



百奧賽圖
BIOCYTOGEN

百奧賽圖(北京)醫藥科技股份有限公司
Biocytogen Pharmaceuticals (Beijing) Co., Ltd.

(A joint stock company incorporated in the People's Republic of China with limited liability)
(於中華人民共和國註冊成立的股份有限公司)

Stock code 股份代號：2315

2023 中期報告
Interim Report



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公司資料 Corporate Information

中文名稱

百奧賽圖(北京)醫藥科技股份有限公司

英文名稱

Biocytogen Pharmaceuticals (Beijing) Co., Ltd.*

股份代號

02315

法定代表人

沈月雷博士

董事長

沈月雷博士

總辦事處及中國主要營業地點

中國
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大興生物醫藥產業基地
寶參南街12號院

註冊辦事處

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北京市大興區
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* 僅供識別

CHINESE NAME

百奧賽圖(北京)醫藥科技股份有限公司

ENGLISH NAME

Biocytogen Pharmaceuticals (Beijing) Co., Ltd.*

STOCK CODE

02315

LEGAL REPRESENTATIVE

Dr. Shen Yuelei

CHAIRMAN OF THE BOARD

Dr. Shen Yuelei

HEAD OFFICE AND PRINCIPLE PLACE OF BUSINESS IN CHINA

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Daxing District, Beijing
PRC

REGISTERED OFFICE

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* For identification purpose only

董事會

執行董事

沈月雷博士 (董事長、首席執行官兼總經理)
倪健博士
張海超博士 (動物中心高級運營總監)

非執行董事

魏義良先生
周可祥博士
張蕾娣女士

獨立非執行董事

華風茂先生
喻長遠博士
梁曉燕女士

監事

李妍女士
孫春麗女士
姚佳維博士

審計委員會

梁曉燕女士 (主席)
華風茂先生
喻長遠博士
魏義良先生

薪酬與考核委員會

華風茂先生 (主席)
梁曉燕女士
喻長遠博士
倪健博士

BOARD OF DIRECTORS

Executive Directors

Dr. Shen Yuelei (*Chairman, chief executive officer and general manager*)
Dr. Ni Jian
Dr. Zhang Haichao (*Senior operation director of animal center*)

Non-executive Directors

Mr. Wei Yiliang
Dr. Zhou Kexiang
Ms. Zhang Leidi

Independent Non-executive Directors

Mr. Hua Fengmao
Dr. Yu Changyuan
Ms. Liang Xiaoyan

SUPERVISORS

Ms. Li Yan
Ms. Sun Chunli
Dr. Yao Jiawei

AUDIT COMMITTEE

Ms. Liang Xiaoyan (*Chairman*)
Mr. Hua Fengmao
Dr. Yu Changyuan
Mr. Wei Yiliang

REMUNERATION AND EVALUATION COMMITTEE

Mr. Hua Fengmao (*Chairman*)
Ms. Liang Xiaoyan
Dr. Yu Changyuan
Dr. Ni Jian

公司資料 Corporate Information

提名委員會

喻長遠博士(主席)
華風茂先生
梁曉燕女士
沈月雷博士

戰略發展委員會

沈月雷博士(主席)
周可祥博士
魏義良先生
張蕾娣女士

聯席公司秘書

王永亮先生
區慧晶女士
(香港公司治理公會及英國
特許公司治理公會會員)

授權代表

沈月雷博士
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核數師

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執業會計師
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NOMINATION COMMITTEE

Dr. Yu Changyuan (*Chairman*)
Mr. Hua Fengmao
Ms. Liang Xiaoyan
Dr. Shen Yuelei

STRATEGY DEVELOPMENT COMMITTEE

Dr. Shen Yuelei (*Chairman*)
Dr. Zhou Kexiang
Mr. Wei Yiliang
Ms. Zhang Leidi

JOINT COMPANY SECRETARIES

Mr. Wang Yongliang
Ms. Au Wai Ching (*associate member of The Hong Kong Chartered
Governance Institute and The Chartered Governance Institute
in the United Kingdom*)

AUTHORIZED REPRESENTATIVES

Dr. Shen Yuelei
Ms. Au Wai Ching

AUDITOR

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財務概要 Financial Summary

		截至2023年 6月30日 止六個月 Six months ended June 30, 2023 人民幣千元 RMB' 000 (未經審核) (Unaudited)	截至2022年 6月30日 止六個月 Six months ended June 30, 2022 人民幣千元 RMB'000 (未經審核) (Unaudited)	同比變動 Period-to- period change %
收益	Revenue	326,836	229,131	42.6
毛利	Gross profit	235,364	166,970	41.0
除稅前虧損	Loss before taxation	(189,389)	(272,593)	(30.5)
期內虧損	Loss for the period	(189,809)	(272,593)	(30.4)
本公司權益股東 應佔期內虧損	Loss for the period attributable to equity shareholders of the Company	(189,808)	(272,385)	(30.3)
期內全面收入總額	Total comprehensive income for the period	(190,098)	(272,236)	(30.2)
每股虧損基本及攤薄(人民幣)	Loss per share basic and diluted (RMB)	(0.48)	(0.73)	(34.2)

* 本報告所載若干金額及百分比數字已經約整，或約整至小數點後一位或兩位數。任何表格、圖表或其他地方所列總數與金額總和之間的任何差異乃因約整所致。

Certain amounts and percentage figures included in this report have been subject to rounding adjustments or have been rounded to one or two decimal places. Any discrepancies in any tables, charts or elsewhere between totals and sums or amounts listed therein are due to rounding.

I. 業務回顧

概覽

我們於2009年成立，是一家致力於新型抗體藥物研發和臨床前研究服務的全球化生物技術公司。不同於傳統的化學藥品是由藥品生產企業通過精確的配方合成，生物藥品是在活的生物體內製造且更複雜的蛋白分子。臨床前研究服務行業主要包括IND前的藥物發現和臨床前藥理藥效評價服務。藥物發現是一個系統過程，需要跨學科的合作以研發有效且商業上可行的藥物，而早期藥物發現是藥物轉讓的基礎。

2022年下半年以來，受全球宏觀經濟形勢的影響，全球生物醫藥行業融資情況和企業經營環境面臨嚴峻挑戰，中國市場也受到嚴重影響，生物醫藥和生物技術公司紛紛通過減少藥物管線和縮減研發支出等進行調整。面對嚴峻的外部環境，我們也在不斷進行內部調整，以更好應對各種挑戰。我們聚焦公司資源，一方面依託公司在各業務線的技術優勢，進一步開拓海外市場，保持銷售收入的快速增長和較好的毛利率水平；另一方面，調整研發策略，與更多的合作方達成多項藥物分子合作開發，以提高研發效率，控制公司自身的研發開支；再一方面，公司不斷提高運營效率，比如YH008等藥物管線，通過縮減各類費用開支，實現虧損的快速收窄。

I. BUSINESS REVIEW

Overview

Founded in 2009, we are a global biotechnology company dedicated to novel antibody drug discovery and pre-clinical research services. Unlike traditional chemical drugs, which are synthesized by drug manufacturers through precise formulations, biopharmaceuticals are manufactured in living organisms and are more complex protein molecules. The pre-clinical research services industry mainly consists of pre-IND drug discovery and pre-clinical pharmacology and efficacy evaluation services. Drug discovery is a systematic process that requires interdisciplinary collaboration to develop effective and commercially viable drugs, and early drug discovery is the foundation for drug transfer.

Since the second half of 2022, due to the impact of the global macroeconomic situation, the financing situation and business operating environment of the global biopharmaceutical industry have faced severe challenges, and the Chinese market has also been seriously affected, with biopharmaceutical and biotechnology companies making adjustments by reducing their drug pipelines and scaling back R&D expenditures, among other things. In the face of the severe external environment, we have also been making internal adjustments to better cope with the challenges. Focusing our resources, we have, on the one hand, relied on our technological advantages in various business lines to further develop overseas markets and maintain rapid growth in sales revenue and a better level of gross profit margin. On the other hand, we have adjusted our R&D strategy to enter into joint development of a number of drug molecules with more collaborators in order to improve the efficiency of R&D and to control our own R&D expenditures. Furthermore, the Company continued to improve its operational efficiency, including drug pipelines like YH008, and realized a rapid narrowing of its losses by curtailing various types of expenses.

管理層討論與分析

Management Discussion and Analysis

我們的業務模式對應包含轉讓「千鼠萬抗」產生的早期抗體序列，以及聯合開發／授權轉讓／轉讓開發臨床前和早期臨床的藥物分子的藥物研發業務，以及提供高技術壁壘的創新動物模型以及臨床前研究服務。以上業務屬於兩個不同的業務板塊。通過獨特的技術優勢和高質量的研發服務，公司各個業務線在2023年均保持銷售收入的快速增長，海外市場的訂單和營收增長尤為突出，2023年上半年公司銷售收入保持超過40%的快速增長；我們通過調整研發策略，提升企業運營效率，公司各項費用開支得到有效控制，公司2023年上半年虧損同比收窄約30%。

我們的藥物開發業務包括(i)抗體開發業務：我們利用自身抗體發現平台RenMice和「千鼠萬抗」計劃，為1,000多個靶點形成400,000至500,000個抗體序列庫，從而有可能識別潛在的治療性抗體分子，以及通過對外授權或與合作夥伴合作以適應他們的各種抗體模式及持續創新的要求。在授權抗體序列的同時也會為合作方提供藥物早期研發服務；(ii)在腫瘤和自免領域挑選有潛力的少量藥物靶點，篩選獲得有潛力的PCC分子，自主推進到CMC／毒理研究，IND及I期臨床階段，在研發推進的過程中，可以把全部或部分產品權益對外聯合開發／授權轉讓／轉讓開發，獲得首付款、里程碑付款以及銷售分成，實現短期和中長期兼顧的營收持續增長，以實現本公司成為全球新藥發源地的願景。

我們的臨床前研究服務包括基因編輯、臨床前藥理藥效評估及模式動物銷售。我們緊跟全球生物製藥公司的研發需求，提供創新前沿的臨床前服務和更多適應症的動物模型。憑藉多年來向跨國公司及國內生物技術公司提供的服務以及依據我們的內部臨床階段候選藥物，我們的實力獲得認可。我們的服務和產品獲得了海外和國內客戶的廣泛認可，並為我們快速增長的收入和高毛利提供了基礎。

Our business model, correspondingly, consists of transferring early-stage antibody sequences generated by Project Integrum, as well as joint development/authorization of transfer/transfer of development pre-clinical and early-clinical drug molecules through our drug development business and providing innovative animal models and pre-clinical research services with high technological barriers, which are two distinctive business segments. Through our unique technological advantages and high-quality R&D services, the Company's business lines maintained rapid growth in sales revenue in 2023, with orders and revenue growth in overseas markets particularly prominent, and the Company's sales revenue maintained a rapid growth of over 40% in the first half of 2023. By adjusting our R&D strategy and enhancing our operational efficiency, the Company's expenses were effectively controlled, and the Company's loss in the first half of 2023 was narrowed by approximately 30% year-on-year.

Our drug development business includes (i) antibody development business that we utilize our own antibody discovery platforms RenMice and Project Integrum to form 400,000 to 500,000 antibody sequences library for more than 1,000 targets which have the potential to identify potential therapeutic antibody molecules and via out-licensing or collaboration with partners to suit their various antibody modalities and continuous innovation requirements. In addition to licensing antibody sequences, we also provide early drug discovery services to our collaborators; (ii) selecting a small number of potential drug targets in the field of oncology and self-immunity, screen and obtain potential PCC molecules, independently advance to CMC/toxicity studies, IND and Phase I clinical stage, and in the process of R&D advancement, joint development/authorization of transfer/transfer of development all or part of the product interests to foreign countries to obtain the down-payment, the milestones payment and share of sales, so as to achieve the sustainable growth of revenues in the short-term and the medium-to-long-term, fulfilling our vision of becoming a global headstream of new drugs.

Our pre-clinical research services include gene editing, pre-clinical pharmacology and efficacy evaluation, and animal models selling. We keep pace with the R&D needs of global biopharmaceutical companies, providing innovative and cutting-edge pre-clinical services and animal models for a wider range of indications. Our capabilities are validated through our years of services provided to multinational companies and domestic biotechnology companies and evidenced by our in-house clinical-stage drug candidates. Our services and products are widely recognized by overseas and domestic customers and have provided the basis for our fast-growing revenues and high gross margins.

1. 產品及產品管線

依託我們原有基因編輯技術，我們不斷拓展我們獨特的RenMice抗體開發平台，並繼續為創新藥物靶點生產更多有前景的抗體藥物分子。通過大型動物轉化醫學平台，我們不斷提高臨床轉化成功率。另一方面，我們的整體研發戰略是自行指導藥物分子的開發，或者將少量有潛力的藥物分子自主推進到臨床前或早期臨床階段，形成臨床前藥物分子資產或早期臨床藥物資產，然後與生物技術及生物製藥合作夥伴進行聯合開發／轉移開發，而該等公司將主要推動個體抗體藥物分子後續臨床前開發、臨床開發與商業化的加速。目前，我們並無計劃投資自有資源以在不久的將來領導管線候選藥物的後期臨床開發與商業化。

截至2023年6月30日，我們戰略性地設計並建立10項候選藥物組成的精選抗體藥物產品管線，包括五項臨床階段候選藥物及五項臨床前階段候選分子。其中三項候選藥物與不同合作方有授權轉讓安排。所有候選藥物均通過我們的自有抗體發現平台發現。

我們的產品管線包括針對新型靶點的候選藥物或差異化療效或安全性經臨床研究驗證的候選藥物。我們的核心產品包括：(i) YH003，一種靶向CD40(在抗原遞呈細胞上發現的共刺激蛋白)的人源化IgG2激動性單克隆抗體；及(ii) YH001，一種人源化抗CTLA-4 IgG1單克隆抗體。除了內部發展，我們亦打算積極尋求機會與領先生物製藥公司建立戰略及協同合作夥伴關係。我們相信，合作夥伴的專業知識及資源與我們互補，可增加我們候選藥物成功的幾率，亦可讓藥物在全球實現最大的臨床及商業價值。

1. PRODUCTS AND PIPELINE

Relying on our original gene editing technology, we continue to expand our unique RenMice antibody development platform, and we continue to generate more promising antibody drug molecules for innovative drug targets. Through the large animal translational medicine platform, we continue to improve the success rate of clinical translation. On the other hand, our overall R&D strategy is to self-direct the early discovery of drug molecules, or a small number of promising drug molecules are autonomously advanced to the pre-clinical or early clinical stage to form pre-clinical drug molecule assets or early clinical drug assets, then enter into co-development/transfer development with biotech and biopharmaceutical partners which will primarily drive the acceleration of the following pre-clinical development, clinical development and commercialization of individual antibody drug molecules. We currently have no plans to invest our own resources to lead later Phase clinical for pipeline candidates development and commercialization in the near future.

As of June 30, 2023, we had strategically designed and built a selective antibody drug pipeline of 10 drug candidates, including five clinical stage candidates and five pre-clinical stage candidates. Three out of our drug candidates are with out-licensing arrangements with different collaborators. All of our drug candidates were discovered through our own antibody discovery platforms.

Our pipeline includes drug candidates targeting novel targets or drug candidates with differentiated efficacy or safety profiles demonstrated in clinical studies. Our Core Products include (i) YH003, a humanized IgG2 agonistic monoclonal antibody targeting the CD40, a costimulatory protein found on antigen-presenting cells; and (ii) YH001, a humanized anti-CTLA-4, IgG1 monoclonal antibody. In addition to internal development, we intend to proactively explore and build strategic and synergistic partnerships with leading biopharmaceutical companies. We believe that the complementary expertise and resources of our partners and us will increase the success probability of our drug candidates and maximize their clinical and commercial value on a global scale.

管理層討論與分析 Management Discussion and Analysis

下圖概述截至最後可行日期我們的產品管線及各候選藥物的開發狀態：

The following chart summarizes our pipeline and the development status of each drug candidate as of the Latest Practicable Date:

在研項目 Candidate	靶點 Target	聯合用藥 Combination	適應症 Indication	臨床前 Pre-clinical	IND	I期 Phase I	II期 Phase II	III期 Phase III	權益 Right	合作方 Partner											
★ YH003	CD40	PD-1+化療 PD-1+chemo	胰臟癌 (一線/二線) Pancreatic ductal adenocarcinoma (first-line/ second-line)	國際多中心 Global MRCT							全球 Global										
		PD-1+化療 PD-1+chemo	黏膜型黑色素瘤 Mucosal melanoma	中國 China																	
		PD-1+YH001	實體瘤 Solid tumors	國際多中心 Global MRCT																	
	★ YH001	CTLA-4	PD-L1+化療 PD-L1+chemo	軟組織肉瘤 Sarcoma	美國 America							北美區以外 Outside North America	Tracon Pharmaceuticals (北美地區以外) Tracon Pharmaceuticals (Outside North America)								
			YH001	實體瘤 Solid tumors	國際多中心 Global MRCT																
	YH002	OX40	YH003+YH001	實體瘤內注射 Intratumoral Immunotherapy	Pre-IND								Syncomme, Inc.								
YH004	4-1BB	單藥 Monotherapy	實體瘤+血液瘤 Solid tumor + hematological malignancy	澳大利亞和中國 Australia and China							全球 Global										
YH008	PD-1x CD40 雙抗 PD-1 x CD40 BsAb	單藥 Monotherapy	實體瘤 Solid tumors	中國 China							大中華區以外 Outside Greater China	微芯新域 (大中華區以外) Chipscreen NewWay (Outside Greater China)									
YH012	HER2 x TROP2 雙抗ADC HER2 x TROP2 BsADC		實體瘤 Solid tumors	CMC							全球 Global										
				YH013	EGFR x MET 雙抗ADC EGFR x MET BsADC	實體瘤 Solid tumors	CMC							全球 Global							
							YH015	CD40抑制劑 CD40 inhibitor	免疫疾病 Autoimmunity	CMC							全球 Global				
										YH016	未公開 Undisclosed	腫瘤 Oncology	藥物發現 Discovery							全球 Global	
													YH017	未公開 Undisclosed	免疫疾病 Autoimmunity	藥物發現 Discovery					

註：★ 核心產品
Notes: Core Product

--- 已授權轉讓/合作開發藥物
Out-licensing/Co-development

— 腫瘤管線
Oncology

— 非腫瘤管線
Non-oncology

- 我們與ISU ABXIS開展基於YH003序列開發三特异性抗體的合作，有權獲得首付款、里程碑付款和未來銷售收入分成。
- 我們可以向榮昌生物收取授權YH005的許可費。
- 我們與微芯生物控股公司微芯新域就YH008雙特异性抗體達成在大中華區(包括中國大陸、香港、澳門和台灣地區)的臨床開發及商業化獨家授權協議，保留YH008在大中華區以外的全球權益。
- 我們可以向啟德醫藥收取PD-L1單抗的許可費，同時雙方共同擁有該知識產權。
- We are in cooperation with ISU ABXIS to develop a tri-specific antibody based on the YH003 sequence, through which we are entitled to receive upfront payments, milestone payments, and future sales royalties.
- We can collect licensing fee from RemeGen for licensing YH005.
- We and Chipscreen Biosciences Co., Ltd.'s holding company, Chipscreen NewWay, have reached an exclusive clinical development and commercialization agreement for the YH008 bispecific antibody in Greater China, including mainland China, Hong Kong, Macau, and Taiwan. And we retain global rights for YH008 outside of Greater China.
- We can collect licensing fee from GeneQuantum for PD-L1 mAb, and both parties jointly own the intellectual property rights.

5 縮寫含義如下：

CD40：細胞分化簇40

CTLA-4：細胞毒性T淋巴細胞相關蛋白4

OX40：又稱TNFRSF4，腫瘤壞死因子受體超家族成員4

4-1BB：又稱TNFRSF9，腫瘤壞死因子受體超家族成員9

PD-1：程序性死亡受體1

PD-L1：程序性死亡受體1配體1

ADC：抗體藥物偶聯物

CMC：化學生產及控制流程

MRCT：多區域臨床試驗

HER2：人表皮生長因子受體-2

TROP2：人滋養層細胞表面糖蛋白抗原2

EGFR：表皮生長因子受體

MET：間質-上皮細胞轉化因子

5 Full term of each abbreviation used:

CD40: Cluster of Differentiation 40

CTLA-4: Cytotoxic T-Lymphocyte-Associated protein 4

OX40: Also known as TNFRSF4, Tumor Necrosis Factor Receptor Superfamily, member 4

4-1BB: Also known as TNFRSF9, Tumor Necrosis Factor Receptor Superfamily, member 9

PD-1: Programmed Death-1

PD-L1: Programmed Death-1 ligand 1

ADC: Antibody Drug Conjugate

CMC: Chemistry, Manufacturing, and Controls

MRCT: Multi-regional Clinical Trial(s)

HER2: Human epidermal growth factor receptor 2

TROP2: Trophoblast cell surface antigen 2

EGFR: Epidermal growth factor receptor

MET: MET proto-oncogene

1.1 自主研發的產品

我們的核心產品

YH003 – 靶向CD40的人源化IgG2激動性單克隆抗體

YH003為一種重組人源化激動性抗CD40 IgG2單克隆抗體（單抗），是我們其中一種核心產品。

我們於2017年開始研發YH003，並於澳大利亞進行I期臨床試驗，以評估YH003與特瑞普利單抗(anti-PD-1 mAb)聯合治療晚期實體瘤患者的安全性、耐受性、療效及藥代動力學表現。我們亦已獲得國家藥監局的IND批准，並在中國進行晚期實體瘤患者的YH003單藥I期臨床試驗。

在澳大利亞進行聯合PD-1的YH003 I期臨床試驗已完成。共26名患者入組（20名在第一部分劑量遞增階段，6名在第二部分劑量擴大階段），並接受至少1劑研究治療。第一部分劑量遞增階段的受試者分別接受0.03、0.1、0.3、1及3mg/kg的YH003和固定劑量240mg的特瑞普利單抗，iv q3W。在26名入組患者中，3名患者出現部分緩解，6名患者出現病情穩定。一名受試者在經過近2年的研究治療後，於2022年8月於腫瘤評估中達到了完全緩解(CR)，且截至2023年6月30日一直保持CR狀態。

I期臨床試驗數據證明YH003聯合特瑞普利單抗耐受性良好，且在某些癌症（如胰腺癌）治療中展現出不錯的抗腫瘤活性。

胰腺癌是世界第四大致命癌症。轉移性PDAC(mPDAC)一線(1L)治療方案的現行標準治療包括FOLFIRINOX及吉西他濱+白蛋白紫杉醇。然而，吉西他濱-白蛋白紫杉醇療法的1L治療中位總生存期(OS)約為8.7個月。二線(2L)治療方案極其有限，且尚未確切證實1L化療失敗後的後續化療能提高生存期。

1.1 PRODUCTS SELF-DEVELOPED

Our Core Products

YH003 – a humanized IgG2 agonistic monoclonal antibody target CD40

YH003, a recombinant, humanized agonistic anti-CD40 IgG2 monoclonal antibody (mAb), is one of our Core Products.

We initiated the research and development of YH003 in 2017, and conducted a Phase I clinical trial in Australia to evaluate the safety, tolerability, efficacy and pharmacokinetics of YH003 in combination with toripalimab (anti-PD-1 mAb) in patients with advanced solid tumors. We also obtained the IND approval from the NMPA and conducted a Phase I clinical trial of YH003 as monotherapy in advanced solid tumor patients in China.

