570	(230,100)	–
Disposals	–	–	–	(3)	–	–	–	–	(3)
Depreciation charges	(2,920)	(22,568)	(2,936)	(1,216)	(307)	(8,695)	(12,977)	–	(51,619)
Closing net book amount	47,096	104,781	6,937	8,160	1,296	20,091	163,341	12,148	363,850
As at December 31, 2022									
Cost	53,771	175,346	13,738	10,575	2,160	44,092	180,523	12,148	492,353
Accumulated depreciation	(6,675)	(70,565)	(6,801)	(2,415)	(864)	(24,001)	(17,182)	–	(128,503)
Net book amount	47,096	104,781	6,937	8,160	1,296	20,091	163,341	12,148	363,850

Note As at December 31, 2022, the construction in progress included in the leasehold improvements amounted at approximately RMB2,034,000 and equipment under construction amounted at approximately RMB10,114,000.

15. PROPERTY, PLANT AND EQUIPMENT (continued)

As at December 31, 2022 and 2021, the Group's building with carrying values of RMB31,247,000 and RMB33,106,000 respectively were pledged for certain of the Group's borrowings (Note 27).

In 2019, the Group acquired building and land use right (Note 16) with total cost of RMB43,921,000 from a third-party seller. According to the agreement entered into by the Group and the local authorities, the third-party seller or its designated entity has the right to repurchase the building and the land use right from the Group if the Company's subsidiary holding the building and the land use right failed to meet the minimum RMB8 million annual tax payment requirements from the third year of commencement of production. Total carrying amount of such building and land use right was RMB37,877,000 and RMB39,892,000 respectively as at December 31, 2022 and 2021.

Depreciation of the Group charged to consolidated statements of comprehensive loss is analyzed as follows:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Administrative expenses	**4,411**	1,492
Research and development expenses	**47,208**	28,155
Total	**51,619**	29,647

16. RIGHT-OF-USE ASSETS

The Group leases land, offices and dormitory for its own use. Information about leases for which the Group is a lessee is presented below:

	Land use right *RMB'000*	Offices and dormitory *RMB'000*	Total *RMB'000*
As at January 1, 2021			
Cost	7,098	34,272	41,370
Accumulated depreciation	(156)	(14,075)	(14,231)
Net book amount	6,942	20,197	27,139
For the year ended December 31, 2021			
Opening net book amount	6,942	20,197	27,139
Additions	–	107,512	107,512
Leasing incentive	–	(32,660)	(32,660)
Depreciation charge	(156)	(16,643)	(16,799)
Exchange differences	–	99	99
Closing net book amount	6,786	78,505	85,291
As at December 31, 2021			
Cost	7,098	109,223	116,321
Accumulated depreciation	(312)	(30,718)	(31,030)
Net book amount	6,786	78,505	85,291
For the year ended December 31, 2022			
Opening net book amount	**6,786**	**78,505**	**85,291**
Additions	**–**	**19,135**	**19,135**
Termination of lease agreements	**–**	**(6,513)**	**(6,513)**
Depreciation charge	**(156)**	**(22,841)**	**(22,997)**
Exchange differences	**–**	**2,617**	**2,617**
Closing net book amount	**6,630**	**70,903**	**77,533**
As at December 31, 2022			
Cost	**7,098**	**121,845**	**128,943**
Accumulated depreciation	**(468)**	**(50,942)**	**(51,410)**
Net book amount	**6,630**	**70,903**	**77,533**

As at December 31, 2022 and 2021, the Group's land use right with carrying values of RMB6,630,000 and RMB6,786,000 respectively was pledged as collateral for the Group's borrowings (Note 27).

16. RIGHT-OF-USE ASSETS (continued)

(i) Amounts recognized in the consolidated statement of comprehensive loss

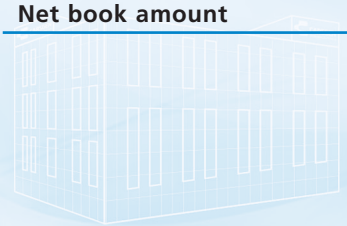
The consolidated statements of comprehensive loss contain the following amounts relating to leases:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Depreciation charge of right-to-use assets		
– Land use right	**156**	156
– Offices and dormitory	**22,841**	16,643
	22,997	16,799
Interest expenses *(Note 11)*	**4,980**	2,846
Expenses relating to short-term leases (included in administrative expenses and research and development expenses)	**1,537**	791
Expenses relating to variable lease payments not included in lease liabilities	**–**	–

The total cash outflow for leases in years 2022 and 2021 were RMB18,338,000 and RMB19,716,000 respectively.

17. INTANGIBLE ASSETS

	Software *RMB'000*	Patents *RMB'000*	Total *RMB'000*
As at January 1, 2021			
Cost	2,145	54,800	56,945
Accumulated amortization	(544)	(32,880)	(33,424)
Net book amount	1,601	21,920	23,521
For the year ended December 31, 2021			
Opening net book amount	1,601	21,920	23,521
Additions	2,612	–	2,612
Amortization charges	(737)	(5,263)	(6,000)
Closing net book amount	3,476	16,657	20,133
As at December 31, 2021			
Cost	4,757	54,800	59,557
Accumulated amortization	(1,281)	(38,143)	(39,424)
Net book amount	3,476	16,657	20,133
For the year ended December 31, 2022			
Opening net book amount	**3,476**	**16,657**	**20,133**
Additions	**2,839**	**–**	**2,839**
Write off	**–**	**(2,910)**	**(2,910)**
Amortization charges	**(1,618)**	**(5,299)**	**(6,917)**
Exchange differences	**–**	**1,331**	**1,331**
Closing net book amount	**4,697**	**9,779**	**14,476**
As at December 31, 2022			
Cost	**7,596**	**50,689**	**58,285**
Accumulated amortization	**(2,899)**	**(40,910)**	**(43,809)**
Net book amount	**4,697**	**9,779**	**14,476**



17. INTANGIBLE ASSETS (continued)

Amortization of intangible assets has been charged to the consolidated statements of comprehensive loss as follows:

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Administrative expenses	**1,071**	679
Research and development expenses	**5,846**	5,321
Total	**6,917**	6,000

18. OTHER NON-CURRENT ASSETS AND PREPAYMENT

	As at December 31, 2022	As at December 31, 2021
	RMB'000	*RMB'000*
Value-added tax recoverable *(Note)*	**2,427**	20,402
Prepayments for purchase of property, plant and equipment	**2,110**	5,363
Rental deposits – non-current	**1,784**	2,695
Total	**6,321**	28,460

Note: Value-added tax recoverable are mainly input VAT on acquisition of property, plant and equipment and the research and development expenses. According to Announcement of the General Administration of Taxation and Customs of the Ministry of Finance on Policies for Deepening the Reform of Value-Added Tax (Announcement of the General Administration of Taxation and Customs of the Ministry of Finance, (2022) No.14), entities with value-added tax recoverable balance can, starting from April 1, 2022, apply for 100% refund on a semi-annual basis if tax payment credit rank is A or B. Value-added tax recoverable which are expected to be recovered within 12 months were recorded as other current assets and prepayments, and those which are expected to be recovered after 12 months were recorded as other non-current assets. Since certain subsidiaries are eligible for a tax refund, the amount of value-added tax recoverable included in other non-current assets decreased significantly.