The Phase I clinical trial of YH003 in combination with PD-1 in Australia is now completed. A total of 26 patients (20 in part I dose escalation stage and 6 in part II expansion stage) were enrolled and received at least 1 dose of study treatment. Subjects in part I dose escalation stage received YH003 at 0.03, 0.1, 0.3, 1 and 3mg/kg and Toripalimab at a fixed dose of 240mg, iv q3W. Among the 26 enrolled patients, three patients achieved PR and six patients achieved SD. One subject after nearly 2 years of study treatment, achieved a tumor assessment of complete response (CR) in August 2022, and was keeping at CR status as of June 30, 2023.

Data from the Phase I clinical trial demonstrated that YH003 in combination with toripalimab was well tolerated and showed promising antitumor activity in some types of cancers, such as pancreatic cancer.

Pancreatic cancer is the fourth leading cause of cancer-related death worldwide. The current standard care for First-line (1L) treatment options for metastatic PDAC (mPDAC) include FOLFIRINOX and also gemcitabine plus nab-paclitaxel. However, median overall survival (OS) with 1L therapy is approximately 8.7 months with the nab-paclitaxel-gemcitabine therapy. Second-line (2L) treatment options are very limited, and it has not been definitively established that subsequent chemotherapy improves survival after failure of 1L chemotherapy.

我們分別於2021年6月、2021年8月、2021年11月、2021年10月及2021年11月從美國FDA、TGA、MedSafe、國家藥監局及台灣FDA獲得IND批准展開II期MRCT，且正在美國、中國大陸、澳大利亞、新西蘭及台灣對胰腺導管腺癌(PDAC)患者進行研究，以探索YH003聯合特瑞普利單抗伴或不伴化療的安全性與有效性，首例患者給藥已於2021年12月在澳大利亞完成。

截至2023年6月30日，合共92名PDAC受試者入組，接受至少一次研究藥物給藥，其中一線治療組別受試者47名，二線及後線治療組別受試者45名。在該項研究中，YH003聯合特瑞普利單抗伴或不伴化療耐受性良好，且取得不錯的臨床療效。研究仍在進行中，結果有望於2024年公佈。

YH003006研究為YH003在中國的II期臨床試驗，以評估YH003聯合帕博利珠單抗和白蛋白紫杉醇用作不可切除／轉移性黏膜型黑色素瘤患者一線治療的療效與安全性。

截至2023年6月30日，20名受試者入組並接受YH003治療。在該項研究中，YH003耐受性良好，並在此種在亞洲地區非常常見的亞型黑色素瘤中取得不錯的臨床療效。目前研究仍在進行中。

YH003005研究為YH003聯合anti-PD1和YH001在中國和澳大利亞治療晚期實體瘤的I期研究，以評估YH003、YH001和帕博利珠單抗聯合治療晚期實體瘤受試者的安全性、耐受性和藥代動力學表現。截至2023年6月30日，共有15名受試者入組並接受YH003治療。該項研究正處於劑量遞增階段。

YH003 – 與ISU ABXIS合作

於2022年，我們與ISU ABXIS Co., Ltd (「ISU ABXIS」)合作，授予ISU ABXIS通過其技術平台使用YH003序列構建多套三特异性抗體，用於開發針對多種腫瘤類型的治療劑。

We received the IND approval for the Phase II MRCT from the U.S. FDA in June 2021, from the TGA in August 2021, from the MedSafe in November 2021, from the NMPA in October 2021 and from the Taiwan FDA in November 2021, and are conducting the study in patients pancreatic duct adenocarcinoma (PDAC) to explore the safety and efficacy of YH003 in combination with toripalimab, with or without chemotherapy, in the U.S., mainland China, Australia, New Zealand, and Taiwan. The first patient was dosed in Australia in December 2021.

As of June 30, 2023, a total of 92 PDAC subjects were enrolled and received at least one dose of any study drug, including 47 subjects in the first line treatment group and 45 subjects in the second and later line treatment group. During the study, YH003 in combination with toripalimab, with or without chemotherapy, are well tolerated and achieved promising clinical efficacy. The study is ongoing and the results are expected to be reported in 2024.

Study YH003006 is a Phase II clinical trial of YH003 in China to evaluate the efficacy and safety of YH003 in combination with pembrolizumab and albumin paclitaxel in the first-line treatment of patients with unresectable/metastatic mucosal melanoma.

As of June 30, 2023, 20 subjects were enrolled and exposed to YH003. During the study, YH003 was well tolerated and achieved promising clinical efficacy in this subtype of melanoma, which is highly prevalent in Asia. The study is on-going.

Study YH003005 is a phase I study of YH003 in combination with anti-PD1 and YH001 for the treatment of advanced solid tumors in China and Australia to evaluate the safety, tolerability and pharmacokinetics of the combination of YH003, YH001 and pembrolizumab in subjects with advanced solid tumors. As of June 30, 2023, 15 subjects in total were enrolled and exposed to YH003. The study is on-going for dose escalation.

YH003 – Collaboration with ISU ABXIS

In 2022, we entered into collaboration with ISU ABXIS Co., Ltd (「ISU ABXIS」) to grant ISU ABXIS to use the sequence of YH003 to construct several sets of tri-specific antibodies through its technology platform for the development of therapeutic agents against a variety of tumor types.

管理層討論與分析

Management Discussion and Analysis

我們未必能最終成功開發及推廣YH003。

其他產品

YH004 – 一種人源化抗4-1BB激動劑

YH004是人源化抗4-1BB IgG1抗體，具有獨特的作用機制，有別於其他抗4-1BB抗體。

我們已在澳大利亞啟動YH004的I期臨床試驗，並於2021年12月完成首例患者給藥。我們亦於2021年10月從美國FDA獲得IND批准，並於2022年1月已獲國家藥監局IND批准。I期臨床試驗是YH004作為單藥治療晚期實體瘤或復發性／難治性非霍奇金淋巴瘤受試者的FIH、多中心、開放標籤的I期劑量遞增研究。截至2023年6月30日，14名受試者入選並接受0.01mg/kg (n=1)、0.03mg/kg (n=1)、0.1mg/kg (n=3)、0.3mg/kg (n=3)、1.0mg/kg (n=3)及3.0mg/kg (n=3)，iv q3W。迄今為止，YH004單藥在不超過3.0mg/kg水平的劑量下安全且耐受性良好。該項研究正處於劑量遞增階段。

我們未必能最終成功開發及推廣YH004。

YH012及YH013 – 兩種雙特异性ADC

YH012及YH013是我們的RenLite平台開發的兩種雙特异性ADC，計劃用於治療實體瘤。YH012及YH013現時在CMC階段。

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH003 SUCCESSFULLY.

Other Products

YH004 – a humanized anti-4-1BB Agonists

YH004 is a humanized anti-4-1BB IgG1 antibody, with a unique mechanism of action that differentiates itself from other anti-4-1BB antibodies.

We have initiated a Phase I clinical trial of YH004 in Australia and have completed the dosing of the first patient in December 2021. We have also received IND approval from the U.S. FDA in October 2021 and IND approval from NMPA in January 2022. The Phase I clinical trial is a FIH, multi-center, open-label and Phase I dose escalation study of YH004 as a single agent in subjects with advanced solid tumors or relapsed/refractory non-Hodgkin lymphoma. As of June 30, 2023, 14 subjects were enrolled and received 0.01mg/kg (n=1), 0.03mg/kg (n=1), 0.1mg/kg (n=3), 0.3mg/kg (n=3), 1.0mg/kg (n=3) and 3.0mg/kg (n=3) iv q3W. To date, YH004 monotherapy is safe and well tolerated up to 3.0mg/kg dose levels. The dose escalation study is ongoing.

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH004 SUCCESSFULLY.

YH012 and YH013 – two bi-specific ADCs

YH012 and YH013 are two bi-specific ADCs developed using our RenLite platform, which are intended for the treatment of solid tumor. YH012 and YH013 are currently at the CMC stage.

我們最終未必能成功開發及推廣YH012及YH013。

YH015 – 一種靶向CD40的全人源IgG1抗體單克隆抗體

YH015基於我們全人源抗體小鼠平台RenMice，為獨特的體內藥物篩選策略，可以快速獲得具有良好的體內外抑制活性及理化性質的全人抗體。同時，抗體Fc端突變修飾降低了ADCC效應，延長了藥物半衰期，減少了給藥頻率，具有較好的臨床應用價值。CD40抑制劑有潛力開發成治療自身免疫性疾病、多發性硬化及器官移植的藥物。YH015目前處於CMC階段。

我們最終未必能成功開發及推廣YH015。

YH016及YH017 – 兩種新型分子

YH016是一個全新的全人單克隆抗體分子，它利用RenMab平台開發。它靶向髓系細胞表面的一個新受體。YH016的靶點在多種實體瘤中富集，因此是一個具有良好臨床前景的抗腫瘤分子。YH016項目目前已經篩選到具有優秀體內外活性的候選抗體。YH017也是一個全新的全人抗體分子，它利用RenMab平台開發。它靶向T細胞和NK細胞表面的一個關鍵細胞因子受體，阻斷同源配體結合從而阻斷下游信號的活化，這對適當的T細胞活化至關重要，尤其是免疫細胞過度活化的情況下。它可用於包括腸炎，關節炎等多種自身免疫疾病等的治療。YH017專案目前已經篩選到具有高親和高阻斷活性的候選抗體。

我們最終未必能成功開發及推廣YH016及YH017。

聯合開發產品

我們的核心產品

YH001 – 一種人源化抗CTLA-4 IgG1單克隆抗體

YH001是我們的核心產品之一。YH001是重組人源化抗CTLA-4 IgG1單克隆抗體。

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH012 AND YH013 SUCCESSFULLY.

YH015 – a fully human IgG1 antagonistic monoclonal antibody targeting CD40

YH015 is based on RenMice our fully human antibody mouse platform and a unique *in vivo* drug screening strategy to rapidly obtain fully human antibodies with good *in vivo* and *in vitro* inhibitory activity and physicochemical properties. Meanwhile, the mutation modification of the Fc end of the antibody reduced the ADCC effect, prolonged the half-life of the drug, reduced the frequency of dosing, and had better clinical application value. CD40 inhibitors have the potential to be developed into drugs for autoimmune diseases, multiple sclerosis and organ transplantation. YH015 is currently at the CMC stage.

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH015 SUCCESSFULLY.

YH016 and YH017 – two novel molecules

YH016 is a novel fully human monoclonal antibody drug discovered with the RenMab platform. It specifically binds to a newly identified receptor that is restricted to myeloid lineage. The target of YH016 is shown to be highly enriched in multiple types of cancer, rendering YH016 is a promising therapeutics. Now, several candidates with excellent *in vivo* and *in vitro* activities have been obtained. YH017 is another fully human antibody drug based on the RenMab technology. It recognizes a key cytokine receptor expressed on T cells and natural killer cells. Blocking the cognate ligand binding can present the downstream signaling cascade that is essential for proper T cell activation, especially in the scenario of immune cell overactivation. YH017 has a strong potential for the treatment of multiple autoimmune diseases, e.g. colitis and rheumatoid arthritis. Currently, we have discovered an optimal candidate molecule with ultra-high affinity and blocking activity.

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH016 AND YH017 SUCCESSFULLY. PRODUCTS CO-DEVELOPED

Our Core Products

YH001 – a humanized anti-CTLA-4 IgG1 monoclonal antibody

YH001 is one of our Core Products. YH001 is a recombinant humanized anti-CTLA-4 IgG1 monoclonal antibody.

管理層討論與分析

Management Discussion and Analysis

我們於2017年開啟YH001的研發流程。我們已在澳大利亞完成I期臨床試驗，以評估YH001與特瑞普利單抗聯合治療晚期實體瘤患者的安全性、耐受性和藥代動力學表現，並於2021年4月確定RP2D。I期臨床試驗的數據顯示出YH001良好的安全性和療效特徵。

在澳大利亞進行YH001聯合PD-1的I期數據載於下文。截至2023年6月30日，該項研究已完成。YH001聯合特瑞普利單抗在不超過4.0mg/kg的劑量下耐受性良好。在29名入組患者中的26名被評估患者，5名患者出現局部緩解，11名患者出現病情穩定。根據RECIST v1.1，客觀緩解率為19.2% (95% CI: 6.6, 39.4)，疾病控制率為61.5% (95% CI: 40.6, 79.8)。我們已於中國完成YH001單藥治療晚期實體瘤患者的I期臨床試驗。I期臨床試驗數據表明YH001在不超過6.0mg/kg的劑量下耐受性良好，且在某些癌症治療中展現出不錯的抗腫瘤活性。

我們已與美國的Tracon達成協議，探討肉瘤等適應症。YH001與恩沃利單抗(Envafolelimab)及多柔比星聯合使用治療軟組織肉瘤患者的I/II期臨床試驗於2022年8月獲得FDA批准，並於2022年11月給首例患者用藥。

此外，我們擬配合合作夥伴的研發計劃，對YH001的其他實體瘤及其他類型適應症作進一步臨床研究探索。

YH001 – 與Tracon合作

YH001/KN035SAR101研究是由Tracon Pharmaceuticals贊助的一項I/II期臨床試驗，預計將在美國多個癌症中心招募176名患者。該研究I期部分的主要目的是評估YH001與PD-L1抗體恩沃利單抗(envafolelimab)聯合用藥或與恩沃利單抗(envafolelimab)和多柔比星聯合用藥在晚期或轉移性肉瘤患者中的安全性與耐受性，並確定推薦II期劑量。本研究II期部分的主要目的是確定恩沃利單抗(envafolelimab)、YH001及多柔比星對未接受免疫檢查點抑制劑或多柔比星治療的平滑肌肉瘤及去分化脂肪肉瘤患者的客觀有效率，並確定恩沃利單抗(envafolelimab)及YH001對未接受免疫檢查點抑制劑治療的肺泡軟組織肉瘤及軟骨肉瘤患者的客觀有效率。該研究已於2022年11月開始招募，目前研究正在進行中。截至2023年6月30日，共計15名患者入組接受研究給藥。

We initiated the research and development process of YH001 in 2017. We completed a Phase I clinical trial in Australia to evaluate the safety, tolerability and pharmacokinetics of YH001 when combined with toripalimab in patients with advanced solid tumors, with the RP2D identified in April 2021. Data from the Phase I clinical trial showed a favorable safety and efficacy profile of YH001.

Data from the Phase I of YH001 combined with PD-1 in Australia is set out below. As of June 30, 2023, this study has been completed. YH001 was well tolerated up to 4.0mg/kg dose levels when combined with toripalimab. Among 26 evaluable patients out of 29 enrolled patients, five patients achieved PR and 11 patients achieved SD. The ORR was 19.2% (95% CI: 6.6, 39.4) and the DCR was 61.5% (95% CI: 40.6, 79.8) according to RECIST v1.1. We completed a Phase I clinical trial of YH001 as a single agent in patients with advanced solid tumors in China. Data from the Phase I clinical trial demonstrated that YH001 was well tolerated up to 6.0mg/kg dose levels and showed promising antitumor activity in some types of cancers.

We have reached an agreement with Tracon in the United States to explore indications such as sarcoma and other indications. The Phase I/II clinical trial of YH001 in combination with Envafolelimab and doxorubicin for the treatment of soft tissue sarcoma patients was approved by FDA in August 2022 and dosed the first patient in November 2022.

In addition, we intend to further explore the clinical research for additional solid tumor and other types of indications for YH001 by aligning with the partners' R&D programs.

YH001 – Collaboration with Tracon

Study on YH001/KN035SAR101 is a Phase I/II clinical trial sponsored by Tracon Pharmaceuticals expected to enroll 176 patients at multiple cancer centers in the U.S.. The primary objective of the Phase I portion of the study is to evaluate safety and tolerability and determine the recommended Phase II dose of YH001 when given in combination with the PD-L1 antibody envafolelimab or given in combination with envafolelimab and doxorubicin in patients with advanced or metastatic sarcoma. The primary objective of the Phase II portion of the study is to determine the objective response rate of envafolelimab, YH001 and doxorubicin in patients with leiomyosarcoma and dedifferentiated liposarcoma who have not received immune checkpoint inhibitors or doxorubicin, and to determine the objective response rate of envafolelimab and YH001 in patients with alveolar soft parts sarcoma and chondrosarcoma who have not received immune checkpoint inhibitors. The study began enrollment in November 2022 and the study is ongoing. As of June 30, 2023, a total of 15 patients were enrolled to receive study drug administration.

我們最終未必能成功開發及推廣YH001。

其他產品

YH002 – 一種有潛力結合YH001的抗OX40單抗

YH002是一種以人類OX40受體(「TNFRSF4」)為靶點的重组人源化IgG1抗體。

YH002002 研究

我們已於澳大利亞完成FIH、多中心、開放標籤及I期劑量遞增研究，以評估YH002的安全性、耐受性及藥代動力學表現並確定YH002在晚期實體惡性腫瘤受試者的最大耐受劑量/RP2D。

研究採用加速滴定和傳統「3+3」劑量遞增方法，以0.01 mg/kg為起始劑量，依次按照0.03、0.1、0.3、1.0、3.0、6.0和12.0 mg/kg共8個劑量水平進行劑量遞增，基於研究者的判定，受試者可接受研究藥物治療最長達2年。本項YH002首次進入人體(FIH)研究已經完成，安全分析集中(n=15)所有級別YH002相關不良事件的發生率為46.7%，其中大部分為1級或2級。共2例(13.3%)受試者報告了3級或4級與YH001相關的TEAE，無5級藥物相關TEAE報告。3例(20%)受試者(均在最高劑量3.0mg/kg組)報告了與研究藥物相關的嚴重不良事件，未出現藥物相關的死亡事件。3.0 mg/kg劑量組3例受試者中觀察到1例DLT，本劑量遞增研究結果顯示YH002單藥治療在高達2.0 mg/kg劑量水平下耐受性良好。

研究中的所有受試者(n=15)均為至少一線抗癌治療後發生疾病進展，其中5例(33.3%)為既往接受過3線或以上治療後出現疾病進展的晚期實體瘤患者。在15例至少有一次給藥後腫瘤影像學評估的受試者中，研究者根據RECIST v1.1評估，3例受試者最佳療效為疾病穩定(SD)。基於療效分析集，經研究者判定的疾病控制率(DCR)為20%。

我們已獲得國家藥監局及美國FDA的IND批准，在中國及美國進行YH002作為單藥的I期臨床試驗。

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH001 SUCCESSFULLY.

Other Products

YH002 – an anti-OX40 mAb, with potential to combine with YH001

YH002 is a recombinant humanized IgG1 antibody that targets the human OX40 receptor (the “TNFRSF4”).

Study YH002002

We completed the FIH, multicenter, open-label and Phase I dose-escalation study in Australia to evaluate the safety, tolerability and pharmacokinetics and determine the MTD/RP2D of YH002 in subjects with advanced solid malignancies.

The study, starting dose at 0.01mg/kg, utilized accelerated titration and traditional “3+3” dose-escalation methodology with 8 dose levels of 0.03, 0.1, 0.3, 1.0, 3.0, 6.0, and 12.0mg/kg in sequential dose increments, and subjects were allowed to be treated with the study drug for a maximum of 2 years based on the investigator’s determination. This first-in-human (FIH) study of YH002 was completed with a 46.7% incidence of YH002-associated adverse events across all levels in the safety analysis set (n=15), the majority of which were Grade 1 or 2. A total of 2 (13.3%) subjects reported Grade 3 or 4 YH001-related TEAEs, and no Grade 5 drug-related TEAEs were reported. 3 (20%) subjects (all in the highest dose 3.0mg/kg group) reported serious adverse events related to the study drug, and there were no drug-related deaths. 1 case was observed in 3 subjects in the 3.0mg/kg dose group DLT, the results of this dose-escalation study showed that YH002 monotherapy was well tolerated at dose levels up to 2.0mg/kg.

All subjects in the study (n=15) experienced disease progression after at least one line of anticancer therapy, of which 5 (33.3%) were patients with advanced solid tumors who had experienced disease progression after 3 or more lines of prior therapy. Of the 15 subjects with at least one post-dose tumor imaging assessment, the investigators assessed that the best efficacy was stable disease (SD) in 3 subjects according to RECIST v1.1. Based on the efficacy analysis set, the investigator-adjudicated disease control rate (DCR) was 20%.

We have received the IND approvals from the NMPA and the U.S. FDA for Phase I clinical trials of YH002 as a single agent in China and the U.S..

管理層討論與分析

Management Discussion and Analysis

YH002004研究

我們正在中國及澳大利亞對晚期實體瘤患者進行YH002聯合YH001的臨床試驗。截至2023年6月30日，招募工作已完成。合共16名患者已入組該研究項目，目前研究正在進行。

YH002 – 與Syncromune合作

於2022年，我們與臨床階段的美國生物製藥公司Syncromune簽訂授權協議，以共同開發和商業化基於Syncrovax™技術的瘤內免疫療法，而該療法為下一代個性化腫瘤療法。Syncromune將獲得由YH002和其他活性成分組成的瘤內免疫療法。其後，各方同意將YH001及YH003作為選定的活性成分納入合作範圍。於2023年，我們與Syncromune訂立技術轉讓協議，該協議為2022年原有授權協議的擴展。根據新簽署協議，Syncromune將獲選擇權，且於選擇權獲行使後，我們將向Syncromune提供技術轉讓，以生產YH002及其他臨床階段抗體並用於使用基於Syncrovax™技術的瘤內免疫療法。根據新簽署協議，Syncromune將向祐和支付首付款，且祐和有權獲得潛在的里程碑費用。目前，Syncromune已於墨西哥開始Syncrovax™療法的臨床試驗並獲得了不錯的抗腫瘤活性初步臨床數據。

Study YH002004

We are conducting a clinical trial of YH002 in combination with YH001 in patients with advanced solid tumors in China and Australia. As cut-off date of June 30, 2023, the recruitment has been completed. A total of 16 patients have enrolled in the study and the study is still ongoing.

YH002 – Collaboration with Syncromune

In 2022, we entered into a license agreement with Syncromune, a clinical-stage U.S. biopharmaceutical company, to jointly develop and commercialize an intratumoral immunotherapy based on Syncrovax™ technology, a next-generation personalized oncology therapy. Syncromune will acquire an intratumoral immunotherapy consisting of YH002 and other active ingredients. It has subsequently been agreed that YH001 and YH003 are also included in the scope of the collaboration as selected active ingredients. In 2023, we have established technology transfer agreement with Syncromune, which is an expansion to the previous license agreement in 2022. Under the newly signed agreement, Syncromune will be granted an option right and upon option-exercise, we will provide technical transfer to Syncromune for the manufacture of YH002 and other clinical-stage antibodies for its use of intratumoral immunotherapy based on Syncrovax™ technology. Under the newly signed agreement, Syncromune will pay Eucure an upfront fee and Eucure is entitled to receive potential milestone fees. Currently, Syncromune has started clinical trials for this Syncrovax™ therapy in Mexico and obtained promising anti-tumor activity preliminary clinical data.

我們最終未必能成功開發及推廣YH002。

YH008 – 與微芯生物合作

2023年2月27日，祐和醫藥與深圳微芯生物科技股份有限公司（「微芯生物」，股票代碼：688321.SH）的控股附屬公司成都微芯新域生物技術有限公司（「微芯新域」）達成在大中華區（包括中國大陸、香港、澳門和台灣地區）臨床開發及商業化YH008雙特异性抗體的獨家授權協議。祐和醫藥保留YH008在大中華區以外的全球權益。根據協議，微芯新域將支付祐和醫藥人民幣40百萬元首付款、不超過人民幣360百萬元之潛在研發里程碑付款、不超過人民幣196百萬元之潛在銷售里程碑付款以及銷售淨額的分級特許權使用費。有關詳情，請參閱本公司日期為2023年2月27日之公告。截至2023年6月30日，祐和醫藥已獲得首付款和國家藥監局IND里程碑付款。YH008將由微芯新域研發團隊推進到臨床開發階段。該產品靶點組合為全球首創，屬於治療用生物製品1類：創新型生物製品。該分子已經獲中國國家藥監局批准進行一項多中心I期劑量遞增臨床研究，將評估NWY001(YH008)在晚期腫瘤受試者中藥物的安全性、耐受性及初步療效。目前正在積極推進，預計2023年第3季度開始I期臨床的患者招募。

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH002 SUCCESSFULLY.

YH008 – Collaboration with Chipscreen Biosciences

On February 27, 2023, Eucure Biopharma has reached an exclusive license agreement with Chipscreen NewWay Biosciences (“Chipscreen NewWay”), a holding subsidiary of Shenzhen Chipscreen Biosciences Co., Ltd. (“Chipscreen Biosciences”, stock code: 688321.SH) for the clinical development and commercialization of YH008 bispecific antibody in Greater China (including Mainland China, Hong Kong, Macau and Taiwan). Eucure Biopharma reserves YH008’s global rights outside Greater China. Under the agreement, Chipscreen NewWay will pay Eucure Biopharma an upfront payment of RMB40 million, a potential development milestone payment of up to RMB360 million, a potential sales milestone payment of up to RMB196 million, as well as tiered royalties on net sales. For details, please refer to the announcement of the Company dated February 27, 2023. By June 30, 2023, Eucure Biopharma has received upfront fee and NMPA IND milestone payment. YH008 will be advanced to clinical development stage by the Chipscreen NewWay R&D team. The target combination is the first of its kind in the world and belongs to therapeutic biologics category 1: innovative biologics. The molecule has been approved by China’s NMPA for a multi-center Phase I dose-escalation clinical study that will evaluate the safety, tolerability and preliminary efficacy of NWY001 (YH008) in subjects with advanced tumors. The study is currently in progress and patient enrollment for the Phase I study is expected to begin in the third quarter of 2023.

我們最終未必能成功開發及推廣YH008。

YH005 – 與榮昌生物合作

YH005是一種使用我們的Claudin 18.2敲除小鼠產生的抗Claudin 18.2抗體。我們已將Claudin 18.2抗體YH005的許可授予榮昌生物，以開發YH005 ADC（亦稱為RC118）。2017年9月6日，我們與榮昌生物就RC118的開發及商業化簽訂獨家技術轉讓協議（「榮昌生物協議」），我們轉讓YH005的全球權利。RC118於2021年8月獲得澳大利亞I期臨床批覆，並於2021年9月獲得國內I期臨床批覆。臨床研究目前進展順利，正在進行的劑量遞增研究顯示出良好的安全性及耐受性。於2022年12月，RC118已獲美國FDA授予兩項孤兒藥資格認證，用於治療胃癌，包括胃食管結合部癌及胰腺癌。於2023年4月，RC118聯合PD-1單克隆抗體治療Claudin18.2表達陽性的局部晚期不可切除或轉移性惡性實體瘤的I/IIa期臨床研究獲得CDE正式批准。

在我們成功開發Claudin 18.2敲除小鼠後，榮昌生物最初尋求YH005的共同開發。我們與榮昌生物訂立合作，是由於Claudin 18.2的腫瘤及組織特異性表達對ADC藥物極具潛力，且榮昌生物於ADC藥物開發方面具有較強的能力。我們相信我們與榮昌生物的合作是雙方共贏且對YH005的價值最大化有所貢獻。

我們最終未必能成功開發及推廣YH005。

1.2 千鼠萬抗

千鼠萬抗是我們專有的大規模全人源抗體篩選計劃，旨在發現有望用於內部藥物開發或外部變現的抗體分子。千鼠萬抗是我們的重點研發項目，預計至2023年第三季度，我們將完成千鼠萬抗的大部分工作。截至2023年6月30日，千鼠萬抗進展順利，已完成近1,000個靶點的評估調研並已對其中800多個靶點進行開發。其中，我們已在靶點敲除RenMab中敲除了680多個靶點基因，並在靶點敲除RenLite中敲除了270多個靶點基因，並有望獲得400,000至500,000個涵蓋1,000多個創新靶點的全人

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET YH008 SUCCESSFULLY.

YH005 – Collaboration with RemeGen

YH005 is an anti-Claudin 18.2 antibody generated using our Claudin 18.2 knock-out mice. We have out-licensed Claudin 18.2 antibody YH005 to RemeGen to develop a YH005 ADC, which is also known as RC118. On September 6, 2017, we entered into an exclusive technology transfer agreement (the "RemeGen Agreement") with RemeGen concerning the development and commercialization of the RC118 which we have transferred the global rights of YH005. The RC118 has obtained approval for Phase I clinical trials in Australia in August 2021, and has obtained approval for Phase I clinical trials in China in September 2021. The clinical studies are currently in smooth progress and ongoing dose creep study demonstrates good safety and tolerability. In December 2022, the RC118 has been granted two orphan drug designations by the U.S. FDA for the treatment of gastric cancer, including gastroesophageal junction cancer, and pancreatic cancer. In April 2023, the Phase I/IIa clinical study of RC118 in combination with PD-1 monoclonal antibody in Claudin18.2 expression-positive locally advanced unresectable or metastatic malignant solid tumors was formally approved by the CDE.

RemeGen initially reached out for co-development of YH005 after our successful development of Claudin 18.2 knock-out mice. We entered into collaboration with RemeGen as the tumoral and tissue-specific expression of Claudin 18.2 has great potential for ADC drugs and RemeGen has strong capabilities in the development of ADC drugs. We believe our collaboration with RemeGen is win-win for both parties and contributes to the value maximization of YH005.

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET AND YH005 SUCCESSFULLY.

1.2 PROJECT INTEGRUM (千鼠萬抗)

Project Integrum (千鼠萬抗) is our proprietary large scale fully human antibody screening program that discovers promising antibody sequences and antibody molecules for internal drug development or external monetization. Project Integrum is our key R&D project, it is expected that by the third quarter of 2023, we will have completed most of the work on Project Integrum. As of June 30, 2023, Project Integrum is progressing well, approximately 1,000 targets have been evaluated and more than 800 of them have been developed. Among others, we have knocked out more than 680 target genes in target knockout RenMab, and more than 270 target genes in target knockout RenLite, and are expected to obtain a library of 400,000 to 500,000 fully human antibody sequences covering more than 1,000 innovative

源抗體序列庫。該抗體庫品質高且多樣性豐富，能全面充分覆蓋靶點的所有抗原表位，形成全人源抗體庫，以滿足各合作夥伴製藥公司的不同抗體開發需求。未來，我們計劃持續基於RenLite和RenNano等技術平台，推出雙抗、納米抗體等創新成藥形式的分子，擴展「千鼠萬抗」所形成的抗體庫的豐富度。

有別於傳統的抗體開發策略，我們將「根據客戶需求來製備抗體」改變成「針對上千個靶點提前開發數十萬個抗體分子進行貨架式提供」，使得客戶可以根據研發計劃從我們這裡即時獲得擬研發的藥物靶點的優質抗體分子，而不用從頭開始研發。基於RenMice技術平台優勢以及RenMice基因敲除後再進行免疫的優勢，我們形成了獨特的規模化抗體開發流程，形成全球獨一無二的優質全人抗體分子庫，極大多樣性的抗體分子庫以及完整的抗體分子數據可以供各個藥企根據研發需要篩選獲得理想的抗體分子。通常，相較於傳統的藥物研發方式，可以為合作夥伴節省2年以上的臨床前研發時間，從而大大加快新藥研發進度。

就業務模式而言，我們利用合作開發藥物、已授權轉讓藥物、轉讓開發及其他合作機會將產生的抗體商業化。我們通過轉讓千鼠萬抗所產生的大量抗體分子／序列收取首付款、里程碑費用和銷售分成，與許多藥物研發公司建立合作關係，從而實現短期和中長期兼顧的抗體開發業務營收增長。在現階段，每年銷售收入大部分來自首付款及少量里程碑費用。未來，隨著轉讓更多抗體分子／序列，里程碑費用及銷售分成的增長將愈發顯著，是我們日後非常重要的收入來源。

於2023年6月30日，在合作方面，我們已達成50項聯合開發／已授權轉讓／轉讓開發協議，包括但不限於Merck Healthcare KGaA、ADC Therapeutics、翰森製藥及南京正大天晴製藥有限公司。2023年上半年新增簽署16個交易，相較於去年同期簽署項目數量增長45%。

targets. This antibody library is of high quality and rich in diversity, and can fully and adequately cover all antigenic epitopes of targets, forming a fully human antibody library to meet the different antibody development needs of various partner pharmaceutical companies. In the future, based on our RenLite and RenNano technology platforms, we plan to continue to introduce innovative drug-ready molecules, such as bis-antibodies and nano-antibodies, in order to expand the richness of the antibody library formed by Project Integrum.

Unlike traditional antibody development strategies, we have changed our approach from “preparing antibodies based on customer demand” to “developing hundreds of thousands of antibody molecules in advance for shelf-ready supply against thousands of targets”, which allows our customers to obtain high-quality antibody molecules for the drug targets they intend to develop instantly according to their R&D plans, without having to develop them from scratch. Based on the advantages of RenMice technology platform and RenMice knockout followed by immunization, we have formed a unique scale-up antibody development process, forming a globally unique library of high-quality, fully human antibody molecules, with a great diversity of antibody molecule libraries and complete antibody molecule data that can be used by various pharmaceutical companies to screen and obtain ideal antibody molecules according to their R&D needs. Generally, compared with the traditional drug development method, we can save more than 2 years of pre-clinical development time for our partners, thus greatly accelerating the progress of new drug development.

In respect of business model, we utilized co-development, out-licensing, transfer development and other collaboration opportunities to commercialise the generated antibodies. We have entered into collaborations with many drug discovery companies through upfront fees, milestone fees and royalties for the transfer of a large number of antibody molecules/sequences generated by Project Integrum, achieving revenue growth in the antibody development business in both the short and medium to long term. At the current stage, most of the annual sales revenue is from upfront fee and a small amount of milestone fee. In the future, as more antibody molecules/sequences are transferred, the growth of milestone fee and royalty revenue will become very significant, which is a very important source of revenue for us in the future.

In terms of cooperation, as at June 30, 2023, we have reached 50 co-development/out-licensing/transfer development deals, including but not limited to Merck Healthcare KGaA, ADC Therapeutics, Hansoh Pharma and Nanjing Chia-Tai Tianqing Pharmaceutical Company. Sixteen new deals were signed in the first half of 2023, representing an increase of 45% in the number of projects signed as compared to the same period last year.

2. 臨床前研究服務及產品

我們的臨床前研究服務及產品主要包括臨床前藥理藥效評估等CRO服務，研發及創新靶點模式動物銷售以及基因編輯定制服務業務。該等服務線乃為本公司重要的業務分部。銷售收入的快速增長和較高的利潤水平為本公司不斷提供經營現金流量，鞏固了我們的財務狀況。

面對國內外充滿挑戰的市場環境，本公司將市場開拓的重點放在了海外。在臨床前藥理藥效評估等CRO服務業務線中，本公司不斷拓展CRO服務的類別。同時，本公司擴充了海外銷售團隊，提升當地客戶覆蓋率。為了更好地服務海外醫藥客戶，發揮海外銷售佔比，本公司於2022年在歐洲成立德國附屬公司，擴大了美國波士頓試驗基地並投入使用。於2023年，本公司進一步將美國波士頓設施擴大為原有三倍，已經於8月正式啟用。該等措施於報告期間取得了顯著銷售增長。

作為本公司銷售收入增長的核心驅動力之一，我們持續保持較高的研發投入，用於開發具有全球競爭力的豐富動物模型，並為國內外藥企客戶提供高質量的臨床前CRO服務，在充滿挑戰的市場環境下依然保持高毛利和快速的營收增長。

2. PRE-CLINICAL RESEARCH SERVICES AND PRODUCTS

Our pre-clinical research services and products primarily include CRO services such as pre-clinical pharmacology and efficacy evaluation, R&D and sale of innovative target animal models, and gene editing customization service business. These services line is an important business segment for the Company. The rapid sales revenue growth and higher profit level have continuously generated business cash flow for the Company and buttressed the soundness our financial conditions.

In the face of the challenging market environment at home and abroad, the Company focuses its market development on overseas. In the business line of pre-clinical CRO services such as pharmacological efficacy evaluation, the Company continuously expands the categories of CRO services. Meanwhile, the Company complements the overseas sales team, enhancing coverage of local customers. A German subsidiary in Europe was established in 2022 and expanding and commissioned the Boston, U.S. test site, in the hope of better serving overseas pharmaceutical customers and leveraging the proportion of overseas sales. In 2023, the Company has further expanded the Boston, U.S. facility to triple its original size, which has officially opened in August. These measures achieved significant sales growth in the Reporting Period.

As one of the core drivers of our sales revenue growth, we continue to maintain a high level of R&D investment for the development of globally competitive and enriched animal models, as well as providing high-quality pre-clinical CRO services to domestic and international pharmaceutical clients, maintaining high gross margins and rapid revenue growth despite the challenging market environment.

2.1 臨床前藥理藥效評估

我們位於中國及美國的藥理學團隊在測試新療法（例如治療免疫腫瘤、免疫及自身免疫、CNS、眼科疾病以及代謝疾病以及腎臟疾病的單克隆抗體、ADC、雙抗及雙抗ADC、CAR-T及CAR-NK、mRNA-LNP及基因療法及其他療法）方面積累了專業知識，支持全球藥物研發。我們的服務利用大量基於檢查點抑制劑及細胞因子／細胞因子受體的基因人源化小鼠模型、高度免疫缺陷B-NDG小鼠及其變體（其中包括CDX模型和工程細胞系模型等）。我們的藥理學服務包括體內功效、PK/PD、生物標誌物評估、毒理學及安全性評估，以及體外免疫細胞及細胞因子分析和細胞功能分析。我們的臨床前藥理學研究支持多項IND申請及臨床試驗。我們已為全球約500名合作夥伴完成超過2,500個藥物評估項目。

我們主要根據使用的動物類型和提供的服務類型來確定臨床前藥理藥效評估服務的費率。動物費用根據使用的動物類型確定，服務費則根據腫瘤PD、免疫重建及自身免疫疾病等服務類型按項目所需的人力資源、期限及材料分配確定。我們與客戶就臨床前藥理藥效評估服務達成協議的期限取決於項目的複雜性，通常不超過一年。付款條款由項目設定，我們通常有權向客戶收取預付款和項目完成時的付款。由於我們是臨床前藥理藥效評估的服務提供商，與項目相關的知識產權屬於我們的客戶。

2.1 Pre-Clinical Pharmacology and Efficacy Evaluation

Our pharmacology team, which is based in China and the U.S., has built expertise in testing novel therapeutics such as mAbs, ADCs, BsAb and BsADC, CAR-Ts and CAR-NKs, mRNA-LNP and gene therapy and other therapeutic modalities for immuno-oncology, immune and autoimmune, CNS, Ocular diseases as well as metabolic diseases as well as kidney diseases to support drug discovery and development worldwide. Our services utilize a large collection of genetically humanized mouse models for checkpoint inhibitors and cytokine/cytokine receptors, highly immune-deficient B-NDG mice and their variants, including CDX models and engineered cell line models, among others. Our pharmacology services include *in vivo* efficacy, PK/PD, biomarker assessments, toxicology and safety evaluation, *in vitro* immune cell and cytokine profiling and cell functional assays. Our pre-clinical pharmacology studies have supported a number of IND applications and clinical trials. We have completed more than 2,500 drug evaluation projects for approximately 500 partners globally.

We determine our fee rates for pre-clinical pharmacology and efficacy evaluation services primarily based on types of animal used and types of service provided. Animal fees are set by types of animals utilized, and service fees are determined by allocation of staff resource, duration and materials required for the projects based on the type of services such as oncology PD, immune reconstitution and autoimmune disease. Duration of our agreements with customers on pre-clinical pharmacology and efficacy evaluation services is based on complexity of the project, which typically lasts for no longer than one year. Payment terms are set by project and we are generally entitled to upfront payments and project closing payments by our customers. As we are a service provider for our pre-clinical pharmacology and efficacy evaluation, the intellectual rights relating to the project belong to our customers.

管理層討論與分析

Management Discussion and Analysis

體內藥理學能力

體內藥理學團隊已成功開發並驗證數百個同源及異基因腫瘤模型，以滿足客戶的科學目標。模式動物內部生產的人源化小鼠和攜帶功能性人類基因的人源化細胞系，該等人類基因表達確定的人類治療靶點或根據客戶興趣定制的靶點。使用人源化細胞系及人源化小鼠須定制完整生物治療策略，評估不同類型的人類治療分子（單克隆抗體、雙特異性抗體、ADC、疫苗等）針對相應治療靶點的療效。此外，通過不同途徑（包括原位注射）植入腫瘤細胞能提供正面直觀的數據支持臨床研究。該等模型均涵蓋了廣泛的免疫治療領域，並大大提高了藥物開發從臨床前研究到臨床研究的轉化效率。

除腫瘤模型外，體內藥理學服務亦於野生型及人源化小鼠中開發了若干可轉化的免疫與自身免疫性疾病模型以及CNS疾病、眼科疾病、代謝性疾病模型以及腎臟疾病模型，將我們的研究與服務擴展至更廣泛的治療領域，更好地支持客戶的研究與藥物開發。

我們基於模型的體內藥效服務具有高規模篩選能力，通過體內活性評估，支持分子的篩選、藥物的比較或藥物的評估。作為體內能力的補充，我們的體外藥理學服務包括免疫細胞分析、細胞因子分析、原代T、NK及巨噬細胞的功能檢測等。我們的綜合體內能力及體外藥理學能力可使我們為藥物開發提供完整的PoC及MoA。

In Vivo Pharmacology Capabilities

Our *in vivo* pharmacology team has successfully developed and validated hundreds of syngeneic and xenogeneic tumor models to meet the scientific objectives of our clients. The animal models include our internally generated humanized mice and humanized cell lines carrying functional human genes that express identified human therapeutic targets or customized targets per clients' interests. Employing the humanized cell lines and the humanized mice results in a tailored therapeutic strategy with a complete biology to evaluate the efficacy of different types of human therapeutic molecules (monoclonal antibodies, bi-specific antibodies, ADCs, vaccines, etc.) against the therapeutic targets of interest. Furthermore, tumor cell implantation through different routes including orthotopic injection delivers favorable translatable data to support clinical studies. All these models cover broad immune-therapeutic areas and greatly increase translation from pre-clinical research to clinical studies for drug development.

Besides the tumor models, *in vivo* pharmacology services have also developed several translatable immune and autoimmune inflammatory disease models and CNS diseases, Ocular diseases, metabolic disease models as well as kidney diseases models in both wild-type and humanized mice to extend our research and services to broader therapeutic areas and better support our clients in their research and drug development.

Our model-based *in vivo* efficacy services have high scale screening capabilities to support molecule selection, drug comparison, or drug evaluation by *in vivo* activity assessment. Complementary to our *in vivo* capabilities, our *in vitro* pharmacology services include immune cell profiling, cytokine profiling, primary T, NK, and macrophage cell-based functional assays, among others. Our integrated *in vivo* capabilities and *in vitro* pharmacology capabilities enable us to provide a complete PoC and MoA for drug development.

藥代動力學(PK)及藥效學(PD)

抗體藥物的藥代動力學深受靶點表達(靶點介導清除)與FcRn(新生Fc受體)表達的影響，這可以延長抗體半衰期。由於人類抗體對靶點有不同的親和力，而且在動物物種中表達的FcRn與在人類中表達的不同，源於動物的人類抗體的PK參數可能並不適用人類。我們的人源化小鼠能夠表達人類治療靶點，FcRn人源化小鼠則能更直觀地評估小鼠中的人類抗體PK，從而能夠協助解決該等問題。由於非人靈長類動物的供應越來越有限，人源化小鼠可能在生物製劑藥物開發的非臨床PK及毒性研究中具有越來越大的價值。

通過使用靶點人源化小鼠及FcRn人源化小鼠，我們建立了完善的PK/PD服務平台，能夠進行一系列PK/PD研究以表徵藥物暴露、預測劑量要求、了解濃度效應關係、建立安全邊際和功效特徵及開發藥物的產品概況，以支持藥物開發及臨床試驗。PK/PD評估亦由我們的體外能力支撐。此外，基於細胞的檢測包括ADCC及CDC，由離體或體外PD評估及MoA識別協助。

小動物毒理學和安全性研究

人源化小鼠可以在候選藥物的毒理學和安全性評估中提供正面的可轉化結果，並得到FDA的推薦。我們使用人源化小鼠和高度免疫缺陷的B-NDG小鼠建立了毒理學和安全性評估平台。我們全面的毒理學和安全性讀數包括血液生化肝腎功能評估、組織病理學評估、細胞因子釋放綜合徵(CRS)評估、抗藥抗體(ADA)測試等，均是目前免疫療法常見的副作用測試。相信我們的臨床前毒理學和安全性評估為候選藥物評估提供了預測性很強的數據支持，並可作為臨床研究設計的指引。

Pharmacokinetics (PK) & Pharmacodynamics (PD)

Antibody drug pharmacokinetics are deeply influenced by target expression (target-mediated clearance) and FcRn (neonatal Fc receptor) expression, which can extend antibody half-life. Because human antibodies have different affinities to the targets, and FcRn expressed in animal species differ from that expressed in human, the PK profile of human antibodies from animals may not be translatable to human. Our humanized mice could express human therapeutic targets, and FcRn humanized mice enable more translatable evaluation of human antibody PK in mice, which could help to address these issues. Due to the growing limited availability of non-human primates, humanized mice may have increased value in non-clinical PK and toxicity studies for biologic drug development.

Utilizing target humanized mice and FcRn humanized mice, we have established a comprehensive PK/PD service platform in which we perform a series PK/PD studies to characterize drug exposure, predict dosage requirements, understand concentration-effect relationships, establish safety margins and efficacy characteristics, and develop the drug's product profile to support drug development and clinical trials. The PK/PD evaluation is also supported by our *in vitro* capabilities. Also, cell-based assays including ADCC and CDC assist with *ex vivo* or *in vitro* PD evaluation and identification of the MoA.

Small Animal Toxicology and Safety Study

Humanized mice can provide favorite translatable results in the toxicology and safety evaluation of drug candidates and are recommended by the FDA. We have established toxicology and safety evaluation platforms using our humanized mice and highly immune deficient B-NDG mice. Our comprehensive toxicology and safety readouts include blood biochemistry liver and renal function evaluation, histopathology evaluation, CRS evaluation, ADA test and more, which are the common side effect tests for current immunotherapy. We believe our pre-clinical toxicology and safety evaluation provides very predictive data to support drug candidate evaluation and may guide the design of clinical studies.