19. OTHER RECEIVABLES

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
Lease incentive receivables	–	32,660
Deposits – current	6,309	5,298
Others	5,525	3,927
Total	11,834	41,885

None of the above assets is past due. The financial assets included in the above balances related to deposits and others for which there was no history of default and the expected credit losses are considered minimal.

The maximum exposure to credit risk at the reporting date is the carrying value of receivables mentioned above.

The carrying amounts of the Group's other receivables approximate their fair values.

20. OTHER CURRENT ASSETS AND PREPAYMENT

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
Value-added tax recoverable *(Note 18)*	11,053	12,460
Prepayments to suppliers	9,716	9,570
Total	20,769	22,030

21. CASH AND CASH EQUIVALENTS AND TERM DEPOSITS WITH ORIGINAL MATURITY BETWEEN THREE AND TWELVE MONTHS

	As at December 31, 2022 *RMB'000*	As at December 31, 2021 *RMB'000*
Cash at banks		
– RMB	**906,855**	33,773
– HKD	**3,821**	–
– USD	**1,357,360**	657,511
Total	**2,268,036**	691,284
Term deposits with original maturity between three and twelve months – USD	**–**	2,315,654

The carrying amount of cash and cash equivalents approximates their fair value.

22. FINANCIAL INSTRUMENTS BY CATEGORY

	As at December 31, 2022 *RMB'000*	As at December 31, 2021 *RMB'000*
Assets		
Financial assets at amortized costs:		
– Other receivables	**11,834**	41,885
– Other non-current assets – rental deposits	**1,784**	2,695
– Cash and cash equivalents	**2,268,036**	691,284
– Term deposits with original maturity between three and twelve months	**–**	2,315,654
Total	**2,281,654**	3,051,518

22. FINANCIAL INSTRUMENTS BY CATEGORY (continued)

	As at December 31, 2022 *RMB'000*	As at December 31, 2021 *RMB'000*
Liabilities		
Financial liabilities at amortized costs:		
– Borrowings – current	**4,850**	219,331
– Borrowings – non-current	**2,523**	7,375
– Accruals and other payables (excluding staff salaries and welfare payables, and other tax payables)	**86,003**	89,568
– Lease liabilities – current	**17,134**	14,027
– Lease liabilities – non-current	**94,938**	97,312
Total	**205,448**	427,613

23. SHARE CAPITAL

Authorized:

	Number of shares *In thousands*	Nominal value of shares *USD*	RMB equivalent value *RMB'000*
As at January 1, 2021 and December 31, 2021	200,000,000	50,000	349
As at January 1, 2022 and December 31, 2022	200,000,000	50,000	349

23. SHARE CAPITAL (continued)

Issued and fully paid:

	Number of ordinary shares at USD0.00000025 par value *In thousands*	RMB equivalent value *RMB'000*
As at January 1, 2021	198,140	–*
Issue of shares held in trust *(Note(a))*	19,623	–*
Conversion of Preferred Shares to Ordinary Shares upon Global Offering *(Note(b))*	254,837	1
Issue of shares by Global Offering *(Note(c))*	94,747	–*
Issue of shares to employees under Employee Incentive Schemes *(Note(d))*	190	–*
As at December 31, 2021	567,537	1

	Number of ordinary shares at USD0.00000025 par value *In thousands*	RMB equivalent value *RMB'000*
As at January 1, 2022	567,537	1
Issue of shares held in trust *(Note(e))*	2,187	–*
Issue of shares to employees under Employee Incentive Schemes *(Note(f))*	2,901	–*
As at December 31, 2022	572,625	1

* The amounts are less than RMB1,000.

23. SHARE CAPITAL (continued)

Note(a): On May 11, 2021, the Company allotted and issued 12,497,947 Shares to Carfa Unity Limited and 7,125,575 Shares to Carfe Unity Limited, both of which were wholly-owned by the 2019 Equity Incentive Plan Trustee. Such Shares are to be held in trust by the 2019 Equity Incentive Plan Trustee to facilitate the transfer of Shares to the grantees upon vesting of the relevant Share Options and Share Awards. The Shares of the Company held in Carfa Unity Limited and Carfe Unity Limited were accounted as" Reserve-Treasury shares held in trust".

Note(b): All 254,836,638 preferred shares were automatically converted into ordinary shares at HK$32.8 per share upon the completion of Global Offering. The difference between HK$32.8 and the par value of each share were capitalized as "Reserve-Share premium". In addition, the cumulative fair value changes due to credit risk related to the preferred shares were transferred from other reserve to accumulated losses on the same date.

Note(c): In connection with the Company's listing, 94,747,000 ordinary shares of the Company at US$0.00000025 par value each were issued at HK$32.8 per share for a total cash consideration of HK$3,107,701,000 (equivalent to RMB2,576,082,000) on June 18, 2021. Netting off underwriting commissions and other issuance costs through equity with the amount of RMB88,349,000, the Group received RMB2,487,733,000. Excluding the par value, the amount was recorded as "Reserve-Share premium".

Note(d): During the year ended December 31, 2021, the Company issued 190,390 shares at the cost of HKD1,278,699 (equivalent to RMB1,118,000 approximately) to employees under Employee Incentive Schemes.

Note(e): On April 28, 2022, the Company allotted and issued 2,187,299 shares to Carfe Unity Limited, which was wholly owned by the 2019 Equity Incentive Plan Trustee. Such Shares are to be held in trust by the 2019 Equity Incentive Plan Trustee to facilitate the transfer of Shares to the grantees upon vesting of the relevant Share Options and Share Awards. The Shares of the Company held in Carfe Unity Limited were accounted as "Reserve-Treasury shares held in trust".

Note(f): During the year ended December 31, 2022, the Company issued 2,900,889 ordinary shares at the cost of HKD8,993,907 (equivalent to RMB8,033,987 approximately) in total at the prices ranging from nil to HKD10.92 per share to employees under Employee Incentive Schemes.

Movements in treasury shares during the year:

	Number of treasury shares *In thousands*	**RMB equivalent value** *RMB'000*
As at January 1, 2021	–	–*
Issue of shares held in trust	19,623	–*
Transfer of treasury shares to employees related to employee share-based payment	(55)	–*
As at December 31, 2021	19,568	–*

	Number of treasury shares *In thousands*	**RMB equivalent value** *RMB'000*
As at January 1, 2022	19,568	–*
Issue of shares held in trust	2,187	–*
Transfer of treasury shares to employees related to employee share-based payment (note(a))	(4,119)	–*
As at December 31, 2022	17,636	–*

* The amounts are less than RMB1,000.