2.2 基因編輯

我們的基因編輯技術為抗體研發平台奠定堅實基礎。運用我們先進的基因編輯技術，我們已提出了千鼠萬抗計劃，開發了三個轉基因RenMice平台，並且設立了全面的抗體發現及模式動物平台。基因編輯是對生物體DNA片段進行特定修飾的技術，通常用於實現特定DNA片段的添加及刪除、特定鹼基的刪除及替換等修飾。基因編輯可對生物體的基因組進行永久性改變，而該等改變可在整個身體或特定組織中發生。通過基因編輯技術獲得的動物或細胞系等模型可模擬人類的特定生理、病理及細胞特徵，故在研究基因功能、闡明生物的遺傳進化、疾病發生的分子機制及提供治療疾病藥物相關評價等方面發揮重要作用。

在基因編輯定制服務領域，我們將重心轉移至海外製藥公司客戶，重點服務於內部研發創新，提升基因編輯業務線的盈利水平和價值貢獻。

2.2 Gene Editing

Our gene editing technology lays the solid foundation for our antibody discovery and development platforms. Leveraging our advanced gene editing technologies, we have launched Project Integrum, developed three transgenic RenMice platforms and created a comprehensive set of antibody discovery and animal model platform. Gene editing is a technique for making specific modifications to segments of an organism's DNA, which is usually used to achieve modifications such as the addition and deletion of specific DNA segments, deletions and substitutions of specific bases. Gene editing can make permanent changes in the genome of an organism, and these changes can take place throughout the body or in specific tissues. Models such as animals or cell lines obtained by gene editing technology can simulate specific physiological, pathological and cellular characteristics of humans, and thus play an important role in studying the functions of genes, elucidating the genetic evolution of organisms, the molecular mechanisms of disease occurrence and providing relevant evaluation of drugs for disease treatment.

In the area of gene editing customized services, we have shifted the focus to overseas pharmaceutical company customers and emphasized to serve internal R&D and innovations so as to enhance the profit level and value contribution of the gene editing business line.

定制服務

我們主要提供基於大鼠／小鼠及細胞系的定制基因編輯服務，最終產品為具有特定基因型的動物或細胞系模型、基因型檢測報告及項目結束報告。此外，我們亦提供sgRNA質粒構建及sgRNA活性檢測等一系列基因編輯實驗服務：

- 基於動物的基因編輯服務。我們主要從事大鼠／小鼠的定制基因編輯服務。小鼠易操作，生命週期短，繁殖能力強，且具有與人類相似的基因組和生理特徵，因此常被用作研究人類基因功能和疾病機制的首選動物。小鼠亦是基因組學、轉錄組學、蛋白質組學及遺傳表型研究最廣泛的動物。與小鼠相比，大鼠在神經系統方面與人類有更高的相似性，常被用作相關領域的藥效學模型。我們使用成熟穩定的基於ESC/HR和基於CRISPR/EGE的基因編輯技術為大鼠／小鼠提供定制基因編輯服務。我們根據幾種大鼠／小鼠品系進行基因編輯修飾。提供基因編輯服務的小鼠品系主要包括C57BL/6、BALB/c、DBA2和NOD-scid，大鼠品系主要包括Sprague Dawley及Wistar。
- 基於細胞系的基因編輯服務。相較於基因編輯模式動物，細胞系模型具有方便、週期短及成本低的優點。穩定細胞系在基因功能研究、重組蛋白製備、藥物篩選及靶點驗證、腫瘤治療等研究中發揮重要作用。我們使用基於ESC/HR和基於CRISPR/EGE的基因編輯技術提供各種細胞系基因編輯服務。
- 基因編輯實驗服務。我們提供基於大鼠、小鼠及細胞系的定制基因編輯服務以及配套實驗服務。

基於多年的潛心研究和技術積累，我們已掌握基於ESC/HR的基因編輯技術和基於CRISPR/EGE的基因編輯技術。

Customized Services

We mainly provide customized gene editing services based on rat/mouse and cell lines, and the final products are animal or cell line models with specific genotypes, genotype detection reports and project closure reports. In addition, we also provide a series of gene editing experimental services such as sgRNA plasmid construction and sgRNA activity detection:

- Animal-based Gene Editing Services. We are mainly engaged in customized gene editing services for rat/mouse. Mice are easy to handle, have a short life cycle, high reproductive capacity, and have similar genomic and physiological characteristics to humans, thus are often used as animals of choice for studying human gene function and disease mechanisms. Mice are also the most intensively studied animal for genomics, transcriptomics, proteomics and genetic phenotyping. Rats have a higher similarity to humans in terms of nervous system compared to mice and are often used as pharmacodynamic models in related fields. We provide customized gene editing services for rat/mouse using mature and stable ESC/HR-based and CRISPR/EGE-based gene editing technologies. We perform gene editing modification based on several rat/mouse strains. The mouse strains for which gene editing services are provided mainly include C57BL/6, BALB/c, DBA2 and NOD-scid, and the rat strains mainly include Sprague Dawley and Wistar.
- Cell Line Based Gene Editing Services. Compared with gene editing animal models, cell line models have the advantages of convenience, short cycle time and low cost. Stable cell lines play an important role in gene function research, recombinant protein preparation, drug screening and target validation, tumor therapy and other research. We provide a variety of cell line gene editing services using ESC/HR-based and CRISPR/EGE-based gene editing technologies.
- Gene Editing Experimental Services. We provide customized gene editing services based on rats and mice as well as cell lines along with supporting experimental services.

We have mastered ESC/HR-based gene editing technology and CRISPR/EGE-based gene editing technology based on our years of dedicated research and technical accumulation.

管理層討論與分析

Management Discussion and Analysis

2.3 模式動物銷售

憑藉先進的基因編輯技術，我們通過編輯小鼠的基因，創建了全面的抗體發現及疾病小鼠模型，創造了適合體內藥效評估的模式動物。我們的抗體發現及疾病小鼠模型包括超過2,900個獨特的基因編輯小鼠／細胞系項目。

全面的模式動物組合與大規模動物生產及體內療效研究相結合，令我們能夠成功地為內部資產及計劃進行大規模體內抗體發現及篩選，並為全球生物技術及大型製藥公司客戶提供疾病模式動物及體內藥理學服務。

在創新模式動物的研發和銷售業務線，本公司每年不斷向市場推出數百種新型模式動物，同時擴大國內外客戶群，並藉助江蘇南通動物設施的規模，為更多的客戶提供更好的模式動物產品。這些舉措確保本公司在報告期間取得令人滿意的銷售增長。

模式動物

通過修改關鍵基因來模擬人類病理環境的模式動物是當前藥物研發過程中必不可少的工具。使用相關模型進行藥物評估被認為是驗證臨床前藥物療效的「黃金標準」。基於基因編輯人源化小鼠模型，我們研發了腫瘤及自身免疫疾病小鼠模型，用於基因功能研究及藥物研發。通過使用已上市及自主研發的抗體藥物進行小鼠體內藥效測試，結合生理、生化、血液、毒性等其他因素，我們能夠驗證模型的有效性並向客戶銷售疾病模型鼠。

目前的模式動物疾病類型主要集中於腫瘤及自身免疫。我們正積極探索新的模式動物及細胞檢測模型，利用基因編輯人源化小鼠構建腫瘤模型，測試抗腫瘤抗體藥物、化療藥物及靶向小分子藥物對腫瘤生長的抑制作用，為腫瘤藥物的藥物篩選及臨床申報提供更多數據支持。對於自身免疫，我們專注於在基因編輯人源化小鼠中誘發自身免疫性疾病（哮喘、實驗性自身免疫性腦脊髓炎、銀屑病等），並測試基於細胞因子抗體藥物的治療效果。

2.3 Animal Model Selling

Leveraging our advanced gene editing technologies, we have created a comprehensive set of antibody discovery and disease mouse models by editing the gene of mice, creating animal models suitable for *in vivo* efficacy evaluation. Our antibody discovery and disease mouse models include more than 2,900 unique gene-edited mouse/cell line projects.

The combination of an extensive portfolio of animal models and large-scale animal production and *in vivo* efficacy studies has enabled us to successfully conduct large-scale *in vivo* antibody discovery and screening for our own internal assets and initiatives as well as providing disease animal models and *in vivo* pharmacology services to biotechnology and large pharmaceutical company clients worldwide.

In the business line of R&D and sales of innovative animal models, the Company keeps launching hundreds of new animal models in the market every year, while expanding the customer base at home and abroad, and leveraging the scale of the animal facility in Nantong, Jiangsu Province, to provide more customers with better animal model products. These initiatives ensure that the Company made satisfactory sales growth in the Reporting Period.

Animal Models

Animal models that mimic human pathological environments through the modification of key genes are essential tools in the current drug development process. Drug evaluations using these models are considered the “gold standard” for validating the efficacy of pre-clinical drugs. Based on the gene editing humanized mouse model, we have developed mouse models for tumor and autoimmune diseases, which are used for gene function research and drug development. Using marketed and self-developed antibody drugs for *in vivo* drug efficacy testing in mice, combined with physiological, biochemical, blood, toxicity and other factors, we are able to verify the validity of the models and sell disease model mice to our customers.

Current disease types of animal models are mainly focused on tumor and autoimmune. We are actively investigating new animal models and cellular assay models, constructing tumor models using gene-edited humanized mice, testing the inhibitory effects of anti-tumor antibody drugs, chemotherapy drugs and targeted small molecule drugs on tumor growth, and providing more data support for drug screening of tumor drugs and clinical declarations. For autoimmune, we are focusing on inducing autoimmune diseases (asthma, experimental autoimmune encephalomyelitis, psoriasis, etc.) in gene-edited humanized mice and testing the therapeutic effects of cytokine-based antibody drugs.

除腫瘤及自身免疫性疾病外，我們正進一步拓展神經、心血管及代謝疾病等疾病領域的模式動物，為藥物開發提供臨床前體內外藥效測試。

(i) 人源化小鼠

免疫檢查點及其他人源化小鼠

大多數人源抗體藥物僅能識別人源抗原並與之相互作用，並且由於物種差異，不能直接用野生小鼠進行臨床前藥效學及藥代動力學評價及測試。因此，有必要將小鼠免疫檢查點以及其他靶點（如GPCR）人源化並在小鼠體內表達人源相關抗原，使人源抗體藥物能在小鼠體內產生正常的藥物反應。

依託高效穩定的基因技術平台和科學規範的模式動物生產中心，我們充分考慮可能干擾人源化蛋白表達的因素，對每個試驗者進行詳細評估和精準設計，基於C57BL/6基因背景研發出一系列免疫檢查點及其他人源化小鼠。為確保小鼠模型完全人源化，我們排除外界環境對人源化蛋白表達及信號傳導的影響，為免疫檢查點及其他靶點抗體的藥物驗證提供了有效模型及有力工具。

細胞因子及細胞因子受體人源化小鼠
同源免疫檢查點及其他人源化小鼠

細胞因子參與自身免疫性疾病的機制已得到深入研究。艾伯維已研發出靶向TNF的阿達木單抗，並已獲得FDA批准用於11種適應症，包括類風濕性關節炎及銀屑病關節炎。其他靶向細胞因子的抗體在自身免疫疾病及腫瘤學方面亦具有良好的市場前景。

細胞因子通常具有複雜的信號通路。通過研究細胞因子的作用機制，我們對小鼠體內的關鍵細胞因子或細胞因子受體進行了人源化處理，從而可以評價人源細胞因子或細胞因子受體抗體藥物在小鼠體內的療效及藥理作用。我們認為該等範疇可滿足藥企對細胞因子或細胞因子受體抗體藥物的絕大部分臨床前藥物評價需求。

In addition to tumor and autoimmune diseases, we are further expanding the disease areas of animal models, such as neurological, cardiovascular and metabolic diseases, to provide pre-clinical *in vivo* and *in vitro* drug efficacy testing for drug development.

(i) Humanized Mice

Immune Checkpoint and other Humanized Mice

Most human antibody drugs can only recognize and interact with human antigens, and due to species differences, pre-clinical pharmacodynamic and pharmacokinetic evaluation and testing cannot be performed directly with wild-type mice. Therefore, it is necessary to humanize mouse immune checkpoints as well as other targets such as GPCR and express human-related antigens in mice, so that human antibody drugs can produce normal drug responses in mice.

Relying on an efficient and stable gene technology platform and a scientific and standardized model animal production center, we considered the factors that may interfere with the expression of humanized proteins, carried out detailed evaluation and made a precise design for each subject and developed a series of immune checkpoint and other humanized mice based on the genetic background of C57BL/6. In order to ensure that the mouse model is fully humanized, we excluded the influence of external environment factors on the expression and signaling of humanized proteins, and provided an effective model and powerful tool for drug validation of immune checkpoint and other targets antibodies.

Cytokine and Cytokine Receptor Humanized Mice Format
Homologous Immune Checkpoint and Other Humanized Mice

The mechanisms of cytokine involvement in autoimmune diseases have been studied in depth. AbbVie has developed adalimumab, which targets TNF, and has been approved by the FDA for 11 indications, including rheumatoid arthritis and psoriatic arthritis. Other antibodies targeting cytokine also have good market prospects in autoimmune diseases and oncology.

Cytokines usually have complex signaling pathways. By studying the mechanism of action of cytokines, we have humanized the key cytokines or cytokine receptors in mice, allowing the *in vivo* evaluation of the efficacy and pharmacological effects of human cytokine or cytokine receptor antibody drugs in mice. We believe such coverage can meet a substantial majority of the pre-clinical drug evaluation needs of cytokine or cytokine receptor antibody drugs for pharmaceutical companies.

管理層討論與分析

Management Discussion and Analysis

(ii) 嚴重免疫缺陷(B-NDG)小鼠

我們獨立研發的B-NDG(NOD.CB17-Prkdcscid IL2rgtm1/Bcgen)小鼠是通過IL2rg基因敲除從具有NOD-scid遺傳背景的小鼠獲得。B-NDG小鼠具有嚴重的免疫缺陷表型，缺乏成熟的T細胞、B細胞及NK細胞，並且缺乏細胞因子信號，使其成為人源造血幹細胞、人外周血單個核細胞、人源腫瘤細胞或組織移植的理想藥物研發載體。

我們用於出售的模式動物的知識產權通常屬於本公司。由於我們的模式動物一般不會直接應用於客戶的候選產品，故於報告期間並無與客戶進行模式動物的知識產權分配討論。我們通常與客戶簽訂為期一至五年的框架協議，並根據此類框架協議接受客戶的工作訂單。我們與客戶釐定費率及付款條款時考慮多項因素，包括特定模式動物的開發成本、育種費用及要求的數量。我們通常要求客戶在發票日期後一個月內全額付款。通常而言，除非發生不可抗力事件，否則客戶與我們均無權終止協議。

人體免疫力系統重建模型

為解決重度免疫缺陷小鼠造血細胞維持分化功能、免疫細胞發育受限等問題，我們基於B-NDG小鼠研發了一系列二代產品，以滿足不同的研究需求。例如，B-NDG B2m KO plus小鼠可以延遲PBMC重建模型中的GVHD效應，從而在不影響抗體藥物半衰期的情況下實現更長的給藥窗口。此外，B-NDG hIL15小鼠能更好地促進人NK細胞的免疫重建，B-NDG hTHPO小鼠無需照射而重組，可避免輻射對小鼠的損傷。

(ii) Severe Immunodeficient (B-NDG) Mice

B-NDG (NOD.CB17-Prkdcscid IL2rgtm1/Bcgen) mice, which we independently developed, are obtained from mice with NOD-scid genetic background by IL2rg gene knockout. B-NDG mice have a severe immunodeficient phenotype, lack mature T-cells, B-cells and NK cells, and are deficient in cytokine signaling, making them ideal drug development vehicles for human hematopoietic stem cells, human peripheral blood mononuclear cells, human tumor cells or tissue transplantation.

The intellectual properties of our animal models for sale generally belong to the Company. As our model animals would generally not be applied directly towards a product candidate of our clients, there were no intellectual properties allocation discussions with our clients of animal models during the Reporting Period. We typically enter into framework agreements with our clients for a term of one to five years and take clients' work orders under such framework agreements. We decide fee rates and payment terms together with our clients considering multiple factors, including the development cost of certain model animals, breeding expenses, and quantity requested. We generally require our clients to make full payment within a month after the invoice date. Generally neither our client nor us have the right of termination unless a force majeure event occurs.

Models for Human Immune System Reconstitution

In order to solve the problems of maintenance and differentiation functions of hematopoietic cells and restricted development of immune cells in severely immunodeficient mice, we have developed a series of second-generation products based on B-NDG mice to meet different research needs. For example, B-NDG B2m KO plus mice can delay the GVHD effect in PBMC reconstitution model, thus achieving a longer dosing window without affecting the half-life of antibody drugs. Additionally, B-NDG hIL15 mice can better promote the immune reconstitution of human NK cells and B-NDG hTHPO mice do not need irradiation to be reconstituted, thus can avoid radiation damage to mice.

營銷及業務開發

我們通過營銷和業務開發團隊的努力及客戶推薦獲得業務。我們的營銷和業務開發團隊致力於提高我們的品牌知名度、擴大我們的全球客戶群並加強我們與現有客戶的關係以獲取更多商機。

市場策略上，我們繼續積極開拓海外市場，提升海外收入的快速增長。通過加大宣傳，塑造本公司專業生物技術公司的形象，擴大在行業內的認知度；按照不同業務線，不同客戶類型等對銷售團隊進行擴充和調整，增加新覆蓋區域，強化對客戶需求的快速響應；擴大大公司在波士頓的研發生產設施，並擴充波士頓附屬公司研發生產團隊，能夠更好的為美國藥企客戶提供本地化的服務。本公司CRO相關臨床前業務收入持續保持以較高的毛利水平快速增長，並與全部海外前十大製藥公司保持長期業務合作。海外業務的總收入及其佔我們總收入的比例繼續增加。

於2022年，我們於德國海德堡設立新的附屬公司，並開始於歐洲各地組建銷售團隊。2023年5月，本公司在美國舊金山成立辦公室並正式投入運營，能夠為美國西海岸的客戶提供及時的響應服務。2023年8月，本公司遷址到美國波士頓新租賃的實驗室和動物房，新設施的投入使用，能夠為本公司帶來更大的業務承載能力。此外，我們亦將招募更多擁有海外基地的業務開發商，積極擴大當地客戶覆蓋率並開拓海外市場。未來，我們將進一步擴大海外投資，提高海外銷售收入的金額及佔比。

MARKETING AND BUSINESS DEVELOPMENT

We procure business through the efforts of our marketing and business development teams and customer referrals. Our marketing and business development team is dedicated to increasing our brand awareness, expanding our global customer base and strengthening our relationships with existing customers to drive more business opportunities.

In terms of market strategy, we continue to actively develop overseas markets to enhance the rapid growth of overseas revenue. By increasing publicity, we have shaped the image of our Company as a professional biotechnology company and expanded our recognition in the industry; we have expanded and adjusted our sales team according to different business lines and types of customers, added new coverage areas, and strengthened our quick response to customers' needs; we have expanded the Company's R&D and production facilities in Boston and expanded the R&D and production teams of our Boston subsidiaries, so that we can better provide localized services to our U.S. pharmaceutical customers. We achieved income from pre-clinical business related to CRO of the Company continues to maintain rapid growth and a relatively high gross profit level, and we keep long-term business cooperation with all top ten overseas pharmaceutical companies. The total revenue of overseas business and its proportion of our total revenue continue to increase.

In the year of 2022, we set up a new subsidiary in Heidelberg, Germany, and started to have sales teams based all over Europe. In May 2023, the Company set up an office in San Francisco, U.S. and officially put it into operation, which is able to provide timely response service for customers on the west coast of the U.S.. In August 2023, the Company has relocated to the newly leased laboratory and animal house in Boston, U.S, and the commissioning of the new facilities is able to bring the Company a greater business carrying capacity. In addition, we are recruiting more business developers with abroad bases to actively expand coverage of local customers and explore overseas markets. In the future, we will further complement overseas investment and improve the amount and proportion of our overseas sales revenue.

管理層討論與分析

Management Discussion and Analysis

基於RenMice平台，我們的抗體發現平台繼續生成潛在抗體分子，並已在不同階段與國內外製藥公司達成合作開發／授權協議。我們的抗體發現業務自2020年以來持續高速增長，同時維持非常高的毛利率。我們的客戶基礎已從國內知名生物科技公司擴展至全球知名製藥公司，單筆合同預付款、進程費及版稅得到持續改善。

截至2023年6月30日止六個月及直至本報告日期，我們並無於市場上商業化任何核心產品。我們尚未就核心產品制定任何明確的定價政策。我們正通過與多家國內及國際製藥公司合作，加快臨床及臨床前產品資產的開發。未來，我們將繼續奉行此產品開發策略，並與製藥公司進行更多合作，以推進及商業化我們的資產。

研發

我們致力於提供創新服務，以支持我們客戶在中國及世界各地的開創性和複雜的新藥研發項目。為實現該目標，我們不斷投資改進技術和提升服務能力，並積極參與政府資助的重大研究項目。相關投資令我們能夠持續站在行業最新技術趨勢的前沿，為客戶研發新解決方案並維持我們的競爭地位。我們努力通過內部研發以及與合作夥伴和客戶的合作進一步提高我們的技術能力。

Based on the RenMice platform, our antibody discovery platforms continue to produce potential antibody molecules and have reached co-development/licensing agreement with domestic and foreign pharmaceutical companies at different stages. Our antibody discovery business has continued to grow at a high rate since 2020, while maintaining a very high gross profit margin. Our customer base has expanded from well-known domestic biotech companies to famous pharmaceutical companies around the world, and the upfront payment, milestone payment and royalties of a single contract keeps improving.

For the six months ended June 30, 2023 and up to the date of this report, we had not commercialized any of our Core Products on the market. We have not formulated any definitive pricing policy for our Core Products yet. We are accelerating the development of our clinical and pre-clinical product assets by entering into collaborations with a number of domestic and international pharmaceutical companies. In the future, we will continue to pursue this product development strategy and enter into more collaborations with pharmaceutical companies to advance and commercialize our assets.

RESEARCH AND DEVELOPMENT

We are committed to providing innovative services to support our customers' groundbreaking and complex new drug R&D projects in China and around the world. Towards this goal, we have constantly invested in improving our technologies and advancing our service capabilities, as well as actively participated in major government-sponsored research projects. Such investments have allowed us to remain at the forefront of the latest technology trend in our industry, develop novel solutions for our customers and maintain our competitive position. We strive to further enhance our technical capability through internal research and development as well as collaboration with our partners and customers.

我們的基因編輯技術

我們的基因編輯技術為抗體研發平台奠定堅實基礎。運用我們先進的基因編輯技術，我們已提出了千鼠萬抗計劃，開發了系列轉基因RenMice平台，並且設立了全面的抗體發現及模式動物平台。

通過十多年的專注研究，我們已開發強大的基因編輯平台SUPCE、CRISPR/EGE及ESC/HR，是我們進行相關技術創新的推動力。自成立以來，我們一直提供基於動物及細胞的定制基因編輯服務，以滿足客戶基礎科學研究及藥物開發的需求。憑藉先進的基因編輯技術，我們為客戶完成了約4,500個定制基因編輯項目及內部開發了約2,900種基因編輯動物及基因編輯細胞模型產品。

與常見其他基因編輯技術使用質粒一次僅可編輯少於30,000個鹼基的基因片段相比，我們的專有內部開發的SUPCE技術可實現百萬鹼基規模的染色體編輯，且具有高穩定性及可重複性。SUPCE技術被應用該技術成功開發的RenMice平台充分驗證。我們在RenMice中實現了多種抗體的全長原位基因替換，並產生了保持強大免疫系統的非常健康的小鼠。

生成豐富全人源抗體庫的RenMice平台

我們開發了RenMice平台，生成豐富的全人源單克隆抗體庫及雙特异性抗體庫。我們的RenMice平台由三種不同的具全人源免疫球蛋白可變區的染色體工程小鼠組成，以替代對應小鼠，即全人源抗體小鼠RenMab、全人源通用輕鏈小鼠RenLite及全人源重鏈小鼠RenNano。基於RenMab，我們開發了全新類RenTCRm技術平台，用於針對細胞內靶點的抗體藥物開發，並開發用於發現針對GPCR及其他具有挑戰性靶點的治療性抗體的新GPCR抗體技術平台。

Our Gene Editing Technology

Our gene editing technology lays the solid foundation for our antibody discovery and development platforms. Leveraging our advanced gene editing technologies, we have launched Project Integrum, developed a series of transgenic RenMice platforms and created a comprehensive set of antibody discovery and animal model platform.

We have developed powerful gene editing platforms, SUPCE, CRISPR/EGE and ESC/HR, through more than a decade of dedicated research, which serves as our driving force for underlying technological innovations. Since our establishment, we have been providing customized gene editing services based on animals as well as cells to meet the needs of basic science research and drug development of our customers. Leveraging our advanced gene editing technologies, we have completed approximately 4,500 customized gene editing projects for our clients and self-developed approximately 2,900 gene edited animal and gene edited cell model products.

Compared with other common gene editing technologies that can only edit gene fragments less than 30,000 bases at a time using plasmid, our proprietary in-house developed SUPCE technology allows for megabase-scale chromosomal editing, with high stability and reproducibility. Our SUPCE technology is well validated by our RenMice platform, which was successfully developed applying this technology. We achieved full length in situ gene replacement for diverse antibodies in RenMice and produced very healthy mice retaining a strong immune system.

RenMice platforms for generation of a diverse repertoire of fully human antibodies

We have developed RenMice platforms to generate a diverse repertoire of fully human monoclonal antibodies and bi-specific antibodies. Our RenMice platform consist of three different chromosome engineered mice with fully human immunoglobulin variable domains replacing mouse counterparts, namely RenMab, a fully human antibody mouse, RenLite, a fully human common light chain mouse and RenNano, a fully human heavy chain only mouse. Based on RenMab, we have developed a new RenT Cell Receptor-Mimic (RenTCRm) technology platform for drug development of antibodies against intracellular targets and developed a new GPCR antibody technology platform for the discovery of therapeutic antibodies against GPCR and other challenging targets.

管理層討論與分析

Management Discussion and Analysis

我們的RenMice平台競爭力很強，這一點體現於對外的授權。截至2023年6月30日，我們已與20家知名的跨國製藥公司及領先的製藥公司，例如Merck Healthcare KGaA、強生集團、Xencor、百濟神州及信達生物製藥，達成授權及試驗合作協議，該等公司均為我們的獨立第三方。截至2023年6月30日，受許可人已合共啟動42個項目。RenMice技術平台的授權將使我們能夠獲得首付款、里程碑和銷售分成。於2023年3月，本公司與楊森生物技術公司（強生集團楊森製藥公司之一）訂立授權協議。有關詳情，請參閱本公司日期為2023年3月8日之公告。

RenMab

我們的RenMab平台使用RenMab小鼠發現及生成全人源單克隆抗體。我們自主開發的RenMab小鼠是全人源重鏈可變區和kappa輕鏈可變區原位置換的轉基因小鼠。RenMab小鼠攜帶全人源免疫球蛋白可變區庫，具有完整的免疫系統，即使經過基因編輯仍非常健康。

我們的自主百萬鹼基級基因編輯技術可實現整體小鼠免疫球蛋白重鏈及kappa輕鏈可變區（包括遠端Vk）與對應人類免疫球蛋白可變區的有效原位置換。因此，RenMab小鼠健康如一般野鼠，非常適合進行藥物靶點基因敲除。基因敲除小鼠是千鼠萬抗的重要組成部分。

通過全人源重鏈及輕鏈可變區，RenMab小鼠能夠產生豐富的抗體庫，我們繼而可在先導抗體篩選過程中優化和選擇具有最佳特異性和親和力的亞納摩爾級抗體。

RenMab平台獨立自主研發的關鍵技術已於2023年獲得中國專利。有關詳情，請參閱日期為2023年7月11日的公告。

Our RenMice platforms are competitive and validated through external licenses. As of June 30, 2023, we reached license and trial collaboration agreements with 20 well-known multinational pharmaceutical companies and leading pharmaceutical companies such as Merck Healthcare KGaA, Johnson & Johnson, Xencor, BeiGene and Innovent, all of which are independent third parties of us. As of June 30, 2023, the licensees have initiated 42 projects in total. The licensing of the RenMice technology platform will allow us to receive upfront fees, milestone fees and royalty. In March 2023, the Company entered into the license agreement with Janssen Biotech, Inc., one of the Janssen Pharmaceutical Companies of Johnson & Johnson. For details, please refer to the announcement of the Company dated March 8, 2023.

RenMab

Our RenMab platform uses RenMab mice for the discovery and generation of fully human monoclonal antibodies. Our in-house developed RenMab mice are transgenic mice with full human heavy chain variable region and kappa light chain variable region replacement *in situ*. RenMab mice carry the full human immunoglobulin variable region repertoire, which have an intact immune system and are healthy even after gene editing.

This proprietary, megabase-scale gene editing technology enables the efficient replacement of the entire murine immunoglobulin heavy chain and kappa light chain variable domains (including distal Vk) with the corresponding human immunoglobulin variable domains *in situ*. Thus, our RenMab mice are as healthy as regular wild-type mice, and well suited to knock out drug target genes. The knockout mice are an essential building block of our Project Integrum.

With the full human heavy and light chain variable region, RenMab mice are able to produce a diverse repertoire of antibodies. This then allows us to optimize and select antibodies with the best specificity and affinity at subnanomolar ranges in the lead antibody screening process.

The independently self-developed key technology of RenMab platform has been granted a Chinese patent in 2023. For details, please refer to the announcement dated July 11, 2023.

RenLite

我們的RenLite平台使用RenLite小鼠生成多種親和力高的雙特異性抗體及雙特異性ADC。RenLite小鼠的小鼠重鏈抗體基因可變區已由全人源重鏈可變區原位置換，產生類似人類的多樣化重鏈庫。相反，kappa鏈可變區則被單一固定人類共同kappa輕鏈置換。該單一人類共同kappa鏈的存在確保完美解決雙特異性抗體平台經常出現的輕鏈與重鏈錯配問題的輕鏈互補性，從而大幅降低CMC流程開發的難度。

除雙特異性抗體外，我們的RenLite小鼠還能夠為雙特異性ADC生成抗體。我們的雙特異性ADC可有效針對兩種腫瘤抗原，準確輸送藥量至腫瘤細胞，克服傳統ADC藥物的非腫瘤細胞毒性。YH012和YH013是Renlite平台產生的雙抗ADC分子。

RenNano

我們的RenNano平台在RenMab小鼠的基礎上進一步對抗體重鏈恆定區進行改造，利用RenNano小鼠生產重鏈抗體。與世界上為數不多的其他納米抗體模型相比，我們的RenNano小鼠擁有原位替換的完整的人類抗體重鏈可變區基因，其產生的全人單鏈抗體片段序列無需再經過體外人源化改造便可用於藥物開發，節省了大量時間和費用，並降低了後續開發的風險。基於小鼠的快速繁殖能力以及成熟的鼠單抗製備技術，與羊駝等其它單鏈抗體片段動物相比，RenNano小鼠可以用來進行規模化高通量全人源重鏈抗體的開發。用多種不同抗原免疫的RenNano小鼠後，可獲得互補決定區3(CDR3)序列多樣、識別表位豐富的重鏈抗體。這些抗體結合抗原不依賴輕鏈，並且具有nM級別的高親和力。實驗表明，RenNano來源的抗體在體內外具有良好的生物學功能。由於其結構簡單、無需配對，所以適合模塊化組裝，易於構建雙抗、多抗及CAR-T等藥物形成新形式。

RenLite

Our RenLite platform uses RenLite mice to produce diverse bi-specific antibodies with high affinity and to generate bi-specific ADCs. In our RenLite mice, the mouse heavy chain antibody gene variable region is replaced with full human heavy chain variable region *in situ*, which results in diversified heavy chain repertoire similar to that of humans. In contrast, the kappa chain variable domain has been replaced by a single fixed human common kappa light chain. Presence of the single human common kappa chain ensures light chain complementarity to seamlessly resolve the light chain and heavy chain mismatch issues often seen in bi-specific antibody platforms, thereby greatly reducing the difficulty of CMC process development.

In addition to bi-specific antibodies, our RenLite mice are able to generate antibodies for bi-specific ADCs. Our bi-specific ADCs can be used to effectively target two tumor-associated antigens and deliver the payload specifically to tumor cells, overcoming the non-tumor cytotoxicity of traditional ADC drugs. YH012 and YH013 are bispecific antibody ADC molecules generated by Renlite platform.

RenNano

Our RenNano platform uses RenNano mice to produce heavy chain antibodies on the basis of RenMab mice with further modification on antibody heavy chain constant region. Compared to few other nanoantibody models in the world, our RenNano mice carry the complete human antibody heavy chain variable region gene in an *in situ* swap, producing a fully human single chain antibody fragment sequence that can be used for drug development without further *in vitro* humanization, saving significant time and expense, and reducing the risk of subsequent development. Based on the rapid reproductive capacity of mice and the proven technology for preparing mice monoclonal antibody, RenNano mice can be used for high-throughput development of fully human heavy chain antibodies at scale compared to other single chain antibody fragment animals such as alpacas. Immunization of RenNano mice with a variety of different antigens resulted in heavy chain antibodies with diverse complementarity determining region 3 sequences and abundant recognition epitopes. These antibodies bind antigen independent of the light chain and have a high affinity at the nM level. Experiments have shown that antibodies derived from RenNano have good biological functions *in vitro* and *in vivo*. Due to its simple structure and no pairing, it is suitable for modular assembly, and even more so, for the construction of more innovative drug-forming forms such as dual antibodies, multibodies and CAR-T.

管理層討論與分析

Management Discussion and Analysis

RenTCRm平台

RenTCRm平台(「**RenTCRm平台**」)基於RenMice進行深度改造，成為HLA/RenMab，以產生全人源抗體，精準識別細胞內MAP表位並產生針對細胞內抗原的抗體。HLA/RenMab旨在突破主要針對細胞膜表面抗原(如PD-1及PD-L1)或可溶性抗原的傳統抗體治療局限，而識別腫瘤抗原TCR的抗體對相應抗原的親和力通常很低，造成了腫瘤細胞的免疫逃逸。RenTCRm平台專注以能夠有效靶向胞內抗原的於抗體替代TCR，從而篩選出親和力和特异性遠高於TCR的抗體。基於HLA/RenMab小鼠的優勢，我們可以一步到位獲得識別MAP表位並產生針對胞內抗原的全人源抗體，同時確保體內的親和力成熟，並篩選出親和力和特异性優於TCR的抗體。

RenTCRm平台獲得的全人源抗體序列為後續的抗體相關藥物、CAR-T等領域提供更多候選物。為靶向清除特定的異常細胞如腫瘤細胞、感染細胞和衰老細胞提供更多的胞內靶點選擇。此外，也可以為自免疾病受到攻擊的特定細胞篩選類TCR的阻斷抗體，避免對正常組織造成傷害。

GPCR平台

GPCR平台(「**GPCR平台**」)乃基於RenMice開發。GPCR(G蛋白偶聯受體)是人類基因中最豐富的膜蛋白。其主要功能是将細胞外信息傳輸到細胞中，引起各種細胞反應。許多GPCR及跨膜蛋白為潛在藥物靶點。然而，其細胞外結構域較小，不可能溶解，使其難以通過傳統方法獲得抗體。我們的GPCR抗體發現平台可解決該等困難。該平台通過DNA免疫及其他方法將抗原與原生構象免疫結合並增強免疫原性。此外，通過利用靶點敲除RenMice(RenMice KO)，該平台產生具有高度多樣性的全人源抗體，以提高篩選成功率。

RenTCRm Platform

RenTCRm platform (the “**RenTCRm Platform**”) is heavily modified based on RenMice to become HLA/RenMab to produce fully human antibodies that accurately recognize intracellular MAP epitopes and produce antibodies against intracellular antigens. HLA/RenMab is designed to break through the limitations of traditional antibody therapy that mainly targets cell membrane surface antigens, such as PD-1 and PD-L1, or soluble antigens, as well as the immune escape of tumor cells caused by the usually low affinity of antibodies that recognize the TCR of tumor antigens for the corresponding antigens. The RenTCRm Platform focuses on screening antibodies with much higher affinity and specificity than TCR by replacing them with antibodies that can effectively target intracellular antigens. Based on the advantages of HLA/RenMab mice, we can obtain fully human antibodies that recognize MAP epitopes and produce antibodies against intracellular antigens in one step, while ensuring in vivo affinity maturation and screening of antibodies with better affinity and specificity than TCR.

The fully human antibody sequences obtained from the RenTCRm Platform provide more candidates for subsequent antibody-related drugs, CAR-T and other fields. It provides additional intracellular targeting options for targeted removal of specific abnormal cells such as tumor cells, infected cells, and senescent cells. In addition, TCR-like blocking antibodies can also be screened for specific cells that are attacked by self-exempt diseases to avoid damage to normal tissues.

GPCR Platform

GPCR platform (the “**GPCR Platform**”) is developed based on RenMice. GPCR (G protein-coupled receptor) is the most abundant membrane protein in the human genome. Its primary function is to transmit extracellular information into the cell, causing various cellular responses. Many GPCR and transmembrane proteins are potential drug targets. However, they have small extracellular domains and are not soluble, which makes it difficult to obtain antibodies by traditional methods. Our GPCR antibody discovery platform can address these difficulties. The platform immunizes antigens with native conformation and enhanced immunogenicity by DNA immunization and other methods. In addition, by utilizing target knock-out RenMice (RenMice KO), the platform generates fully human antibodies with great diversity to increase the screening success rate.

我們致力於通過利用我們領先的內部研發能力（涵蓋從早期藥物發現到臨床研發）來改進我們的資產。截至2023年6月30日，我們的研發團隊已發現及／或研發10種候選藥物作為目前的產品管線。

為培養高素質人才儲備並確保提供專業服務，我們已建立現場培訓計劃提供有關各種尖端科學和技術主題的培訓課程，以及跟蹤、評估和報告各員工的培訓進度。

截至2023年6月30日，本公司約有500名研發人員，從事藥物開發以及臨床前研究服務。截至2022年及2023年6月30日止六個月，我們的研發費用分別為人民幣327.8百萬元及人民幣248.0百萬元。截至2023年6月30日止六個月，核心產品的研發費用為人民幣37.9百萬元，約佔同期研發費用的15.3%。

生產

模式動物生產

我們已建立模式動物生產中心，包括三個動物基地，涵蓋共約55,000平方米的動物設施。憑藉大型基地，我們得以擁有廣泛的基因工程小鼠、疾病小鼠模型及大齡小動物，並具有顯著的成本優勢。

與CRO及CDMO的合作

CRO及CDMO（作為我們的供應商）開展及支持我們資產產品的研發和臨床試驗。臨床前CRO主要根據我們的研究設計並在我們的監督下為我們提供與我們核心產品臨床前毒性及安全性評估相關的服務，例如動物研究。我們與CDMO合作夥伴合作生產我們的部分候選藥物，特別是我們的核心產品，以供應用於臨床前研究及臨床試驗。有關詳情，請參閱本報告「供應商」及「外部業務開發」。

We are dedicated to enhancing our assets by leveraging our leading in-house research and development capabilities, which spans from early drug discovery to clinical development. As of June 30, 2023, our R&D team has discovered and/or developed our current pipeline of 10 drug candidates.

To cultivate a high-quality talent pool and ensure delivery of professional services, we have developed on-site training programs that provide training courses on a variety of cutting-edge scientific and technical topics, as well as also tracking, evaluating and reporting each employee's training progress.

As of June 30, 2023, the Company had approximately 500 research and development personnel engaged in drug development as well as preclinical research services. For the six months ended June 30, 2022 and 2023, our R&D expenses were RMB327.8 million and RMB248.0 million, respectively. The R&D expenses on the Core Products was RMB37.9 million for the six months ended June 30, 2023, accounting for approximately 15.3% of the R&D expenses during the same period.

Manufacturing

Animal Model Production

We have established animal model production centers, including three animal facilities encompassing a total of approximately 55,000 sq.m. animal facilities. Our large facilities allow us to have a broad set of genetically engineered mice, disease mouse models and aged small animal with a significant cost advantage.

Collaboration with CROs and CDMOs

CROs and CDMOs, as our supplier, conduct and support our research and development and clinical trials of our assets products. The pre-clinical CROs mainly provide us with services related to pre-clinical toxicity and safety evaluations, such as animal studies, of our Core Products in accordance with our study design and under our supervision. We collaborate with our CDMO partners for the manufacturing of a portion of our drug candidates, in particular our Core Products, to supply for use in pre-clinical studies and clinical trials. For details, please refer to "Supplier" and "External Business Development" in this report.

建議發行A股

本公司於2023年3月6日召開董事會會議，建議發行A股並於上海證券交易所科创板上市，並於2023年4月20日召開臨時股東大會，以批准相關決議案。本公司已就建議發行A股提交申請材料，並已收到上海證券交易所就申請建議發行A股發出的接納函。發行A股須待中國證券監督管理委員會及上海證券交易所批准後，方可作實。於2023年6月20日，本公司收到上海證券交易所就本公司申請建議發行A股發出的接納函。詳情請參閱日期為2023年3月6日、2023年3月15日及2023年6月20日的公告以及日期為2023年3月31日的通函。

質量管理

我們設有質量管理部門，將資源投入到產品的質量管理中。基於我們研發抗體藥物的新理念，我們參照ISO9001、GMP和GLP體系建立了自己的質量控制體系。我們的質量控制體系非常重視我們產品和候選產品的設計、研發、製造、測試及運輸的質量控制。我們的管理團隊積極參與制定質量政策和管理內外部的質量表現。

截至2023年6月30日，我們的質量管理部門由約42名員工組成。我們的質量管理團隊成員擁有豐富的質量管理及成功向美國FDA和國家藥監局申報藥品的經驗。

供應商

供應商是本集團重要的業務夥伴，供應商的選擇和管理直接關係到本集團的產品質量。因此，依靠卓越的供應鏈管理，確保供應商和產品的質量是重中之重。為了有效規範和管理我們的供應商選擇流程，我們制定了一系列政策，為供應商准入、選擇、審批、監控和評估提供制度保障，明確了內部採購人員的職責。

PROPOSED ISSUE OF A SHARES

The Company held a Board meeting on March 6, 2023 to propose issue of A Shares and listing on the Sci-Tech Board of the Shanghai Stock Exchange and held the extraordinary general meeting on April 20, 2023 to approve the related resolutions. The Company has submitted the application materials in respect of the proposed issue of A Shares and has received a letter of acceptance issued by the Shanghai Stock Exchange in respect of the application for the proposed issue of A Shares. The issue of A Shares will be subject to approvals by the China Securities Regulatory Commission and the Shanghai Stock Exchange. On June 20, 2023, the Company received a letter of acceptance issued by the Shanghai Stock Exchange in respect of the Company's application for the proposed issue of A Shares. For details, please refer to the announcements dated March 6, 2023, March 15, 2023 and June 20, 2023 and the circular dated March 31, 2023.

QUALITY MANAGEMENT

We have a quality management department that devotes resources to the quality management of our products. Based on our novel idea to develop antibody drugs, we have established our own quality control system with reference to the ISO9001, GMP and GLP systems. Our quality control system devotes significant attention to quality control for the designing, research and development, manufacturing, testing and transportation of our products and product candidates. Our management team is actively involved in setting quality policies and managing our internal and external quality performance.

As of June 30, 2023, our quality management department consists of approximately 42 employees. Our quality management team members have rich experience in quality management and successful drug filings to the U.S. FDA and the NMPA.

SUPPLIERS

Suppliers are important business partners of the Group, and the selection and management of suppliers are directly related to the quality of the Group's products. Therefore, relying on an excellent supply chain management to ensure the quality of our suppliers and products is a top priority. In order to effectively standardize and manage our supplier selection process, we have formulated a series of policies to provide a system guarantee for supplier access, selection, approval, monitoring, and evaluation and clarified the responsibilities of internal procurement personnel.

在選擇供應商並與其簽訂合約之前，我們會進行盡職調查，以評估潛在供應商交付產品及服務的價格、質量、聲譽、能力及技術，並可能要求其發送樣品，經採購部審查後，由人員進行產品試用檢驗或現場調查，並納入我們的合格供應商數據庫。我們亦要求供應商提供企業認證，包括但不限於質量及／或環境管理體系認證，以確保符合國家及國際標準。同時，根據供應商甄選相關政策，我們定期對所有供應商進行評估考核，以驗證其質量體系及服務表現的有效性，並將評估結果作為供應商評估的依據。對於無法滿足基本採購要求且考核結果被淘汰的供應商，各部門必須立即終止與其合作，並以表現較好的供應商替換。

於2023年6月30日，本集團有約1,000名供應商，其中超過900名來自中國。截至2023年6月30日，我們對主要供應商進行評估，以檢查其供應表現是否符合我們對質量、服務及價格的要求。我們的主要供應商包括材料、資產及服務供應商。

外部業務開發

根據行業慣例，我們與CRO及CDMO合作開展及支持我們的資產產品（尤其是我們的核心產品）的研發和臨床試驗。我們的CRO合作夥伴通常是主要從事生物製藥開發、生物檢測開發、臨床開發、臨床試驗管理、藥物警戒及結果研究的信譽良好的跨國公司。臨床前CRO主要根據我們的研究設計並在我們的監督下為我們提供與我們核心產品臨床前毒性及安全性評估相關的服務，例如動物研究。我們委聘CRO對我們臨床階段產品進行臨床試驗，尤其是我們的核心產品。CRO通常提供一整套服務以協助我們進行及管理臨床試驗，包括試驗準備、源數據驗證、臨床安全管理、數據管理及報告編製。我們的CDMO合作夥伴通常是主要從事藥物開發及製造的跨國公司。我們與CDMO合作夥伴合作生產我們的部分候選藥物，特別是我們的核心產品，以供應用於臨床前研究及臨床試驗。

Before selecting a supplier and signing a contract with it, we will conduct due diligence to evaluate the price, quality, reputation, ability, and technology of the potential supplier to deliver products and services, and may request it to send samples, product trial inspection or on-the-spot investigation by personnel will be included in our qualified supplier database after being reviewed by the purchasing department. We also require suppliers to provide corporate certifications, including but not limited to quality and/or environmental management system certifications, to ensure compliance with national and international standards. At the same time, in accordance with the policies related to supplier selection, we regularly conduct assessments and assessments of all suppliers to verify the effectiveness of their quality systems and service performance, and the assessment results serve as the basis for supplier evaluation. For suppliers who cannot meet the basic procurement requirements and whose assessment results are eliminated, all departments must immediately terminate cooperation with them and replace them with suppliers with better performance.