Note(a): During the year ended December 31, 2022, the Company transferred 4,119,678 treasury shares to employees under Employee Incentive Schemes at the cost of HKD2,766,504 (equivalent to RMB2,471,235 approximately) in total at the prices ranging from nil to HKD10.81 per share.

24. SHARE-BASED PAYMENTS

(a) Employee Stock option

The Group adopted a number of employee stock option plans to provide long-term incentives for its employees and directors of the Group to deliver long-term shareholder returns. Under the plans, participants are granted options which only vest if certain conditions are met. Participation in the plan is at the Board's discretion and no individual has a contractual right to participate in the plan or to receive any guaranteed benefits.

During the years ended December 31, 2022 and 2021, the Group adopted the following stock option plans to certain employees and directors of the Group, as rewards for their services, full time devotion and professional expertise to certain of the Group's subsidiaries.

Stock Option Scheme	Number of options granted	Exercise price per share option *(HKD)*
2021 Stock Option Scheme ("2021 Plan").	730,578	31.00
2022 Stock Option Scheme ("2022 Plan").	5,013,002	16.32
2022 Additional Stock Option Scheme ("2022 Additional Plan").	1,004,000	13.58

Under the scheme of 2021 Plan, those grant options can be vested in several tranches with the following vesting schedule: 25% of the stock option can be vested on the first anniversary of the vesting commencement date and the remaining 75% are to be vested monthly thereafter in 36 equal monthly instalments.

Under the scheme of 2022 Plan, 800,000 options can be vested in several tranches with the following vesting schedule: 25% of the stock option can be vested on the first anniversary of the vesting commencement date and the remaining 75% are to be vested monthly thereafter in 36 equal monthly installments. 4,213,002 options can be vested in several tranches with the following vesting schedule: 25% of the stock option can be vested on the four anniversaries of the vesting commencement date separately.

24. SHARE-BASED PAYMENTS (continued)

(a) Employee Stock option (continued)

Under the scheme of 2022 Additional Plan, 800,000 options can be vested in several tranches with the following vesting schedule: 25% of the stock option can be vested on the four anniversaries of the vesting commencement date separately. 204,000 options can be vested in several tranches with the following vesting schedule: 25% of the stock option can be vested the first anniversary of the vesting commencement date and the remaining 75% are to be vested monthly thereafter in 36 equal monthly installments.

The following table summarizes the Group's stock option activities during the years ended December 31, 2022 and 2021.

	Year ended 31 December			
	2022		2021	
	Average exercise price per share option *HKD*	**Number of stock options**	Average exercise price per share option *HKD*	Number of stock options
Outstanding as at beginning of the year	**3.62**	**20,651,338**	2.71	20,412,187
Execution of employee stock option	**1.85**	**(6,583,624)**	5.61	(234,890)
Granted during the year	**15.86**	**6,017,002**	31.00	730,578
Forfeited during the year	**13.91**	**(1,392,530)**	8.25	(256,537)
Outstanding as at year end	**7.41**	**18,692,186**	3.62	20,651,338

24. SHARE-BASED PAYMENTS (continued)

(b) Employee restricted share

The Group adopted a number of employee restricted share plans to provide long-term incentives for its employees and directors of the Group to deliver long-term shareholder returns. Under the plans, participants are granted restricted share which only vest if certain conditions are met. Participation in the plan is at the Board's discretion and no individual has a contractual right to participate in the plan or to receive any guaranteed benefits.

During the years ended December 31, 2022 and 2021, the Group adopted the following restricted share plans to certain employees and directors of the Group, as rewards for their services, full time devotion and professional expertise to certain of the Group's subsidiaries.

Restricted Share Scheme	**Number of restricted shares granted**	**Exercise price per share** *(HKD)*
2021 Stock RSU Scheme ("2021 RSU Plan")	1,616,867	–
2022 Stock RSU Scheme ("2022 RSU Plan")	701,276	–
2022 Stock RSU Scheme ("2022 RSU Additional Plan")	1,719,000	–

The following table summarizes the Group's restricted share incentive scheme activities during the year ended December 31, 2022 and 2021.

	Year ended 31 December			
	2022		2021	
	Average exercise price per restricted share	**Number of restricted shares**	Average exercise price per restricted share	Number of restricted shares
Executed by the Company:				
Outstanding as at beginning	**HKD–**	**1,568,957**	HKD–	–
Granted during the year	**HKD–**	**2,420,276**	HKD–	1,616,867
Vested during the year	**HKD–**	**(436,943)**	HKD–	(10,656)
Forfeited during the year	**HKD–**	**(615,192)**	HKD–	(37,254)
Outstanding as at year end	**HKD–**	**2,937,098**	HKD–	1,568,957

24. SHARE-BASED PAYMENTS (continued)

(c) Fair value of stock option and restricted share granted

The assessed fair value at grant date of options granted during the years ended December 31, 2022 and 2021 was as follows:

Employee Incentive Scheme	Fair value as at grant date *(RMB'000)*
2021 Plan	8,895
2021 RSU Plan	41,689
2022 Plan	32,682
2022 Additional Plan	5,786
2022 RSU Plan	9,310
2022 RSU Additional Plan	19,186

The fair value at grant date is independently determined using an adjusted Binomial option-pricing model that takes into account the exercise price, fair value of ordinary shares at the grant date, the term of the option, the expected price volatility, the expected dividend yield, the risk free interest rate.

The model inputs for options granted during the years ended December 31, 2022 and 2021 are:

	2022 Plan	2022 Additional Plan	2021 Plan
Exercise price	**HKD 13.58**	**HKD 13.58**	HKD 31.00
Risk-free interest rate	**2.12%**	**4.17%**	0.87%
Volatility	**47.22%**	**45.68%**	48.09%
Expected dividend yield	**Nil**	**Nil**	Nil

The directors estimated the risk-free interest rate based on the yield of curve of US Treasury strips with a maturity life close to the life of stock option. Volatility was estimated at grant date based on average of historical volatilities of the comparable companies with length commensurable to the time to maturity of the stock option. Dividend yield is based on the directors' estimation at the grant date.

(d) Expenses arising from share-based compensation transactions

Expenses for the share-based compensation have been charged to the consolidated statements of comprehensive loss as follows:

	Year ended December 31,	
	2022 ***RMB'000***	2021 *RMB'000*
Administrative expenses	**7,685**	1,890
Research and development expenses	**36,310**	11,614
Total	**43,995**	13,504

25. DIVIDEND

No dividend was declared or paid by the Company or the companies now comprising the Group during the years ended December 31, 2022 and 2021.