As at June 30, 2023, the Group had approximately 1,000 suppliers, of which more than 900 were from China. As of June 30, 2023, we conducted assessments for major suppliers to examine whether their supply performance meets our requirements for quality, service, and price. Our main suppliers include suppliers of materials, assets, and services.

EXTERNAL BUSINESS DEVELOPMENT

In line with industry practice, we collaborate with CROs and CDMOs to conduct and support our research and development and clinical trials of our assets products, in particular our Core Products. Our CRO partners are usually reputable or multinational companies that primarily engage in biopharmaceutical development, biologic assay development, clinical development, clinical trials management, pharmacovigilance and outcomes research. The pre-clinical CROs mainly provide us with services related to pre-clinical toxicity and safety evaluations, such as animal studies, of our Core Products in accordance with our study design and under our supervision. We engage CROs for the clinical trials of our clinical-stage products, in particular our Core Products. CROs generally provide a comprehensive suite of services to assist us in the implementation and management of clinical trials, including trial preparation, source data verification, clinical safety management, data management and report preparation. Our CDMO partners are usually multinational companies that primarily engage in the development and manufacture of drugs. We collaborate with our CDMO partners for the manufacturing of a portion of our drug candidates, in particular our Core Products, to supply for use in pre-clinical studies and clinical trials.

管理層討論與分析

Management Discussion and Analysis

截至2023年6月30日止六個月，CRO及CDMO的核心產品研發費用為人民幣31.04百萬元。我們挑選CRO及CDMO時基於各項因素，例如學歷、行業聲譽以及對相關監管機構的合規性及成本競爭力。此外，我們還考慮彼等促進站點選擇、及時招募患者和高效高質進行複雜臨床試驗的能力。我們通常與CRO或CDMO就臨床試驗管理服務簽訂一般服務協議，據此，我們為每個臨床開發項目執行單獨的工作訂單。我們密切監督相關CRO及CDMO，確保彼等表現符合我們的協議和適用法律，從而保障我們試驗和研究數據的完整性及真實性。

知識產權

知識產權對我們的業務很重要。我們在開展業務的過程中開發及使用多種自有方法、分析、系統、技術、商業秘密、專有知識及其他知識產權。截至2023年6月30日，我們擁有271個註冊商標、122項授權專利及4項軟件著作權，並於20個國家或地區提交了329項專利申請。我們亦已就有關核心產品獲授8項專利，並提交30項專利申請。

未來與前景

2023年上半年，根據宏觀經濟環境變化和生物醫藥行業的嚴峻挑戰，我們聚焦公司發展調整，持續優化運營效率。我們很高興看到，本公司的銷售收入，銷售回款，簽約訂單都實現了較快的增長，尤其是海外銷售收入和訂單保持了更為顯著的增長。在本公司各項調整舉措落地後，我們實現了虧損的大幅收窄。未來二至三年，本公司將繼續堅持「開源節流」的戰略目標，各業務條線銷售收入快速增長的同時，保證足夠研發投入以鞏固核心業務的競爭優勢，同時不斷提升運營效率，控制費用開支，預計2024年本公司虧損將繼續快速收窄，並有望在2025年實現盈利。

For the six months ended June 30, 2023, the expenses for CROs and CDMOs attributable to the research and development of our Core Products were RMB31.04 million. We select CROs and CDMOs based on various factors, such as academic qualifications, industry reputation and compliance with relevant regulatory agencies and cost competitiveness. In addition, we consider their ability to facilitate site selection, timely recruit patients and conduct complex clinical trials efficiently with high quality. We typically enter into a general service agreement with a CRO or CDMO for clinical trial management services under which we execute separate work orders for each clinical development project. We closely supervise these CROs and CDMOs to ensure their performance in a manner that complies with our protocols and applicable laws, which in turn protects the integrity and authenticity of the data from our trials and studies.

INTELLECTUAL PROPERTY

Intellectual property rights are important to our business. We develop and use a number of proprietary methodologies, analytics, systems, technologies, trade secrets, know-how and other intellectual property during the conduct of our business. As of June 30, 2023, we had 271 registered trademarks, 122 registered patents and 4 software copyrights, and filed 329 patent applications in 20 countries or regions. We also have 8 issued patents and 30 filed patent applications in relation to our Core Products.

FUTURE AND PROSPECTS

In the first half of 2023, in light of the changes in the macroeconomic environment and the severe challenges in the biopharmaceutical industry, we focused on adjusting our Company's development and continued to optimize our operational efficiency. We are pleased to see that the Company's sales revenue, sales returns, and contracted orders all achieved faster growth, especially overseas sales revenue and orders maintained more significant growth. After the Company's various restructuring initiatives came into effect, we realized a significant narrowing of losses. In the next two to three years, the Company will continue to adhere to the strategic goal of "open source and cut costs", rapid growth in sales revenue of all business lines, while ensuring sufficient investment in research and development in order to consolidate the competitive advantage of the core business, and at the same time, continue to improve operational efficiency and control expenses, it is expected that the Company's losses will continue to narrow rapidly in 2024, and is expected to achieve profitability in 2025.

從2022年下半年開始，在審慎評估生物醫藥行業變化和本公司資源承載能力的基礎上，我們調整了臨床／臨床前藥物管線的研發策略，通過達成更多的外部合作來推動管線分子的研發進度，目前已顯現出良好的效果。YH001、YH002、YH005、YH008等眾多分子在達成對外授權／轉讓後，都取得了明顯的臨床進展並獲得具有前景的臨床數據，本公司保留的產品權益得到升值。未來，我們將繼續堅持聯合開發／授權轉讓／轉讓開發的策略，堅持自主開發少量有潛力的藥物分子，專注於臨床前或早期臨床階段的研發，在研發進入到中後期臨床之前實現對外轉讓，依靠合作夥伴的資源去推進後期臨床及商業化。

在2023年第三季度，已開展三年的「千鼠萬抗」計劃即將完成，我們將構建成功針對1,000+潛在藥物靶點的四十至五十萬個全人序列庫。抗體序列分子的對外轉讓在2023年顯現出強勁的增長態勢，我們有信心未來幾年將繼續保持快速增長趨勢。伴隨更多的對外轉讓，除首付款收入外，預計未來兩年已轉讓分子的里程碑收入將不斷增長，這將成為本公司未來銷售收入增長的重要支撐。

考慮到國內外生物技術行業的環境和挑戰，我們將堅持持續加強海外市場開拓的戰略，一方面通過加大動物模型、臨床前CRO服務等業務線的研發投入，保持所提供產品和服務的技術優勢，以贏得客戶的信賴；另一方面，通過擴大海外銷售團隊，開拓更多的海外客戶。擴大海外研發生產設施的規模，貼近市場為客戶提供本地化服務。在複雜的國際形式和多變的行業環境下，本公司將持續努力，以實現海外銷售收入的快速增長，從而拉動本公司整體銷售收入的快速增長和保持高毛利水準。

Starting from the second half of 2022, based on prudent assessment of the changes in the biopharmaceutical industry and the Company's resource capacity, we have adjusted the R&D strategy of our clinical/pre-clinical drug pipeline, and pushed forward the R&D progress of our pipeline molecules by entering into more external collaborations, which is showing good results so far. Many of our molecules, such as YH001, YH002, YH005, YH008, have achieved good results after entering into external licenses/transfers. And the rights and interests of the products retained by the Company have been appreciated. In the future, we will continue to adhere to the strategy of joint development/authorization of transfer/transfer of development, insist on developing a small number of promising drug molecules on our own, focusing on pre-clinical or early clinical stage research and development, and then achieve external transfer of the research and development before it reaches the mid - to late-stage clinical stage, and relying on the resources of our partners to advance the late-stage clinical and commercialization.

In the third quarter of 2023, we will complete our three-year Project Integrum, and we will have constructed 400,000 to 500,000 libraries of fully human sequences targeting 1,000+ potential drug targets. Outside transfers of antibody sequence molecules have shown strong growth in 2023, and we are confident that the rapid growth trend will continue in the coming years. Along with more outward transfers, milestone revenues from transferred molecules are expected to grow over the next two years, in addition to down payment revenues, which will be an important support for the Company's future sales revenue growth.

Considering the environment and challenges of the biotechnology industry both at home and abroad, we will strengthen our strategy of continuous development of overseas markets. On the one hand, we will maintain the technological superiority of the products and services we provide by increasing R&D investment in business lines such as animal models and pre-clinical CRO services, in order to win the trust of our customers. On the other hand, we will explore more overseas customers by expanding our overseas sales team. We will expand the scale of overseas R&D and production facilities to provide localized services close to the market for customers. Under the complex international situation and changing industry environment, the Company will continue to make efforts to realize the rapid growth of overseas sales revenue, so as to drive the rapid growth of the Company's overall sales revenue and maintain a high level of gross profit.

管理層討論與分析

Management Discussion and Analysis

本公司的發展願景是「成為全球新藥發源地」，我們堅信本公司正在朝著這一目標不斷前進。面對日益複雜和挑戰的外部環境，本公司唯有更加努力，更加實幹，不斷交出優異的業績答卷。

II. 財務回顧

概覽

以下討論乃基於本中期報告所載的財務資料及附註，並應與該等資料一併閱讀。

The Company's vision is to "become a global headstream of new drugs", and we firmly believe that the Company is moving forward towards this goal. In the face of the increasingly complex and challenging external environment, the Company can only work harder and more diligently to deliver excellent performance.

II. FINANCIAL REVIEW OVERVIEW

The following discussion is based on, and should be read in conjunction with, the financial information and the notes included elsewhere in this interim report.

截至6月30日止六個月			
For the six months ended			
June 30,			
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
		(未經審核)	(未經審核)
		(unaudited)	(unaudited)
收益	Revenue	326,836	229,131
銷售成本	Cost of sales	(91,472)	(62,161)
毛利	Gross profit	235,364	166,970
其他收益及虧損淨額	Other gains and losses, net	20,960	38,381
生物資產公允價值變動淨額	Net change in fair value of biological assets	942	10,233
銷售及營銷開支	Selling and marketing expenses	(29,506)	(24,241)
一般及行政開支	General and administrative expenses	(117,532)	(107,625)
研發開支	Research and development expenses	(247,970)	(327,819)
除稅前虧損	Loss before taxation	(189,389)	(272,593)
期內虧損	Loss for the period	(189,809)	(272,593)
期內其他全面收入 (稅後)	Other comprehensive income for the period (after tax)	(289)	357
期內全面收入總額	Total comprehensive income for the period	(190,098)	(272,236)

收益

截至2023年6月30日止六個月，我們的所有收益均來自臨床前研究服務相關之服務及產品（包括基因編輯、臨床前藥理藥效評估及模式動物銷售）以及抗體開發業務。下表載列於所示期間的收益明細：

REVENUE

For the six months ended June 30, 2023, all our revenue was generated from services and products related to our pre-clinical research services (which include gene editing, pre-clinical pharmacology and efficacy evaluation and animal models selling) and antibody development business. The following table sets forth a breakdown of our revenue for the periods indicated:

		截至2023年6月30日止六個月 (未經審核)		截至2022年6月30日止六個月 (未經審核)	
		Six months ended June 30, 2023 (Unaudited)		Six months ended June 30, 2022 (Unaudited)	
		人民幣千元	%	人民幣千元	%
		RMB'000		RMB'000	
基因編輯	Gene editing	33,429	10.2	29,252	12.8
臨床前藥理藥效 評估	Pre-clinical pharmacology and efficacy evaluation	89,541	27.4	65,416	28.5
模式動物銷售	Animal models selling	115,219	35.3	72,858	31.8
抗體開發	Antibody development	88,245	27.0	61,345	26.8
其他	Others	402	0.1	260	0.1
收益總額	Total revenue	326,836	100.0	229,131	100.0

收益由截至2022年6月30日止六個月的人民幣229.1百萬元增加42.6%至截至2023年6月30日止六個月的人民幣326.8百萬元，主要是由於臨床前藥理藥效評估、模式動物銷售及抗體開發收益增加所致。

Revenue increased by 42.6% from RMB229.1 million for the six months ended June 30, 2022 to RMB326.8 million for the six months ended June 30, 2023. The increase was mainly driven by the increase in revenue from our pre-clinical pharmacology and efficacy evaluation, animal models selling and antibody development.

銷售成本

銷售成本由截至2022年6月30日止六個月的人民幣62.2百萬元增長47.1%至截至2023年6月30日止六個月的人民幣91.5百萬元，該等增長總體上與報告期間收益增長一致。

COST OF SALES

Cost of sales increased by 47.1% from RMB62.2 million for the six months ended June 30, 2022 to RMB91.5 million for the six months ended June 30, 2023, which was generally in line with the increase in our revenue in the Reporting Period.

毛利及毛利率

毛利(即收益減銷售成本)由截至2022年6月30日止六個月的人民幣167.0百萬元增長41.0%至截至2023年6月30日止六個月的人民幣235.4百萬元，毛利增加主要是由於臨床前藥理藥效評估、模式動物銷售及抗體開發收益增加。毛利率按毛利除以收益計算。毛利率由截至2022年6月30日止六個月的72.9%減少至截至2023年6月30日止六個月的72.0%，該等減少主要是由於報告期間臨床前藥理藥效評估業務隨著收入的增長毛利率趨於穩定，由去年的較高水平恢復至正常水平，因此導致毛利率下降。

其他收益及虧損淨額

截至2023年6月30日止六個月，其他收益及虧損淨額總計約為人民幣21.0百萬元，而去年同期約為人民幣38.4百萬元，減幅為45.3%。

其他收益及虧損淨額包括出售物業、廠房及設備的虧損淨額、按公允價值計量且其變動計入當期損益之金融資產的公允價值變動、聯營公司權益、附屬公司權益、利息收入、政府補助(包括遞延收入攤銷)、出售按公允價值計量且其變動計入當期損益之金融資產的收益、衍生金融工具已實現虧損淨額、匯兌淨虧損及其他。其他收益及虧損淨額總計有所減少，主要是由於截至2022年6月30日止六個月至今年同期，出售聯營公司權益的收益由人民幣24.1百萬元下降至零。

GROSS PROFIT AND GROSS PROFIT MARGIN

The gross profit, representing revenue less cost of sales, increased by 41.0% from RMB167.0 million for the six months ended June 30, 2022 to RMB235.4 million for the six months ended June 30, 2023. The increase in the gross profit was mainly attributable to the increase in revenue from our pre-clinical pharmacology and efficacy evaluation, animal models selling and antibody development. Gross profit margin is calculated as gross profit divided by revenue. The gross profit margin decreased from 72.9% for the six months ended June 30, 2022 to 72.0% for the six months ended June 30, 2023. The decrease was primarily because pre-clinical pharmacology and drug efficacy evaluation business gross margin stabilized with the growth of revenue, recovering to a normal level from a high level last year, which causes the decrease of gross profit margin in the Reporting Period.

OTHER GAINS AND LOSSES, NET

For the six months ended June 30, 2023, the total other gains and losses, net were approximately RMB21.0 million, representing an decrease of 45.3% as compared with approximately RMB38.4 million in the corresponding period last year.

Other gains and losses, net, consist of net loss on disposal of property, plant and equipment, change in fair value of financial assets at FVTPL, interest in an associate, interest in a subsidiary, interest income, government grants (including amortization of deferred income), gain on disposal of financial assets at FVTPL, net realised losses on derivative financial instruments, net foreign exchange loss and others. The decrease in total other gains and losses, net was mainly due to gain on disposal of interest in an associate decreased from RMB24.1 million in the six months ended June 30, 2022 to nil in the corresponding period this year.

生物資產公允價值變動淨額

我們的生物資產主要指繁殖用小鼠及銷售用小鼠。對於報告期末仍是本公司生物資產的小鼠，本公司確認該等生物資產的公允價值變動（減去期末處置成本）。生物資產公允價值變動淨額確認為損益。生物資產公允價值變動淨額指期初到期末的公允價值差額，並無實際現金流動。生物資產公允價值採用市場法及成本法釐定。計算公允價值時採用近期交易單價及基於生物資產特徵的調整因素。庫存數量及估計市場單價的大幅上升或下降會導致生物資產公允價值大幅上升或下降。

我們的生物資產公允價值變動淨額由截至2022年6月30日止六個月的收益人民幣10.2百萬元減少至截至2023年6月30日止六個月的收益人民幣0.9百萬元，主要是由於相較於去年同期，截至2023年6月30日止六個月期間的人源化小鼠存貨數量存在變動。截至2023年6月30日止六個月，人源化小鼠存貨水平減少約5,000隻，而截至2022年6月30日止六個月，我們錄得人源化小鼠數量增長約7,700隻。不同產品線的單價於同期內並無重大波動，因此對生物資產公允價值變動淨額並無重大影響。

銷售及營銷開支

截至2023年6月30日止六個月，我們的銷售及營銷開支約為人民幣29.5百萬元，較截至2022年6月30日止六個月的人民幣24.2百萬元增加21.9%，該等增加主要是由於薪資增長，該等增長總體上與我們於報告期間的收益增長相一致。

NET CHANGE IN FAIR VALUE OF BIOLOGICAL ASSETS

Our biological assets mainly represent mice for breeding and selling. For mice that remained as the Company's biological assets at the end of the Reporting Period, the Company recognized the change in the fair value of these biological assets, less costs of disposal at the period-end. The net change in fair value of biological assets is recognized as profit or loss. Net change in fair value of biological assets represents the difference in fair value from the beginning to the end of the period and does not generate actual cash inflow or outflow. The fair values of biological assets are determined using the market approach and cost approach. Recent unit trading price and adjustment factors, which are based on the characteristics of the biological assets, were used in the calculations of fair values. A significant increase or decrease in the quantity in stock as well as the estimated unit market price would result in a significant increase or decrease in the fair value of the biological assets.

Our net change in fair value of biological assets decreased from a gain of RMB10.2 million for the six months ended June 30, 2022 to a gain of RMB0.9 million for the six months ended June 30, 2023, primarily due to the change of the number of humanized mice in stock during the six months ended June 30, 2023 as compared to the corresponding period last year. The stock level of humanized mice decreased approximately 5,000 heads in the six months ended June 30, 2023, while we recorded an increase of approximately 7,700 heads in the number of humanized mice in the six months ended June 30, 2022. The unit price of different product lines did not fluctuate materially during the corresponding period hence it did not have material impact on the net change in fair value of biological assets.

SELLING AND MARKETING EXPENSES

For the six months ended June 30, 2023, our selling and marketing expenses were approximately RMB29.5 million, representing an increase of 21.9% as compared with RMB24.2 million for the six months ended June 30, 2022. The increase was mainly due to increased salaries which was generally in line with the increase in our revenue in the Reporting Period.

一般及行政開支

我們的一般及行政開支由截至2022年6月30日止六個月的人民幣107.6百萬元增長9.2%至截至2023年6月30日止六個月的人民幣117.5百萬元，主要是由於我們與A股上市流程相關的服務支出及諮詢費用增加及我們的折舊及攤銷開支增加。

研發開支

我們的研發開支由截至2022年6月30日止六個月的人民幣327.8百萬元減少24.3%至截至2023年6月30日止六個月的人民幣248.0百萬元，是由於我們研發僱員人數減少導致的員工成本減少，以及自2022年下半年以來我們控制研發開支的策略導致直接材料成本減少。

流動資金及資本資源

本集團監控並維持一定水平的現金及現金等價物，將其維持在足以為我們的營運提供資金的水平，並減輕現金流量波動的影響。於報告期間，我們依賴股權融資作為主要的流動資金來源。我們亦通過提供服務所得收益產生現金，包括基因編輯、臨床前藥理藥效評估服務、模式動物銷售及抗體開發。

截至2023年6月30日，我們的銀行及庫存現金總計為人民幣551.1百萬元，而截至2022年12月31日為人民幣626.6百萬元。減少的主要原因是由於報告期間的經營活動現金流量為負，而這與業務經營虧損淨額及資本開支導致的投資活動負現金流量一致。

GENERAL AND ADMINISTRATIVE EXPENSES

Our general and administrative expenses increased by 9.2% from RMB107.6 million for the six months ended June 30, 2022 to RMB117.5 million for the six months ended June 30, 2023, primarily due to our increased service charge and consulting fees in connection with A Shares listing process and our increased depreciation and amortization expenses.

RESEARCH AND DEVELOPMENT EXPENSES

Our research and development expenses decreased by 24.3% from RMB327.8 million for the six months ended June 30, 2022 to RMB248.0 million for the six months ended June 30, 2023, because of our decreased staff costs as a result of our decreasing number of research and development employees, and decreased direct material costs due to our control R&D expenditures strategy since the second half of 2022.

LIQUIDITY AND CAPITAL RESOURCES

Our Group monitored and maintained a level of cash and cash equivalents deemed adequate to finance our operations and mitigate the effects of fluctuations in cash flows. During the Reporting Period, we relied on equity financing as the major sources of liquidity. We also generated cash from our revenue from our service offerings, including gene editing, pre-clinical pharmacology and efficacy evaluation services, animal models selling and antibody development.

As at June 30, 2023, our cash at bank and on hand totaled RMB551.1 million, as compared to RMB626.6 million as at December 31, 2022. The decrease was mainly as a result of our negative cash flows in operating activities which in line with net loss from business operation and negative cash flows in investing activities as result of capital expenditures in Reporting Period.

下表載列本集團於所示期間的中期簡明綜合現金流量表的簡明概要和對所示期間現金及現金等價物結餘的分析：

The following table sets forth a condensed summary of the Group's interim condensed consolidated statement of cash flows for the periods indicated and analysis of balances of cash and cash equivalents for the periods indicated:

		截至6月30日止六個月	
		For the six months ended June 30,	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
		(未經審核)	(未經審核)
		(unaudited)	(unaudited)
已付稅項	Tax paid	–	–
經營活動所用現金淨額	Net cash used in operating activities	(17,569)	(111,159)
投資活動所用現金淨額	Net cash used in investing activities	(90,011)	(42,969)
融資活動所得現金淨額	Net cash generated from financing activities	21,511	11,960
現金及現金等價物減少淨額	Net decrease in cash and cash equivalents	(86,069)	(142,168)
匯率變動影響	Effects of foreign exchange rate changes	9,946	7,551
於1月1日的現金及現金等價物	Cash and cash equivalents at January 1	610,882	466,445
於期末的現金及現金等價物	Cash and cash equivalents at the end of the period	534,759	331,828

財務成本

截至2023年6月30日止六個月，財務成本為人民幣46.7百萬元，較截至2022年6月30日止六個月的人民幣19.0百萬元有所增加，增幅達145.8%，主要是由於租賃負債及長期應付款項的利息增加。

FINANCE COSTS

For the six months ended June 30, 2023, finance costs were RMB46.7 million, representing an increase of 145.8% from RMB19.0 million for the six months ended June 30, 2022, primarily due to the increase in interest on lease liabilities and long-term payables.