26. RESERVE

	Capital reserve *RMB'000* *Note(a)*	Share premium *RMB'000*	Treasury shares *RMB'000*	Currency translation reserve *RMB'000*	Other reserve *RMB'000*	Share-based compensation *RMB'000* *Note(b)*	Accumulated loss *RMB'000*	Total *RMB'000*
Balance at January 1, 2021	54,800	–	–	35,492	42,531	13,852	(1,822,803)	(1,676,128)
Loss for the year	–	–	–	–	–	–	(4,744,423)	(4,744,423)
Exchange differences	–	–	–	8,984	–	–	–	8,984
Fair value changes relating to financial instruments issued to investors due to the Company's own credit risk	–	–	–	–	(25,093)	–	–	(25,093)
Share-based compensation	–	–	–	–	–	13,504	–	13,504
Automatic conversion of Preferred Shares upon Global Offering	–	6,930,964	–	–	(17,438)	–	17,438	6,930,964
Shares issued upon global offering	–	2,576,082	–	–	–	–	–	2,576,082
Issue of shares held in trust*	–	–	–*	–	–	–	–	–*
Issue ordinary shares for exercise of share-based payment	–	1,118	–	–	–	–	–	1,118
Capitalised listing fee	–	(88,349)	–	–	–	–	–	(88,349)
Balance at December 31, 2021	54,800	9,419,815	–*	44,476	–	27,356	(6,549,788)	2,996,659
Balance at January 1, 2022	**54,800**	**9,419,815**	**–**	**44,476**	**–**	**27,356**	**(6,549,788)**	**2,996,659**
Loss for the year	**–**	**–**	**–**	**–**	**–**	**–**	**(892,247)**	**(892,247)**
Exchange differences	**–**	**–**	**–**	**314,261**	**–**	**–**	**–**	**314,261**
Share-based compensation	**–**	**–**	**–**	**–**	**–**	**43,995**	**–**	**43,995**
Issue of shares held in trust	**–**	**–**	**–***	**–**	**–**	**–**	**–**	**–***
Issue of shares to employees under Employee Incentive Schemes	**–**	**8,034**	**–**	**–**	**–**	**–**	**–**	**8,034**
Transfer of treasury shares to employees under Employee Incentive Schemes	**–**	**2,471**	**–***	**–**	**–**	**–**	**–**	**2,471**
Balance at December 31, 2022	**54,800**	**9,430,320**	**–***	**358,737**	**–**	**71,351**	**(7,442,035)**	**2,473,173**

* The amounts are less than RMB1,000.

Note(a): Capital reserve arose from the capital contribution of patents, which were recognized as intangible assets, from CARsgen Therapeutics' equity shareholder, Shanghai Yijie Bio-tech Co., Ltd. on the date of CARsgen Therapeutics' incorporation.

Note(b): Share-based compensation arose from share-based compensation granted to employees of the Group (Note 24).

27. BORROWINGS

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
Non-current		
Secured bank borrowings	2,523	7,375
Current		
Unsecured borrowings	–	214,727
Secured bank borrowings	4,850	4,604
	4,850	219,331
Total	7,373	226,706

As at December 31, 2022 and 2021, the Group's bank borrowings of approximately RMB7,373,000 and RMB11,979,000 respectively are pledged by property, plant and equipment and right-of-use assets of the Group (Notes 15 and 16).

At December 31, 2022 and 2021, the Group's borrowings were repayable as follows:

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
Within 1 year	4,850	219,331
Between 1 and 2 years	2,523	4,835
Between 2 and 3 years	–	2,540
Total	7,373	226,706

The weighted average effective interest rates at each balance sheet date were as follows:

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
Bank borrowings	5.23%	4.88%

27. BORROWINGS (continued)

The fair values of the borrowings approximate their carrying amounts as the discounting impact is not significant.

As at December 31, 2022, the Group's secured borrowings is mature within three years with the annual interest rate of 5.2250% (2021: 5.2250%).

28. LEASE LIABILITIES

	As at December 31, 2022 *RMB'000*	As at December 31, 2021 *RMB'000*
Minimum lease payments due		
– Within 1 year	**21,451**	18,446
– Between 1 and 2 years	**18,936**	19,853
– Between 2 and 5 years	**50,332**	49,842
– Over 5 years	**39,580**	43,698
	130,299	131,839
Less: future finance charges	**(18,227)**	(20,500)
Present value of lease liabilities	**112,072**	111,339
Less: Current portion lease liabilities	**(17,134)**	(14,027)
Non-current portion of lease liabilities	**94,938**	97,312
– Within 1 year	**17,134**	14,027
– Between 1 and 2 years	**15,323**	16,114
– Between 2 and 5 years	**43,514**	42,138
– Over 5 years	**36,101**	39,060
Present value of lease liabilities	**112,072**	111,339

The Group leases land use right and properties. Lease on land use right has been fully paid and lease on properties were measured at net present value of the lease payments to be paid during the lease terms.

Lease liabilities were discounted at incremental borrowing rates of the Group.

29. DEFERRED INCOME

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
Non-current	21,180	15,116
Current	6,565	10,144
Total	**27,745**	**25,260**

Deferred income represented government grants received relating to property, plant and equipment to be recognized over the estimated useful lives of the related assets and government grant received relating to costs to be recognized over the period necessary to match the costs they are intended to compensate.

30. ACCRUALS AND OTHER PAYABLES

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
Accrued expenses	81,536	45,520
Payables for acquisition of property, plant and equipment	1,529	37,969
Payables for research and development consumables	503	340
Staff salaries and welfare payables	51,017	45,837
Other taxes payable	4,094	2,620
Interest payables	49	393
Others	2,386	5,346
Total	**141,114**	138,025

The carrying amounts of accruals and other payables of the Group are denominated in the following currencies:

	As at December 31, 2022 RMB'000	As at December 31, 2021 RMB'000
RMB	87,264	85,992
USD	53,850	52,033
Total	**141,114**	138,025

31. CASH FLOW INFORMATION

(a) Reconciliation of loss before income tax to net cash used in operation

	As at December 31,	
	2022	2021
	RMB'000	*RMB'000*
Loss before income tax	**(890,952)**	(4,736,778)
Adjustments for		
– Depreciation and amortization *(Note 15, 16 and 17)*	**81,533**	52,446
– Share-based compensation expenses *(Note 24)*	**43,995**	13,504
– Finance costs – net *(Note 11)*	**9,655**	7,301
– Interest income on term deposits with original maturity between three and twelve months *(Note 7)*	**(21,700)**	(6,043)
– Net foreign exchange losses/(gains) *(Note 8)*	**97,351**	(7,451)
– (Gains)/Losses on disposals of property, plant and equipment	**(23)**	83
– Write-off of intangible assets	**2,910**	–
– Gains from termination of lease agreements	**(68)**	–
– Fair value losses on financial instruments issued to investors	**–**	4,155,572
– Government grants relating to investing activities	**(7,450)**	(7,903)
	(684,749)	(529,269)
Changes in working capital:		
– Increase in other receivables	**(2,609)**	(6,543)
– Decrease/(Increase) in other current assets and prepayment	**1,261**	(5,109)
– Increase in accruals and other payables	**39,873**	39,925
– Increase in deferred income on government grants (excluding those relating to acquisition of non-current assets)	**(180)**	(1,135)
– Decrease/(Increase) in other non-current assets and prepayments	**5,137**	(13,759)
Cash used in operations	**(641,267)**	(515,890)

31. CASH FLOW INFORMATION (continued)

(b) Reconciliation of net debt

	As at December 31,	
	2022	2021
	RMB'000	*RMB'000*
Cash and cash equivalents *(Note 21)*	**2,268,036**	691,284
Borrowings and interest payables *(Note 27 and Note 30)*	**(7,422)**	(227,099)
Lease liabilities *(Note 28)*	**(112,072)**	(111,339)
Net debt	**2,148,542**	352,846

(c) Reconciliation of liabilities from financing activities

	Borrowings and interest payables *RMB'000*	Lease liabilities *RMB'000*	Subtotal *RMB'000*	Cash and cash equivalents *RMB'000*	Total *RMB'000*
At January 1, 2021	(80,561)	(19,906)	(100,467)	1,042,969	942,502
Cash flows	(138,515)	18,381	(120,134)	(309,611)	(429,745)
Foreign exchange adjustments	–	–	–	(42,074)	(42,074)
New lease agreement entered into	–	(106,968)	(106,968)	–	(106,968)
Interest expenses	(8,023)	(2,846)	(10,869)	–	(10,869)
At December 31, 2021	(227,099)	(111,339)	(338,438)	691,284	352,846

	Borrowings and interest payables ***RMB'000***	**Lease liabilities** ***RMB'000***	**Subtotal** ***RMB'000***	**Cash and cash equivalents** ***RMB'000***	**Total** ***RMB'000***
At January 1, 2022	**(227,099)**	**(111,339)**	**(338,438)**	**691,284**	**352,846**
Cash flows	**230,218**	**16,801**	**247,019**	**1,507,428**	**1,754,447**
Foreign exchange adjustments	**–**	**–**	**–**	**69,324**	**69,324**
New lease agreement entered into	**–**	**(19,135)**	**(19,135)**	**–**	**(19,135)**
Termination and modification of lease agreements	**–**	**6,581**	**6,581**	**–**	**6,581**
Interest expenses	**(10,541)**	**(4,980)**	**(15,521)**	**–**	**(15,521)**
At December 31, 2022	**(7,422)**	**(112,072)**	**(119,494)**	**2,268,036**	**2,148,542**

32. COMMITMENTS

(a) Capital commitments

Capital expenditure contracted for by the Group at the balance sheet date but not yet incurred is as follows:

	As at December 31, 2022 *RMB'000*	As at December 31, 2021 *RMB'000*
Property, plant and equipment	**2,923**	80,999

(b) Lease commitments – where the Group is the lessee

At the balance sheet dates, lease commitments of the Group for leases not yet commenced for short-term lease and low-value lease are as follows:

	As at December 31, 2022 *RMB'000*	As at December 31, 2021 *RMB'000*
No later than 1 year	**179**	46

33. RELATED PARTY TRANSACTIONS

Parties are considered to be related in one party has the ability, directly or indirectly, to control the other part or exercise significant influence over the other party in making financial and operation decisions. Parties are also considered to be related if they are subject to common control. The following is a summary of the significant transactions carried out between the Group and its related parties in the ordinary course of business during the years ended December 31, 2022 and 2021 respectively.

33. RELATED PARTY TRANSACTIONS (continued)

(a) Key management compensation

Compensations for key management other than those for directors as disclosed in Note 34 is set out below.

	Year ended December 31,	
	2022	2021
	RMB'000	*RMB'000*
Basic salaries, share options, other allowances and benefits in kind	**32,590**	15,299
Discretionary bonus	**3,907**	2,599
Social security costs	**973**	620
Total	**37,470**	18,518

34. DIRECTORS' BENEFITS AND INTERESTS

(a) Directors' emoluments

Directors and chief executives' emoluments for the years ended December 31, 2022 and 2021 are set out as follows:

	Fees	Salary	Discretionary bonus	Allowances and benefits in kind	Pension costs	Other benefits	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Year ended December 31, 2021							
Chairman and executive director							
Zonghai LI *(i)*	–	920	503	–	57	82	1,562
Executive director							
Huamao Wang *(ii)*	–	1,448	500	–	57	148	2,153
Non-executive director							
Bingsen Guo *(iv)*	–	–	–	–	–	–	–
Yachao Zhao *(v)*	–	–	–	–	–	–	–
Ronggang Xie *(vi)*	–	–	–	–	–	–	–
Huaqing Guo *(vii)*	–	–	–	–	–	–	–
Independent non-executive director							
Chunhai Fan *(viii)*	184	–	–	–	–	–	184
Guangmei Yan *(ix)*	184	–	–	–	–	–	184
Tak Young So *(x)*	184	–	–	–	–	–	184
	552	2,368	1,003	–	114	230	4,267

34. DIRECTORS' BENEFITS AND INTERESTS (continued)

(a) Directors' emoluments (continued)

	Fees *RMB'000*	Salary *RMB'000*	Discretionary bonus *RMB'000*	Allowances and benefits in kind *RMB'000*	Pension costs *RMB'000*	Other benefits *RMB'000*	Total *RMB'000*
Year ended December 31, 2022							
Chairman and executive director							
Zonghai LI *(i)*	–	1,070	776	–	63	84	1,993
Executive director							
Huamao Wang *(ii)*	–	1,088	844	–	63	141	2,136
Hua Jiang *(iii)*	–	840	56	–	63	166	1,125
Non-executive director							
Bingsen Guo *(iv)*	–	–	–	–	–	–	–
Yachao Zhao *(v)*	–	–	–	–	–	–	–
Ronggang Xie *(vi)*	–	–	–	–	–	–	–
Huaqing Guo *(vii)*	–	–	–	–	–	–	–
Independent non-executive director							
Chunhai Fan *(viii)*	402	–	–	–	–	–	402
Guangmei Yan *(ix)*	402	–	–	–	–	–	402
Tak Young So *(x)*	402	–	–	–	–	–	402
	1,206	2,998	1,676	–	189	391	6,460

(i) Mr. Zonghai LI was appointed as director on February 9, 2018, appointed as chairman of the Board and redesignated as an executive Director on February 23, 2021.

(ii) Mr. Huamao Wang was appointed as director on September 13, 2018 and redesignated as an executive Director on February 23, 2021.

(iii) Ms. Hua Jiang was appointed as an executive Director on August 1, 2022.