銀行及其他貸款以及資產負債比率

於2023年6月30日，本集團的未償還貸款約為人民幣234.8百萬元（2022年12月31日：人民幣178.8百萬元）。截至2022年12月31日，短期貸款包括分別來自南京銀行、上海銀行及交通銀行的貸款，為期一年，年利率為3.65%至4.8%，同時，本公司就本公司附屬公司百奧賽圖江蘇基因生物技術有限公司向南京銀行借入的短期貸款約人民幣43.9百萬元提供共同及個別擔保。截至2023年6月30日，短期貸款包括分別來自南京銀行、交通銀行、民生銀行及杭州銀行的貸款，為期一年，年利率為3.55%至3.70%，同時，本公司就本公司附屬公司百奧賽圖江蘇基因生物技術有限公司向南京銀行借入的短期貸款約人民幣59.9百萬元提供共同及個別擔保。其他貸款為北京大興發展融資租賃有限公司根據售後回租協議提供的貸款，該筆貸款實質上被視為抵押貸款，貸款將於未來五年內支付，實際年利率為6.0%。

本集團使用資產負債比率監管資本充足率。於2023年6月30日，本集團的資產負債比率（報告期末負債總額（包括銀行及其他貸款和租賃負債）佔總權益百分比）分別為1.82（2022年12月31日：1.43）。

流動資產淨值

本集團於2023年6月30日的流動資產淨值約為人民幣197.0百萬元，而於2022年12月31日的流動資產淨值約為人民幣313.3百萬元。

外匯風險

外匯風險指外幣匯率變動造成虧損的風險。美元與本集團經營業務所用的其他貨幣之間的匯率波動可能會影響本集團的財務狀況及經營業績。

BANK AND OTHER LOANS AND GEARING RATIO

As at June 30, 2023, the Group's outstanding loans were approximately RMB234.8 million (December 31, 2022: RMB178.8 million). As of December 31, 2022, short-term bank loans include loans from Bank of Nanjing, Bank of Shanghai and Bank of Communications respectively, with a term of one year and an annual interest rate of 3.65% to 4.8%, and at the same time, the Company provided a joint and several guarantee for the short-term loan of approximately RMB43.9 million from Bank of Nanjing, which was borrowed by a subsidiary of the Company, Biocytogen Jiangsu Co., Ltd. (百奧賽圖江蘇基因生物技術有限公司). As of June 30, 2023, short-term loans include loans from Bank of Nanjing, Bank of Communications, Minsheng Bank and Bank of Hangzhou respectively, with a term of one year and an annual interest rate of 3.55% to 3.70%, and at the same time, the Company provided a joint and several guarantee for the short-term loan of approximately RMB59.9 million from Bank of Nanjing, which is a subsidiary of the Company, Biocytogen Jiangsu Co., Ltd. (百奧賽圖江蘇基因生物技術有限公司). Other loans were from Beijing Daxing Development Finance Leasing Co., Ltd. (北京大興發展融資租賃有限公司) under the sale and leaseback agreements which was considered as a mortgage loan in substance, and the loans will be paid in the next five years with annual interest rate of 6.0%.

The Group monitored its capital sufficiency using gearing ratio. As at June 30, 2023, the Group's gearing ratio (total debt (including bank and other loans and lease liabilities) as a percentage of total equity as of the end of the Reporting Period) was 1.82 (December 31, 2022: 1.43).

NET CURRENT ASSETS

The Group's net current assets, as at June 30, 2023 were approximately RMB197.0 million, while net current assets of approximately RMB313.3 million as at December 31, 2022.

FOREIGN EXCHANGE RISK

Foreign currency risk is the risk of loss resulting from changes in foreign currency exchange rates. Fluctuations in exchange rates between USD and other currencies in which the Group conducts business may affect the Group's financial condition and results of operations.

為應對外匯風險，本公司尋求通過盡量減少其外匯淨頭寸來限制其外匯風險敞口，以減少外匯風險對本公司的影響。於報告期內，本集團與一間商業銀行訂立有關混合外幣衍生工具的合約，當中包含外幣遠期部分及部分期權部分。該合約已於年末悉數結清。本公司管理層將繼續密切監察其外匯風險及需求，並於必要時安排對沖措施。

資本開支

截至2023年6月30日止六個月，資本開支總額約為人民幣85.0百萬元，主要包括廠房及辦公大樓投資及購買科學設備（2022年12月31日：人民幣410.6百萬元）。

或有負債

截至2023年6月30日，本集團並無任何重大或有負債（2022年12月31日：無）。

資產抵押

於2022年7月，本集團與北京大興發展融資租賃有限公司（以下簡稱「大興發展」）簽訂售後回租協議，向大興發展出售及回租金額為人民幣60,305,873元的若干機器及設備。租金將於未來五年內分期支付。其實質上被視為按揭貸款，實際年利率為6.0%。

對於本公司日期為2023年3月31日的通函中所述的銀行授信擔保建議，該擔保在報告期內未發生。

除上文所披露者外，截至2023年6月30日，本集團並無抵押任何集團資產。

In response to the foreign exchange risk, the Company seeks to limit its exposure to foreign currency risk by minimizing its net foreign currency position to reduce the impact of the foreign exchange risk on the Company. During the Reporting Period, the Group entered into a contract related to hybrid foreign currency derivative which contains a foreign currency forward component and some options component, with a commercial bank. The contract has been fully settled at the year end. The management of the Company will continue to monitor closely its foreign currency exposure and requirements and to arrange hedging facilities when necessary.

CAPITAL EXPENDITURE

For the six months ended June 30, 2023, our total capital expenditure amounted to approximately RMB85.0 million, primarily including investment in facility and office building, and purchase of scientific equipment. (December 31, 2022: RMB 410.6 million)

CONTINGENT LIABILITIES

As of June 30, 2023, the Group did not have any significant contingent liabilities. (December 31, 2022: Nil)

CHARGE ON ASSETS

In July 2022, the Group signed sale and leaseback agreements with Beijing Daxing Development Finance Leasing Co., Ltd. (hereinafter referred to as "Daxing Development") to sell and lease back certain machinery and equipment amounting to RMB60,305,873 to Daxing Development. The rent will be paid in installments within the next five years. It is considered as a mortgage loan in substance with an annual effective interest rate of 6.0%.

For the proposed guarantee for back credit facilities stated in the circular of the Company dated March 31, 2023, the guarantee did not occur during the Reporting Period.

Save as disclosed above, as of June 30, 2023, the Group did not pledge any group assets.

重大投資

截至2023年6月30日，我們並無任何重大投資。

重大收購及出售

截至2023年6月30日止六個月，我們並無進行任何其他重大收購及出售。

報告期後事項

除本報告所披露者外，就本公司所知，於2023年6月30日至最後可行日期並無任何重大期後事項。

僱員及薪酬政策

於2023年6月30日，我們共有1,313名僱員（2022年12月31日：1,348名），其中在北京有810名僱員，在江蘇有336名僱員，在中國其他地區及海外有167名僱員。

根據中國相關勞動法，我們與僱員簽訂標準保密及僱傭協議，當中包括條款、工資、獎金、僱員福利、工作場所安全、保密義務及終止理由等事項。

為保持在勞動市場的競爭力，我們向僱員提供各種獎勵及福利。我們為管理層員工及其他僱員投資持續教育及培訓項目（包括內部與外部培訓），以提升技能和知識。我們亦為僱員（尤其是重要僱員）提供有競爭力的薪酬及股票激勵計劃。我們相信，我們為僱員提供的福利、工作環境及發展機會有助於建立良好的僱員關係和提升僱員留任率。

重大投資及資本資產的未來計劃

除本中期報告所披露者外，截至最後可行日期，我們並未授權任何重大投資或收購資本資產的計劃。

SIGNIFICANT INVESTMENTS

As of June 30, 2023, we did not hold any significant investments.

MATERIAL ACQUISITIONS AND DISPOSALS

For the six months ended June 30, 2023, we did not conduct any other material acquisitions and disposals.

EVENTS AFTER REPORTING PERIOD

Save as disclosed in this report, the Company is not aware of any material subsequent events from June 30, 2023 to the Latest Practicable Date.

EMPLOYEES AND REMUNERATION POLICIES

As of June 30, 2023, we had 1,313 employees in total (December 31, 2022: 1,348), including 810 employees in Beijing, 336 employees in Jiangsu, and 167 employees in other regions of China and overseas.

In compliance with the relevant PRC labor laws, we enter into standard confidentiality and employment agreements with our employees covering matters such as terms, wages, bonuses, employee benefits, workplace safety, confidentiality obligations and grounds for termination.

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 and stock incentive plans to our employees especially key employees. We believe our benefits, working environment and development opportunities for our employees have contributed to good employee relations and employee retention.

FUTURE PLANS FOR MATERIAL INVESTMENTS AND CAPITAL ASSET

Save as disclosed in this interim report, we had not authorized any plan for the material investments or acquisition of capital asset as of the Latest Practicable Date.

Corporate Governance and Other Information

I. 中期股息

董事會不建議向股東派付截至2023年6月30日止六個月的中期股息（截至2022年6月30日止六個月：無）。

II. 權益披露

1. 董事、監事及最高行政人員於本公司及其相聯法團的股份、相關股份及債權證的權益及淡倉

於2023年6月30日，本公司董事、監事及最高行政人員於本公司及其相聯法團（定義見證券及期貨條例第XV部）的股份、相關股份或債權證中擁有須(a)根據證券及期貨條例第XV部第7及8分部知會本公司及聯交所的權益或淡倉（包括根據證券及期貨條例的有關條文被當作或視為擁有的權益及淡倉）；或(b)根據證券及期貨條例第352條須登記於該條例所指登記冊的權益或淡倉；或(c)根據標準守則須知會本公司及聯交所的權益或淡倉如下：

董事／監事／ 最高行政人員姓名	股份類別	身份	股份數目	於相關 類別股份中的 持股概約百分比 Approximate Percentage of Shareholding in Relevant Class of Shares	於本公司 所有股份中的 持股概約百分比 Approximate Percentage of Shareholding in Total Share of the Company
Name of Director/ Supervisor/Chief Executive	Class of Shares	Capacity	Number of Shares		
沈月雷博士 ⁽¹⁾⁽²⁾ 〔沈博士〕	非上市股份	實益擁有人			
Dr. Shen Yuelei ⁽¹⁾⁽²⁾ 〔“Dr. Shen”〕	Unlisted Shares	Beneficial owner	26,394,840	9.1%	6.6%
	非上市股份	配偶權益			
	Unlisted Shares	Interest of spouse	29,004,840	10.0%	7.3%
	非上市股份	受控制法團權益			
	Unlisted Shares	Interest in controlled corporations	37,840,860	13.1%	9.5%
	H股	受控制法團權益			
	H Shares	Interest in controlled corporations	16,854,300	15.2%	4.2%

I. INTERIM DIVIDEND

The Board does not recommend the payment of interim dividend for the six months ended June 30, 2023 to the Shareholders (six months ended June 30, 2022: Nil).

II. DISCLOSURE OF INTERESTS

1. DIRECTORS', SUPERVISORS' AND CHIEF EXECUTIVE'S INTERESTS AND SHORT POSITIONS IN THE SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY AND ITS ASSOCIATED CORPORATIONS

As of June 30, 2023, the interests or short positions of the Directors, Supervisors and chief executive of the Company in the Shares, underlying Shares or debentures of the Company and its associated corporations (within the meaning of Part XV of the SFO), which were required (a) 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 they were taken or deemed to have under such provisions of the SFO); or (b) pursuant to Section 352 of the SFO, to be entered in the register referred to therein; or (c) to be notified to the Company and the Stock Exchange pursuant to the Model Code, were as follows:

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董事／監事／ 最高行政人員姓名	股份類別	身份	股份數目	於相關 類別股份中的 持股概約百分比 Approximate Percentage of Shareholding in Relevant Class of Shares	於本公司 所有股份中的 持股概約百分比 Approximate Percentage of Shareholding in Total Share of the Company
Name of Director/ Supervisor/Chief Executive	Class of Shares	Capacity	Number of Shares		
倪健博士 ⁽³⁾ (「倪博士」)	非上市股份	實益擁有人	29,004,840	10.0%	7.3%
Dr. Ni Jian ⁽³⁾ ("Dr. Ni")	非上市股份	配偶權益	64,235,700	22.3%	16.1%
	Unlisted Shares	Interest of spouse	16,854,300	15.2%	4.2%
	H股	配偶權益			
	H Shares	Interest of spouse			

附註：

Note:

(1) 根據於2023年6月30日已發行股份總數399,398,420股股份(包括288,616,500股非上市股份及110,781,920股H股)計算。

(1) The calculation is based on the total number of issued Shares, 399,398,420 Shares, including 288,616,500 Unlisted Shares and 110,781,920 H Shares, as at June 30, 2023.

(2) 沈博士為百奧常青、百奧常盛、祐和常青及祐和常盛(均為僱員持股平台)的唯一普通合夥人及唯一管理合夥人，因此，沈博士被視為擁有該四個有限責任合夥企業持有的37,840,860股非上市股份及16,854,300股H股之權益。彼亦作為實益擁有人持有26,394,840股非上市股份。

(2) Dr. Shen is the sole general partner and the sole managing partner of Biao Evergreen, Baiao Changsheng, Eucure Evergreen and Eucure Changsheng, which are employee shareholding platforms. Dr. Shen, therefore, is deemed to be interested in the 37,840,860 Unlisted Shares and 16,854,300 H Shares held by these four limited partnerships. He also holds 26,394,840 Unlisted Shares as beneficial owner.

(3) 沈博士與倪博士為配偶，因此，沈博士被視為擁有倪博士所持有29,004,840股非上市股份之權益，而倪博士被視為擁有沈博士所持有之64,235,700股非上市股份及16,854,300股H股之權益。

(3) Dr. Shen and Dr. Ni are spouses. Dr. Shen, therefore, is deemed to be interested in 29,004,840 Unlisted Shares which Dr. Ni holds, and Dr. Ni is deemed to be interested in 64,235,700 Unlisted Shares and 16,854,300 H Shares which Dr. Shen holds.

除上文所披露者外，概無本公司董事、監事或最高行政人員於本公司或其任何相聯法團的股份、相關股份及債權證中擁有根據證券及期貨條例第352條須登記或根據標準守則須另行知會本公司及香港聯交所的權益或淡倉。

Save as disclosed above, none of the Directors, Supervisors or chief executives of the Company had registered an interest or short position in the Shares, underlying shares or debentures of the Company or any of its associated corporations that was required to be recorded pursuant to Section 352 of the SFO, or as otherwise notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code.

2. 主要股東權益

於2023年6月30日，據本公司及董事作出合理查詢後所知，下列人士（並非上文所披露的董事、監事及本公司最高行政人員）擁有股份或相關股份將須根據證券及期貨條例第XV部第2及3分部之條文知會本公司的權益或淡倉並記錄於本公司根據證券及期貨條例第336條須存置的登記冊：

2. SUBSTANTIAL SHAREHOLDER'S INTERETS

As of June 30, 2023, to the knowledge of the Company and the Directors after making reasonable inquiries, the following persons (other than the Directors, Supervisors and chief executive of the Company as disclosed above) have interests or short positions in Shares or underlying Shares which would be required to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO and recorded in the register required to be maintained by the Company under Section 336 of the SFO:

主要股東名稱	股份類別	身份	股份數目	於相關類別 股份中的持股概 約百分比 ⁽¹⁾	於本公司股本 總額中的持股 概約百分比 ⁽¹⁾
Name of Substantial Holders	Class of Shares	Capacity	Number of Shares	Approximate Percentage of Shareholding in Relevant Class of Shares ⁽¹⁾	Approximate Percentage of Shareholding in Total Share Capital of the Company ⁽¹⁾
國投上海 SDIC Shanghai	非上市股份 Unlisted Shares	實益擁有人 Beneficial owner	42,133,320	14.6%	10.5%
國投(上海)創業投資管理有限公司 ⁽²⁾ China Investment (Shanghai) Venture Capital Management Co., Ltd. ⁽²⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	42,133,320	14.6%	10.5%
國投深圳 SDIC Shenzhen	非上市股份 Unlisted Shares	實益擁有人 Beneficial owner	18,996,120	6.6%	4.8%
國投創業投資管理有限公司 ⁽³⁾ China Venture Capital Management Co., Ltd. ⁽³⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	72,937,440	25.3%	18.3%
中國國投高新產業投資有限公司 ⁽⁴⁾ China Venture Capital High-Tech Industry Investment Co., Ltd. ⁽⁴⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	72,937,440	25.3%	18.3%

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主要股東名稱	股份類別	身份	股份數目	於相關類別 股份中的持股概 約百分比 ⁽¹⁾	於本公司股本 總額中的持股 概約百分比 ⁽¹⁾
Name of Substantial Holders	Class of Shares	Capacity	Number of Shares	Approximate Percentage of Shareholding in Relevant Class of Shares ⁽¹⁾	Approximate Percentage of Shareholding in Total Share Capital of the Company ⁽¹⁾
國投 ⁽⁵⁾ SDIC ⁽⁵⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	72,937,440	25.3%	18.3%
維科控股集團股份有限公司 ⁽⁶⁾ Weike Holdings Group Co., Ltd. ⁽⁶⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	30,804,120	10.7%	7.7%
	H股 H Shares	受控制法團權益 Interest in controlled corporations	4,528,500	4.1%	1.1%
何承命先生 ⁽⁶⁾ Mr. He Chengming ⁽⁶⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	30,804,120	10.7%	7.7%
	H股 H Shares	受控制法團權益 Interest in controlled corporations	4,528,500	4.1%	1.1%
招銀成長柒號 Zhaoyin Chengzhang Qihao	非上市股份 Unlisted Shares	實益擁有人 Beneficial owner	22,602,960	7.8%	5.7%
招銀朗曜 ⁽⁷⁾ Zhaoyin Langyao ⁽⁷⁾	非上市股份 Unlisted Shares	實益擁有人 Beneficial owner	6,433,560	2.2%	1.6%
	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	22,602,960	7.8%	5.7%
深圳市招銀肆號股權投資合夥企業 (有限合夥) ⁽⁷⁾ Shenzhen Zhaoyin No.4 Equity Investment Partnership (Limited Partnership) ⁽⁷⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	29,036,520	10.1%	7.3%

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主要股東名稱	股份類別	身份	股份數目	於相關類別 股份中的持股概 約百分比 ⁽¹⁾	於本公司股本 總額中的持股 概約百分比 ⁽¹⁾
Name of Substantial Holders	Class of Shares	Capacity	Number of Shares	Approximate Percentage of Shareholding in Relevant Class of Shares ⁽¹⁾	Approximate Percentage of Shareholding in Total Share Capital of the Company ⁽¹⁾
全國社會保障基金理事會 ⁽⁷⁾ National Social Security Fund Board of Trustees ⁽⁷⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	29,036,520	10.1%	7.3%
招銀成長拾玖號 Zhaoyin Chengzhang Shijiu hao	非上市股份 Unlisted Shares	實益擁有人 Beneficial owner	19,060,920	6.6%	4.8%
招銀國際金融控股(深圳)有限公司 ⁽⁸⁾ China Merchants International Financial Holdings (Shenzhen) Co., Ltd. ⁽⁸⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	19,060,920	6.6%	4.8%
招銀國際資本 ⁽⁹⁾ CMB International Capital ⁽⁹⁾	非上市股份 Unlisted Shares 非上市股份 Unlisted Shares	實益擁有人 Beneficial owner 受控制法團權益 Interest in controlled corporations	3,074,400 48,097,440	1.1% 16.7%	0.8% 12.0%
星赫 Astral	H股 H Shares	實益擁有人 Beneficial owner	26,088,480	23.5%	6.5%
CMBI Private Equity Series SPC- Biotechnology Fund I SP ⁽¹⁰⁾	H股 H Shares	受控制法團權益 Interest in controlled corporations	26,088,480	23.5%	6.5%
CMBI Private Equity Series SPC- Biotechnology Fund V SP ⁽¹⁰⁾	H股 H Shares	受控制法團權益 Interest in controlled corporations	26,088,480	23.5%	6.5%
百奧維達 BioVeda	H股 H Shares	實益擁有人 Beneficial owner	20,291,400	18.3%	5.1%

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Name of Substantial Holders	Class of Shares	Capacity	Number of Shares	Approximate Percentage of Shareholding in Relevant Class of Shares ⁽¹⁾	Approximate Percentage of Shareholding in Total Share Capital of the Company ⁽¹⁾
InnoVeda Medtech, Ltd. ⁽¹¹⁾	H股 H Shares	受控制法團權益 Interest in controlled corporations	20,291,400	18.3%	5.1%
中國人壽保險股份有限公司 ⁽¹²⁾ China Life Insurance Co., Ltd. ⁽¹²⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	23,519,160	8.1%	5.9%
中國人壽保險(集團)公司 ⁽¹³⁾ China Life Insurance (Group) Company ⁽¹³⁾	非上市股份 Unlisted Shares	受控制法團權益 Interest in controlled corporations	23,519,160	8.1%	5.9%

附註：

(1) 根據於2023年6月30日已發行股份總數399,398,420股股份(包括288,616,500股非上市股份及110,781,920股H股)計算。

(2) 國投(上海)創業投資管理有限公司為國投上海的普通合夥人，因此，國投(上海)創業投資管理有限公司被視為擁有國投上海持有之42,133,320股非上市股份之權益。

(3) 國投創業投資管理有限公司為國投寧波及國投深圳的普通合夥人，因此，國投創業投資管理有限公司被視為擁有國投寧波持有之11,808,000股非上市股份及國投深圳持有之18,996,120股非上市股份之權益。另外，國投(上海)創業投資管理有限公司為國投創業投資管理有限公司之全資附屬公司，因此國投創業投資管理有限公司被視為擁有國投(上海)創業投資管理有限公司持有的42,133,320股非上市股份之權益。

Note:

(1) The calculation is based on the total number of issued Shares, 399,398,420 Shares, including, 288,616,500 Unlisted Shares and 110,781,920 H Shares, as at June 30, 2023.

(2) China Investment (Shanghai) Venture Capital Management Co., Ltd. is the general partner of SDIC Shanghai. China Investment (Shanghai) Venture Capital Management Co., Ltd., therefore, is deemed to be interested in 42,133,320 Unlisted Shares which SDIC Shanghai holds.

(3) China Venture Capital Management Co., Ltd. is the general partner of each of SDIC Ningbo and SDIC Shenzhen. China Venture Capital Management Co., Ltd., therefore, is deemed to be interested in 11,808,000 Unlisted Shares which SDIC Ningbo holds and 18,996,120 Unlisted Shares which SDIC Shenzhen holds. In addition, China Investment (Shanghai) Venture Capital Management Co., Ltd. is a wholly-owned subsidiary of China Venture Capital Management Co., Ltd., and therefore, China Venture Capital Management Co., Ltd. is deemed to be interested in 42,133,320 Unlisted Shares held by China Investment (Shanghai) Venture Capital Management Co., Ltd..