(iv) Mr. Bingsen Guo was appointed as director on September 13, 2018 and re-designated as a non-executive Director on February 23, 2021.

(v) Ms. Yachao Zhao was appointed as director on September 13, 2018, re-designated as a non-executive Director on February 23, 2021 and resigned on May 27, 2022.

(vi) Mr. Ronggang Xie was appointed as director on September 18, 2020 and re-designated as a non-executive Director on February 23, 2021.

(vii) Mr. Huaquing Guo was appointed as director on September 18, 2020 and re-designated as a non-executive Director on February 23, 2021.

(viii) Dr. Chunhai Fan was appointed as an independent non-executive director on June 18, 2021.

(ix) Dr. Guangmei Yan was appointed as an independent non-executive director on June 18, 2021.

(x) Mr. Tak Young So was appointed as an independent non-executive director on June 18, 2021.

34. DIRECTORS' BENEFITS AND INTERESTS (continued)

(b) Directors' retirement benefits

None of the directors received or will receive any retirement benefits during the years ended December 31, 2022 and 2021.

(c) Directors' termination benefits

None of the directors received or will receive any termination benefits during the years ended December 31, 2022 and 2021.

(d) Consideration provided to third parties for making available directors' services

During the years ended December 31, 2022 and 2021, the Company did not pay consideration to any third parties for making available directors' services.

(e) Information about loans, quasi-loans and other dealings in favor of directors, bodies corporate controlled by or entities connected with directors

Save as disclosed in Note 34(b), there were no loans, quasi-loans and other dealings in favor of directors, controlled bodies corporate by and connected entities with such directors during the years ended December 31, 2022 and 2021.

(f) Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements and contracts in relation to the Group's business to which the Company was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at the end of the years or at any time during the years ended December 31, 2022 and 2021.

35. FINANCIAL POSITION AND RESERVE MOVEMENT OF THE COMPANY

(a) Statement of Financial Position of the Company

	As at December 31,	
	2022	2021
	RMB'000	*RMB'000*
ASSETS		
Non-current assets		
Investment in subsidiaries	**705,894**	604,515
Other receivables	**2,864,149**	1,500,005
	3,570,043	2,104,520
Current assets		
Cash and cash equivalents	**1,610,852**	430,642
Time deposits with original maturity between three and twelves months	**–**	2,154,987
	1,610,852	2,585,629
Total assets	**5,180,895**	4,690,149
EQUITY AND LIABILITIES		
Equity attributable to owners of the Company		
Share capital	**1**	1
Reserves	**5,176,487**	4,688,896
Total equity	**5,176,488**	4,688,897
Liabilities		
Current liabilities		
Accruals and other payables	**4,407**	1,252
	4,407	1,252
Total liabilities	**4,407**	1,252
Total equity and liabilities	**5,180,895**	4,690,149

The above Company statement of financial position should be read in conjunction with the accompanying notes.

The statement of financial position of the Company was approved and authorised for issue by the board of directors on March 21, 2023.

Zonghai LI
Director

Huamao WANG
Director

35. FINANCIAL POSITION AND RESERVE MOVEMENT OF THE COMPANY (continued)

(b) Reserve movement of the Company

	Share premium *RMB'000*	Treasury shares *RMB'000*	Currency translation reserve *RMB'000*	Other reserve *RMB'000*	Share-based compensation *RMB'000*	accumulated loss *RMB'000*	Total *RMB'000*
Balance at January 1, 2021	262,672	–	22,703	42,531	13,852	(881,693)	(539,935)
Loss for the year	–	–	–	–	–	(4,165,874)	(4,165,874)
Exchange differences	–	–	(11,328)	–	–	–	(11,328)
Fair value changes relating to financial instruments issued to investors due to the Company's own credit risk	–	–	–	(25,093)	–	–	(25,093)
Share-based compensation	–	–	–	–	13,504	–	13,504
Automatic conversion of Preferred Shares upon Global Offering	6,930,964	–	–	(17,438)	–	15,245	6,928,771
Shares issued upon global offering	2,576,082	–	–	–	–	–	2,576,082
Issue of shares held in trust*	–	–*	–	–	–	–	–*
Issue ordinary shares for exercise of share-based payment	1,118	–	–	–	–	–	1,118
Capitalised listing fee	(88,349)	–	–	–	–	–	(88,349)
Balance at December 31, 2021	9,682,487	–*	11,375	–	27,356	(5,032,322)	4,688,896
Balance at January 1, 2022	**9,682,487**	**–**	**11,375**	**–**	**27,356**	**(5,032,322)**	**4,688,896**
Loss for the year	**–**	**–**	**–**	**–**	**–**	**(2,010)**	**(2,010)**
Exchange differences	**–**	**–**	**435,101**	**–**	**–**	**–**	**435,101**
Share-based compensation	**–**	**–**	**–**	**–**	**43,995**	**–**	**43,995**
Issue of shares held in trust*	**–**	**–***	**–**	**–**	**–**	**–**	**–***
Issue of shares to employees under Employee Incentive Schemes	**8,034**	**–**	**–**	**–**	**–**	**–**	**8,034**
Transfer of treasury shares to employees under Employee Incentive Schemes	**2,471**	**–***	**–**	**–**	**–**	**–**	**2,471**
Balance at December 31, 2022	**9,692,992**	**–***	**446,476**	**–**	**71,351**	**(5,034,332)**	**5,176,487**

* The amounts are less than RMB1,000.

36. CONTINGENCIES

The Group did not have any material contingent liabilities as at December 31, 2022 and 2021.

37. SUBSEQUENT EVENTS

As at January 16, 2023, CARsgen Life Sciences, a wholly-owned subsidiary of the Company and Huadong Medicine (Hangzhou) Co., Ltd., a wholly-owned subsidiary of Huadong Medicine Co., Ltd. entered into a collaboration agreement (the "Agreement") for the commercialization of CARsgen's drug candidate, zevorcabtagene autoleucel (CT053) in mainland China. Pursuant to the Agreement, Huadong Medicine Co., Ltd. is granted the exclusive right to commercialize zevor-cel in mainland China. Under the terms of the Agreement, CARsgen Life Sciences will receive an upfront payment of RMB200 million and is eligible to receive regulatory and commercial milestone payments up to RMB1,025 million. CARsgen Life Sciences will continue to be responsible for the development, regulatory approval, and manufacturing of CT053 in mainland China.

Financial Summary

	As at December 31			
	2022	2021	2020	2019
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Total current assets	**2,300,639**	3,070,853	1,055,795	115,000
Total non-current assets	**462,180**	434,782	198,056	210,811
Total assets	**2,762,819**	3,505,635	1,253,851	325,811
Total current liabilities	**171,004**	389,172	145,231	1,021,370
Total non-current liabilities	**118,641**	119,803	2,784,748	37,045
Total liabilities	**289,645**	508,975	2,929,979	1,058,415
Equity attributable to equity holders of the Company	**2,473,174**	2,996,660	(1,676,128)	(732,604)
Total equity/(deficit)	**2,473,174**	2,996,660	(1,676,128)	(732,604)
Total equity and liabilities	**2,762,819**	3,505,635	1,253,851	325,811

	For the year ended 31 December			
	2022	2021	2020	2019
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Revenue	**–**	25,813	–	–
Gross profit	**–**	25,813	–	–
Operating loss	**(881,297)**	(573,905)	(327,045)	(227,400)
Loss before income tax	**(890,952)**	(4,736,778)	(1,064,049)	(265,133)
Loss for the year	**(892,247)**	(4,744,423)	(1,064,049)	(265,133)
Loss attributable to equity holders of the Company	**(892,247)**	(4,744,423)	(1,064,049)	(265,133)

Forward-Looking Statements

All statements in this report that are not historical fact or that do not relate to present facts or current conditions are forward-looking statements. Such forward-looking statements express the Group's current views, projections, beliefs and expectations with respect to future events as of the date of this report. Such forward-looking statements are based on a number of assumptions and factors beyond the Group's control. As a result, they are subject to significant risks and uncertainties, and actual events or results may differ materially from these forward-looking statements and the forward-looking events discussed in this report might not occur. Such risks and uncertainties include, but are not limited to, those detailed under the heading "Principal Risks and Uncertainties" in our most recent annual report and interim report and other announcements and reports made available on our corporate website, https://www.carsgen.com. No representation or warranty is given as to the achievement or reasonableness of, and no reliance should be placed on, any projections, targets, estimates or forecasts contained in this report.

Definitions

"2019 Equity Incentive Plan"	the equity incentive plan of our Company as adopted by way of written resolutions of the Board on January 22, 2019, the principal terms of which are set out in the section headed "Statutory and General Information — D. 2019 Equity Incentive Plan" in the Prospectus
"affiliate"	any other person, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified person
"Audit Committee"	the audit committee of the Company
"Board of Directors", "Board" or "our Board"	our board of Directors
"BVI"	the British Virgin Islands
"CARsgen Life Sciences"	CARsgen Life Sciences Co., Ltd (愷興生命科技(上海)有限公司), a wholly foreign-owned enterprise incorporated in the PRC on March 22, 2018 and an indirectly wholly-owned subsidiary of our Company
"CARsgen Pharmaceuticals"	CARsgen Pharmaceuticals Co., Ltd (上海科濟製藥有限公司), a company incorporated in the PRC with limited liability on November 15, 2017 and wholly-owned by CARsgen Therapeutics (Shanghai)
"CARsgen Therapeutics (Shanghai)"	CARsgen Therapeutics Co., Ltd (科濟生物醫藥(上海)有限公司), a company incorporated in the PRC with limited liability on October 30, 2014, and one of our Consolidated Affiliated Entities
"China" or "PRC"	the People's Republic of China, which for the purpose of the Prospectus and for geographical reference only, excludes Hong Kong, Macao and Taiwan
"Company", "our Company", "the Company", "CARsgen Therapeutics" or "CARsgen"	CARsgen Therapeutics Holdings Limited (科濟藥業控股有限公司), an exempted company incorporated in the Cayman Islands with limited liability on February 9, 2018
"Companies Ordinance"	the Companies Ordinance (Cap. 622), as amended, supplemented or otherwise modified from time to time
"Consolidated Affiliated Entities"	the entities we control through the Contractual Arrangements, namely CARsgen Therapeutics (Shanghai) and its wholly-owned subsidiary, CARsgen Pharmaceuticals
"Contractual Arrangements"	the series of contractual arrangements entered into among CARsgen Life Sciences, CARsgen Therapeutics, the Corporate Registered Shareholder and the Individual Registered Shareholders details of which are described in the section headed "Contractual Arrangements" in this report
"Core Product Candidate"	has the meaning ascribed to it in Chapter 18A of the Listing Rules and in this context, refers to CT053

"Corporate Governance Code" or "CG Code"	the Corporate Governance Code set out in Appendix 14 to the Listing Rules
"Corporate Registered Shareholder"	YIJIE Biotech (Shanghai) Holding Limited (上海益傑生物技術有限公司), being the registered shareholder of CARsgen Therapeutics
"Director(s)"	the director(s) of the Company
"Group", "our Group", "we", "us" or "our"	our Company, its subsidiaries and consolidated affiliated entities from time to time or, where the context so requires, in respect of the period prior to our Company becoming the holding company of its present subsidiaries and consolidated affiliated entities, such subsidiaries and consolidated affiliated entities as if they were subsidiaries and consolidated affiliated entities of our Company at the relevant time
"HK$" or "Hong Kong dollars"	Hong Kong dollars, the lawful currency of Hong Kong
"Hong Kong" or "HK"	the Hong Kong Special Administrative Region of the People's Republic of China
"Individual Registered Shareholders"	Dr. Zonghai LI, Mr. Bingsen GUO, Dr. Huamao WANG, Mr. Huaqing GUO and Mr. Haiou CHEN, being the registered shareholders of the Corporate Registered Shareholder
"Latest Practicable Date"	April 11, 2023, being the latest practicable date prior to the printing of this report for the purpose of ascertaining certain information contained in this report
"Listing Date"	June 18, 2021
"Listing Rules"	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended, supplemented or otherwise modified from time to time
"Model Code"	Model Code for Securities Transactions by Directors of Listed Issuers
"MOFCOM"	the Ministry of Commerce of the PRC (中華人民共和國商務部)
"NDRC"	the National Development and Reform Commission of the PRC (中華人民共和國國家發展和改革委員會)
"Nomination and Corporate Governance Committee"	the nomination and corporate governance committee of the Company
"NMPA"	National Medical Products Administration (國家藥品監督管理局), the successor of the China Food and Drug Administration (國家食品藥品監督管理總局), or the CFDA, the State Food and Drug Administration (國家食品藥品監督管理局), or the SFDA and the State Drug Administration (國家藥品監督管理局), or the SDA

Definitions

"Post-IPO RSU Scheme"	the post-IPO RSU scheme adopted by our Company on April 30, 2021, the principal terms of which are set out in the section headed "Appendix V — Statutory and General Information" in the Prospectus
"Post-IPO Share Option Scheme"	the post-IPO share option scheme adopted by our Company on April 30, 2021, the principal terms of which are set out in the section headed "Appendix V — Statutory and General Information" in the Prospectus
"Prospectus"	the prospectus issued by the Company on June 7, 2021 in connection with the IPO
"Reporting Period"	the period from January 1, 2022 to December 31, 2022
"RMB" or "Renminbi"	Renminbi, the lawful currency of China
"RSU(s)"	restricted share unit(s)
"Remuneration Committee"	the remuneration committee of the Company
"Share(s)"	ordinary share(s) in the share capital of our Company with a par value of US$0.00000025 each
"SFO"	the Securities and Futures Ordinance (Cap. 571), as amended, supplemented or otherwise modified from time to time
"United States" or "U.S." or "US"	the United States of America, its territories, its possessions and all areas subject to its jurisdiction
"US$" or "U.S. dollars" or "USD"	United States dollars, the lawful currency of the United States

In this report, the terms "associate", "connected person", "controlling shareholder" and "subsidiary" shall have the meanings given to such terms in the Listing Rules, unless the context otherwise requires.

Glossary

"ADCC"	antibody-dependent cellular cytotoxicity is an immune mechanism through which Fc receptor-bearing effector cells recognize and kill antibody-coated target cells expressing tumor- or pathogen-derived antigens on their surface
"antigen"	the substance that is capable of stimulating an immune response, specifically activating lymphocytes, which are the body's infection-fighting white blood cells
"BCMA"	B-cell maturation antigen, a protein that is highly expressed in multiple myeloma with limited expression on normal tissues other than plasma cells
"BLA"	biologics license application
"B2M"	beta 2 microglobulin
"CAR(s)"	chimeric antigen receptor(s)
"CAR-T" or "CAR T"	chimeric antigen receptor T cell
"CD19"	a cell surface protein expressed on the surface of almost all B cell leukemia and lymphoma
"CDC"	complement-dependent cytotoxicity, an effector function of IgG and IgM antibodies
"CDE"	Center for Drug Evaluation, an institution under the NMPA
"CGMP"	current good manufacturing practices
"chemotherapy"	a category of cancer treatment that uses one or more anti-cancer chemotherapeutic agents as part of its standardized regimen
"CLDN18.2"	Claudin18.2, a target in the treatment of certain solid tumors such as gastric cancer, esophageal cancer and pancreatic cancer
"CMC"	chemistry, manufacturing, and controls processes in the development, licensure, manufacturing, and ongoing marketing of pharmaceutical products
"cohort"	a group of patients as part of a clinical study who share a common characteristic or experience within a defined period and who are monitored over time
"combination therapy"	treatment in which a patient is given two or more therapeutic agents for the treatment of a single disease
"CRS"	cytokine release syndrome, a form of systemic inflammatory response syndrome that arises as a complication of some diseases or infections, and is also an adverse effect of some monoclonal antibody drugs, as well as adoptive T cell therapies

Glossary

"CycloCAR®"	a next-generation CAR-T technology under development by the Company, which features co-expression of cytokines IL-7 and chemokine CCL21 in the CAR T-cells to potentially improve clinical efficacy and reduced requirement for lymphodepletion conditioning
"cytokine"	a broad and loose category of small proteins that are important in cell signaling. Their release affects the growth of all blood cells and other cells that help the body's immune and inflammation responses
"EGFR"	epidermal growth factor receptor
"EGFRvIII"	variant III of epidermal growth factor receptor
"EMA"	European Medicines Agency
"FDA" or "U.S. FDA"	U.S. Food and Drug Administration
"GMP"	Good Manufacturing Practice
"GPC3"	Glypican-3, an oncofetal antigen expressed in a variety of tumors including certain liver and lung cancers
"Grade"	term used to refer to the severity of adverse events
"GvHD"	graft versus host disease
"HCC"	hepatocellular carcinoma, a type of cancer arising from hepatocytes in predominantly cirrhotic liver
"HLA"	human leukocyte antigen
"HvGR"	host versus graft response
"IHC"	immunohistochemistry, which is the identification of antigens in tissues using antibodies that are linked to enzymes, fluorescent dyes, or radioactive labels. IHC is used to diagnose and track specific cellular anomalies, such as cancers
"IIT" or "investigator-initiated trial"	clinical trial sponsored and conducted by independent investigators
"IND"	investigational new drug or investigational new drug application, also known as clinical trial application in China
"LADAR®"	Local Action Driven by Artificial Receptor technology, with similar mechanism of synNotch system, in which the intracellular transcription of the gene of interest is controlled by a chimeric regulatory antigen receptor
"mAb" or "monoclonal antibody"	antibodies that are made by identical immune cells which are all clones belonging to a unique parent cell

"mesothelin"	cell-surface protein whose expression is mostly restricted to mesothelial cell layers lining the pleura, pericardium and peritoneum
"MM" or "R/R MM"	multiple myeloma, a type of cancer that forms in the white blood cells; cancer that relapses or does not respond to treatment is called relapsed and/or refractory multiple myeloma
"NDA"	new drug application
"NK cell"	natural killer cell, the human body's first line of defense due to their innate ability to rapidly seek and destroy abnormal cells
"NKG2A"	also named KLRC1, killer cell lectin-like receptor subfamily C, member 1
"NMPA"	National Medical Products Administration (國家藥品監督管理局), the successor of the China Food and Drug Administration (國家食品藥品監督管理總局), or the CFDA, the State Food and Drug Administration (國家食品藥品監督管理局), or the SFDA and the State Drug Administration (國家藥品監督管理局), or the SDA
"neurotoxicity"	possible adverse side effect of T cell therapies that leads to a state of confusion, aphasia, encephalopathy, tremor, muscular weakness, and somnolence
"PD-L1"	PD-1 ligand 1, which is a protein on the surface of a normal cell or a cancer cell that attaches to PD-1 on the surface of the T cell that causes the T cell to turn off its ability to kill the cancer cell
"Phase I"	a study in which a drug is introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage, tolerance, absorption, metabolism, distribution, excretion, and if possible, to gain an early indication of its effectiveness
"Phase Ib"	a phase of clinical trials that primarily assesses safety, tolerability and pharmacokinetics/pharmacodynamics at multiple ascending dose levels prior to commencement of a Phase II or Phase III clinical trial
"Phase II"	a study in which a drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the drug for specific targeted disease, and to determine dosage tolerance and optimal dosage
"confirmatory trial" or "pivotal trial"	the trial or study intended to demonstrate the required clinical efficacy and safety evidence before submission for drug marketing approval
"PRIME"	PRIority MEdicine. A scheme launched by the EMA to offer early and proactive support to medicine developers to optimize the generation of robust data on medicine's benefits and risks, and accelerate assessment of medicines applications, for medicines that target an unmet medical need with advantages over existing treatments

Glossary

"regenerative medicine advanced therapy" or "RMAT"	a special status granted by the FDA to regenerative medicine therapies, including cell therapies, intended to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug has the potential to address unmet medical needs for such disease or condition
"solid tumor"	an abnormal mass of tissue that usually does not contain cysts or liquid areas
"TCR"	T cell receptor
"THANK-uCAR®"	the Company's proprietary technology to generate CAR T cells with improved expansion and persistence from T cells that are sourced from third-party donors
"United States" or "U.S."	the United States of America, its territories, its dependencies and all areas subject to its jurisdiction