- (4) 中國國投高新產業投資有限公司為國投深圳的有限合夥人，持有其49.4%有限合夥權益。因此，中國國投高新產業投資有限公司被視為擁有國投深圳持有之18,996,120股非上市股份之權益。另外，中國國投高新產業投資有限公司持有國投創業投資管理有限公司40%的已發行股本，因此，中國國投高新產業投資有限公司被視為擁有國投創業投資管理有限公司持有的72,937,440股非上市股份之權益。
- (5) 國投持有中國國投高新產業投資有限公司72.36%的已發行股本，因此，國投被視為擁有中國國投高新產業投資有限公司持有的72,937,440股非上市股份之權益。
- (6) 維科控股集團股份有限公司為國投深圳的有限合夥人（持有其38.4%有限合夥權益）及國投寧波的有限合夥人（持有其50.8%有限合夥權益），因此，維科控股集團股份有限公司被視為擁有30,804,120股非上市股份（國投寧波持有11,808,000股非上市股份及國投深圳持有18,996,120股非上市股份）之權益。此外，基石投資者之一維科（香港）經貿有限公司（持有4,528,500股H股）由維科控股集團股份有限公司全資擁有，而維科控股集團股份有限公司由何承命先生擁有43.8%。
- (7) 招銀朗曜為招銀成長柒號的有限合夥人，持有其99.8%有限合夥權益。因此，招銀朗曜被視為擁有招銀成長柒號持有的22,602,960股非上市股份之權益。深圳市招銀肆號股權投資合夥企業（有限合夥）及全國社會保障基金理事會為招銀朗曜的有限合夥人，分別持有招銀朗曜41.9%及40%有限合夥權益。因此，深圳市招銀肆號股權投資合夥企業（有限合夥）及全國社會保障基金理事會被視為擁有招銀朗曜持有的29,036,520股非上市股份之權益。
- (8) 招銀國際金融控股（深圳）有限公司為招銀成長拾玖號的有限合夥人，持有其99.9%有限合夥權益。因此，招銀國際金融控股（深圳）有限公司被視為擁有招銀成長拾玖號持有的19,060,920股非上市股份之權益。
- (4) China Venture Capital High-Tech Industry Investment Co., Ltd. is a limited partner holding 49.4% limited partnership interests in SDIC Shenzhen. China Venture Capital High-Tech Industry Investment Co., Ltd., therefore, is deemed to be interested in 18,996,120 Unlisted Shares, which SDIC Shenzhen holds. In addition, China Venture Capital High-Tech Industry Investment Co., Ltd. holds 40% issued capitals of China Venture Capital Management Co., Ltd.. China Venture Capital High-Tech Industry Investment Co., Ltd., therefore, is deemed to be interested in 72,937,440 Unlisted Shares which China Venture Capital Management Co., Ltd. holds.
- (5) SDIC holds 72.36% issued capitals of China Venture Capital High-Tech Industry Investment Co., Ltd.. SDIC, therefore, is deemed to be interested in 72,937,440 Unlisted Shares which China Venture Capital High-Tech Industry Investment Co., Ltd. holds.
- (6) Weike Holdings Group Co., Ltd. is a limited partner holding 38.4% limited partnership interests in SDIC Shenzhen and a limited partner holding 50.8% limited partnership interests in SDIC Ningbo. Weike Holdings Group Co., Ltd., therefore, is deemed to be interested in 30,804,120 Unlisted Shares which SDIC Ningbo is interested in 11,808,000 Unlisted Shares and SDIC Shenzhen is interested in 18,996,120 Unlisted Shares. Moreover, one of our Cornerstone Investors, namely, VEKEN (HONGKONG) ECONOMIC AND TRADE CO., LIMITED (維科(香港)經貿有限公司), which holds 4,528,500 H Shares, is wholly owned by Weike Holdings Group Co., Ltd.. Weike Holdings Group Co., Ltd. is in turn owned as to 43.8% by Mr. He Chengming (何承命).
- (7) Zhaoyin Langyao is a limited partner holding 99.8% limited partnership in Zhaoyin Chengzhang Qihao. Zhaoyin Langyao, therefore, is deemed to be interested in 22,602,960 Unlisted Shares, which Zhaoyin Chengzhang Qihao is interested in. Shenzhen Zhaoyin No.4 Equity Investment Partnership (Limited Partnership) and National Social Security Fund Board of Trustees are limited partners holding limited partnership interests of 41.9% and 40% in Zhaoyin Langyao, respectively. Shenzhen Zhaoyin No.4 Equity Investment Partnership (Limited Partnership) and National Social Security Fund Board of Trustees, therefore, are deemed to be interested in 29,036,520 Unlisted Shares which Zhaoyin Langyao is interested in.
- (8) China Merchants International Financial Holdings (Shenzhen) Co., Ltd. is a limited partner holding limited partnership interests of 99.9% in Zhaoyin Chengzhang Shijiu hao. China Merchants International Financial Holdings (Shenzhen) Co., Ltd., therefore, is deemed to be interested in 19,060,920 Unlisted Shares, which Zhaoyin Chengzhang Shijiu hao is interested in.

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- (9) 招銀國際資本為招銀成長柒號、招銀成長拾玖號及招銀朗曜的普通合夥人，因此，招銀國際資本被視為擁有招銀成長柒號、招銀成長拾玖號及招銀朗曜持有的48,097,440股非上市股份之權益。
- (10) CMBI Private Equity Series SPC-Biotechnology Fund I SP及CMBI Private Equity Series SPC-Biotechnology Fund V SP分別持有星赫18.3%及81.7%的已發行股本，因此，CMBI Private Equity Series SPC-Biotechnology Fund I SP及CMBI Private Equity Series SPC-Biotechnology Fund V SP被視為擁有星赫持有的26,088,480股H股之權益。
- (11) InnoVeda Medtech, Ltd.持有百奧維達的全部已發行股本，因此，InnoVedaMedtech, Ltd.被視為擁有百奧維達持有的20,291,400股H股之權益。
- (12) 中國人壽保險股份有限公司為(i)國壽成達(上海)健康產業股權投資中心(有限合夥)的有限合夥人，持有其74.9%有限合夥權益，而國壽成達(上海)健康產業股權投資中心(有限合夥)持有14,296,320股非上市股份；及(ii)江蘇國壽走泉股權投資中心(有限合夥)的有限合夥人，持有其60.0%有限合夥權益，而江蘇國壽走泉股權投資中心(有限合夥)持有9,222,840股非上市股份。因此，中國人壽保險股份有限公司被視為擁有國壽成達(上海)健康產業股權投資中心(有限合夥)及江蘇國壽走泉股權投資中心(有限合夥)持有合共的23,519,160股非上市股份之權益。
- (13) 中國人壽保險(集團)公司持有中國人壽保險股份有限公司68.37%權益，因此，中國人壽保險(集團)公司被視為擁有中國人壽保險股份有限公司持有的23,519,160股非上市股份之權益。
- (9) CMB International Capital is a general partner of Zhaoyin Chengzhang Qihao, Zhaoyin Chengzhang Shijiu hao and Zhaoyin Langyao. CMB International Capital, therefore, is deemed to be interested in 48,097,440 Unlisted Shares, which Zhaoyin Chengzhang Qihao, Zhaoyin Chengzhang Shijiu hao and Zhaoyin Langyao are interested in.
- (10) Each of CMBI Private Equity Series SPC-Biotechnology Fund I SP and CMBI Private Equity Series SPC-Biotechnology Fund V SP holds 18.3% and 81.7%, respectively, of the issued capital of Astral. CMBI Private Equity Series SPC-Biotechnology Fund I SP and CMBI Private Equity Series SPC-Biotechnology Fund V SP, therefore, are deemed to be interested in 26,088,480 H Shares, which Astral is interested in.
- (11) InnoVeda Medtech, Ltd. holds all issued capital of BioVeda. InnoVeda Medtech, Ltd., therefore, is deemed to be interested in 20,291,400 H Shares, which BioVeda is interested in.
- (12) China Life Insurance Co., Ltd. is (i) a limited partner holding 74.9% limited partnership interests in China Life Chengda (Shanghai) Healthcare Equity Investment Center (Limited Partnership), which in turn holds 14,296,320 Unlisted Shares, and (ii) a limited partner holding 60.0% limited partnership interests in Jiangsu China Life Jiequan Equity Investment Center (Limited Partnership), which in turn holds 9,222,840 Unlisted Shares. China Life Insurance Co., Ltd., therefore, is deemed to be interested in 23,519,160 Unlisted Shares in total, which China Life Chengda (Shanghai) Healthcare Equity Investment Center (Limited Partnership), Jiangsu China Life Jiequan Equity Investment Center (Limited Partnership) holds.
- (13) China Life Insurance (Group) Company holds 68.37% interests in China Life Insurance Co., Ltd., and therefore it is deemed to be interested in 23,519,160 Unlisted Shares which China Life Insurance Co., Ltd. holds.

除上文所披露者外，據本公司董事及最高行政人員所知，概無任何其他人士(並非本公司董事或最高行政人員)於本公司股份或相關股份中擁有權益或淡倉(該等權益及淡倉記入本公司根據證券及期貨條例第336條須存置的登記冊)。

Save as disclosed above, the Directors and the chief executives of the Company were not aware of any other person (other than the Directors or chief executives of the Company) who had an interest or short position in the shares or underlying shares of the Company as recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO.

III. 董事獲得股份或債權證的權利

除上文「董事、監事及最高行政人員於本公司及其相聯法團的股份、相關股份及債權證的權益及淡倉」一節所披露者外，截至2023年6月30日止六個月，本公司或其任何附屬公司概無訂立任何安排致使董事通過收購本公司或任何其他法團的股份或債權證而獲得利益，且概無董事或其配偶或18歲以下子女獲授可認購本公司或任何其他法團的股權或債權證的權利或已行使任何該等權利。

IV. 僱員激勵計劃

於2023年6月30日，本公司已就四個僱員激勵平台（即百奧常青、百奧常盛、祐和常青及祐和常盛）採納四個僱員激勵計劃，即於2017年12月26日採納的百奧常青計劃、於2019年7月29日採納的百奧常盛計劃、於2020年9月10日採納的祐和常青計劃及於2020年9月23日採納的祐和常盛計劃。四個僱員激勵平台合共持有54,695,160股股份（包括16,854,300股H股及37,840,860股內資股），佔本公司於本報告日期已發行股本約13.69%。本公司目前並無計劃根據上市規則第14A章所規定的僱員激勵計劃進一步授予股份獎勵，或以其他方式進行任何股份獎勵交易。本公司將就任何僱員激勵計劃下的股份獎勵後續交易遵守相關上市規則（倘適用）。

III. DIRECTORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

Save as disclosed in the section headed "Directors', Supervisors' and Chief Executive's Interests and Short Positions in the Shares, Underlying Shares and Debentures of the Company and Its Associated Corporations" above, at no time during the six months ended June 30, 2023 was the Company or any of its subsidiaries, a party to any arrangement that would enable the Directors to acquire benefits by means of acquisition of shares in, or debentures of, the Company or any other body corporate, and none of the Directors or any of their spouses or children under the age of 18 were granted any right to subscribe for the equity or debt securities of the Company or any other body corporate or had exercised any such right.

IV. EMPLOYEE INCENTIVE SCHEMES

As of June 30, 2023, the Company had adopted four Employee Incentive Schemes, namely the Baiao Evergreen Scheme that was adopted on December 26, 2017, the Baiao Changsheng Scheme that was adopted on July 29, 2019, the Eucure Evergreen Scheme that was adopted on September 10, 2020, and the Eucure Changsheng Scheme that was adopted on September 23, 2020, in relation to the four respective Employee Incentive Platforms, namely Baiao Evergreen, Baiao Changsheng, Eucure Evergreen, and Eucure Changsheng. The four Employee Incentive Platforms, in aggregate, held 54,695,160 Shares (comprising 16,854,300 H Shares and 37,840,860 Domestic Shares), representing approximately 13.69% of the issued share capital of the Company as at the date of this report. The Company currently has no plan to make further grant of share awards or otherwise effect any dealings in share awards pursuant to the Employee Incentive Schemes that will be subject to the requirements under Chapter 14A of the Listing Rules. Where applicable, the Company will comply with the relevant Listing Rules in relation to subsequent dealings of share awards under any Employee Incentive Scheme.

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下表載列我們的董事、高級管理層（執行董事除外）及其他僱員（為獨立第三方）分別於2023年6月30日於各僱員激勵平台持有的實際權益總額及等值的相關股份總數：

The following table sets out the aggregate effective interests in each of the employee Incentive Platforms and the equivalent aggregate number of underlying Shares held by our Directors, senior management (other than the executive Directors) and other employees who are Independent Third Parties, respectively as at June 30, 2023:

僱員激勵平台	於僱員激勵平台的實際權益(%)	與指定權益範圍相關 的其他相關僱員人數 Number of relevant other employees	相關股份數目
Employee Incentive Platform	Effective interests in the Employee Incentive Platform (%)	relative to the specified interest range	Number of underlying Shares
百奧常青 Baiao Evergreen	董事：18.65		董事：3,485,987
	Directors: 18.65		Directors: 3,485,987
	其他高級管理層：30.00		其他高級管理層：5,606,601
	Other senior management: 30.00		Other senior management: 5,606,601
	監事：8.67		監事：1,619,683
	Supervisors: 8.67		Supervisors: 1,619,683
百奧常盛 Baiao Changsheng	其他僱員：42.68		其他僱員：7,976,409
	Other employees: 42.68		Other employees: 7,976,409
	0.08 – 0.35	51	15,570 – 64,910
	0.42 – 2.67	30	77,870 – 498,370
	4.67 – 5.33	2	872,130 – 996,730
			872,130 – 996,730
百奧常盛 Baiao Changsheng	董事：59.89		董事：11,167,920
	Directors: 59.89		Directors: 11,167,920
	其他高級管理層：8.13		其他高級管理層：1,516,680
	Other senior management: 8.13		Other senior management: 1,516,680
	監事：1.45		監事：270,360
	Supervisors: 1.45		Supervisors: 270,360
	其他僱員：30.53		其他僱員：5,692,680
	Other employees: 30.53		Other employees: 5,692,680
	0.01- 0.15	57	2,160 – 28,800
	0.16 – 0.25	73	30,240 – 46,800
	0.27 – 0.38	14	49,680 – 72,360
0.40 – 0.43	6	74,880 – 79,560	
0.45 – 3.70	11	83,160 – 689,410	

僱員激勵平台	於僱員激勵平台的實際權益(%)	與指定權益範圍相關 的其他相關僱員人數 Number of relevant other employees relative to the specified interest range	相關股份數目
Employee Incentive Platform	Effective interests in the Employee Incentive Platform (%)		Number of underlying Shares
祐和常青 Eucure Evergreen	董事：1.94 Directors: 1.94 其他高級管理層：76.32 Other senior management: 76.32 監事：11.77 Supervisors: 11.77 其他僱員：9.97 Other employees: 9.97		董事：92,160 Directors: 92,160 其他高級管理層：3,632,400 Other senior management: 3,632,400 監事：560,160 Supervisors: 560,160 其他僱員：474,120 Other employees: 474,120
	0.61 – 0.75	3	28,800 28,800
	1.04 – 1.57	3	51,840 – 74,880 51,840 – 74,880
	3.39 – 3.91	1	186,120 186,120
祐和常盛 Eucure Changsheng	董事：99.20 Director: 99.20 其他高級管理層：0.75 Other senior management: 0.75 監事：0.05 Supervisors: 0.05		董事：12,499,698 Director: 12,499,698 其他高級管理層：94,004 Other senior management: 94,004 監事：6,298 Supervisors: 6,298

根據計劃文件(「計劃文件」)及獎勵協議(「獎勵協議」)，計劃的參與者包括本公司的核心僱員及高級管理層成員。獎勵協議進一步規定，下列個人不得獲選為計劃參與者(如適用)：(i)未與本公司或我們任何附屬公司訂立僱傭合約，或與本公司或我們任何附屬公司不存在實際勞動關係的個人；(ii)根據中國公司法，被禁止擔任董事、監事或高級管理人員職務的個人；(iii)採納計劃前最後三年被裁定犯罪或違反行政法規的僱員；及(iv)根據相關監管機構的規範，不適合持有股份或繼續持有股份可能影響全球發售完成的個人。

Pursuant to the scheme documents (the “Scheme Documents”) and the award agreements (the “Award Agreements”), participants of the Schemes include our Company’s core employees and senior management members. The Award Agreements further provided that the following individuals may not be selected as participants to the Schemes (as applicable): (i) individuals who have not entered into an employment contract with our Company or any of our subsidiaries, or there is no actual labor relations between such individuals and our Company or any of our subsidiaries; (ii) individuals who are forbidden to hold the position of director, supervisor or senior management pursuant to the PRC Company Law; (iii) employees who have been convicted of crime or in violation of administrative law in the last three years prior to the adoption of the Schemes; and (iv) individuals who are not suitable to hold Shares or the continuing holding of Shares of such individuals may affect the completion of the Global Offering pursuant to the specifications of the relevant regulators.

各僱員激勵平台的唯一普通合夥人為沈博士。因此，實際上僱員激勵平台的所有管理權力和投票權均歸沈博士所有。所有入選參與者概不享有本公司任何投票權。入選參與者將作為相關僱員激勵平台的有限合夥人以僱員激勵平台經濟利益的形式獲授予獎勵。一旦成為僱員激勵平台的有限合夥人，入選參與者將間接收取僱員激勵平台所持有相應數目的相關股份之經濟利益。

本公司將按相關入選參與者認購特定僱員激勵平台的股權金額並參考該僱員激勵平台於本公司的相對持股量，以現金股息通過相關僱員激勵平台向有關入選參與者支付經濟利益。

根據僱員激勵計劃的條款，未經董事會書面同意，入選參與者不得出售、轉讓、質押彼等於有限合夥企業中的權益或以其他方式就該權益設立產權負擔以償還債務。

本公司可要求入選參與者於發生與該入選參與者有關的若干事件時根據任何僱員激勵計劃所持合夥權益轉讓予唯一的普通合夥人，主要包括以下事件：(i) 死亡或被人民法院宣告死亡或失蹤；(ii) 因退休終止勞動或僱傭合同、經本公司同意辭職、因工傷導致喪失工作能力、裁員、業績不理想；(iii) 患病或者非因公負傷，在規定的醫療期滿後不能從事原工作，也不能從事由本公司另行安排的工作；(iv) 完成且不重續勞動合同；(v) 本公司已決定不建議該入選參與者於僱員激勵平台持有該等合夥權益；(vi) 被認為不會對本公司有不利影響的其他退出情形；(vii) 違反本公司規則及規例，導致產生不少於人民幣200,000元的虧損；(viii) 裁定刑事罪行；(ix) 入選參與者疏

The sole general partner of each Employee Incentive Platform is Dr. Shen. Thus, in effect, all management powers and voting rights of the Employee Incentive Platforms reside with Dr. Shen. All selected participants do not have any voting rights in our Company. The selected participants will be granted awards in the form of economic interest in the Employee Incentive Platforms as a limited partner of the relevant Employee Incentive Platform. Upon becoming the limited partner of the Employee Incentive Platforms, the selected participants indirectly receive economic interest in the corresponding number of underlying Shares held by the Employee Incentive Platforms.

Economic interests will be paid by the Company by way of cash dividends to the relevant selected participants through the relevant Employee Incentive Platform proportionate to such selected participant's subscription of amount of equity interests in that specific Employee Incentive Platform with reference to such Employee Incentive Platform's relative holding of Shares in the Company.

Pursuant to the terms of the Employee Incentive Schemes, the selected participants may not dispose of, transfer, pledge or otherwise encumber his or her interest in the limited partnership for the repayment of debt without the written consent of the Board.

The Company may require selected participants to transfer their partnership interests held under any of the Employee Incentive Scheme to the sole general partner upon occurrence of the certain events in respect of such selected participant, primarily including (i) death or declaration of his/her death or disappearance by a people's court; (ii) the termination of labor contract or employment due to retirement, resignation with Company's consent, and incapacity resulting from work injury, redundancy, dissatisfactory performance; (iii) unable to perform original duties after a certain period of medical treatment of illness or not-job-related injury and no alternative arrangement can be offered by the Company; (iv) completion and non-renewal of the labor contract; (v) the Company has decided that it is not advisable for the selected participant to hold such partnership interests in the Employee Incentive Platforms; (vi) other exit events which are considered having no adverse effects on the Company; (vii) violation of rules and regulation of the Company causing a loss of not less than RMB200,000; (viii) conviction

忽職責、行為不當、腐敗，導致本公司損失重大；(x)入選參與者接受或索取賄賂、挪用及竊取財產、披露商業及技術機密，導致本公司或其聲譽損失重大；(xi)未經批准辭職；(xii)入選參與者參與未經授權競爭業務；(xiii)入選參與者因行為不當被解僱；及(xiv)被認為對本公司有不利影響的其他退出情形((i)至(vi)統稱為「**正面退出情形**」；(vii)至(xiv)統稱為「**負面退出情形**」)。

根據適用法律法規的任何禁售要求，牽涉正面退出情形或負面退出情形的入選參與者可(視情況而定)(i)保留其權利；或(ii)根據相關僱員激勵平台的規則處置其有權享有的相關經濟利益。該項權利有一個例外情況，倘入選參與者於上市後任何適用限售期內死亡或被人民法院宣告死亡或失蹤，或在無民事行為能力的情況下，則相關入選參與者於各自的僱員激勵平台所持合夥權益應由普通合夥人或普通合夥人指定的第三方以相等於購買前五個交易日股份均價80%的價格購買，所得款項於獲悉退出情形後30日內分配予參與者的繼承人。倘購買不可行，則相關僱員激勵平台所持與該入選參與者權益相對應數的股份應由相關僱員激勵平台於限售期屆滿後三個月內予以處置，處置所得款項應支付予參與者的繼承人，相關入選參與者應自合夥企業中除名。然而，倘發生負面退出情形，本公司可要求相關入選參與者就負面退出情形對本公司造成的損害(如有)進行賠償。

截至2023年6月30日，授予董事、監事及高級管理層成員的獎勵相關股份總數為40,218,231股股份，佔本公司已發行股本總額的10.07%。

of criminal offense; (ix) neglect of duties, misconduct and corruption of the selected participant causing significant damages to the Company; (x) the acceptance or solicitation of bribes, misappropriation and steal of properties, disclosure of business and technical secrets by the selected participants causing significant damages to the Company or its reputation; (xi) unapproved resignation; (xii) the selected participant participated in unauthorized competitive businesses; (xiii) the dismissal of the selected participant due to his/her misconduct; and (xiv) other exit events which are considered having adverse effects on the Company ((i) to (vi) together, the “**Positive Exit Events**”; (vii) to (xiv) together, the “**Negative Exit Events**”).

Subject to any lock up requirements under applicable laws and regulations, the selected participants involved in either Positive Exit Events or Negative Exit events may (as the case may be) (i) retain his/her entitlement; or (ii) dispose of his/her relevant entitlement to economic interests pursuant to the rules of the relevant Employment Incentive Platform. An exception to such entitlement is that in the event of death or declared death or disappearance by a people's court during any applicable lock-up period after Listing or in the case of incapability for the civil conduct, the relevant selected participant's partnership interest held in the respective Employee Incentive Platforms shall be purchased by the general partner or a third party designated by the general partner at a price that is equivalent to 80% of the average price of the Shares in five trading days prior to the purchase, and the proceeds thereof be allocated to the successor of the participant within 30 days after the exit is known. If such purchase is impracticable, the corresponding number of Shares held by the relevant Employee Incentive Platform that correspond to the interest of such selected participants shall be disposed of by the relevant Employee Incentive Platform within three months after the expiry of the lock-up period and the proceeds of the disposal shall be paid to the successors of the participant and the relevant selected participant shall be removed from the partnership. However in the event of Negative Exit Events, the Company may demand that the relevant selected participant pay compensation for damages (if any) of the Company caused by the Negative Exit Event.

As of the June 30, 2023, the aggregate number of Shares underlying the awards granted to the Directors, Supervisors and senior management members was 40,218,231 Shares representing 10.07% of our Company's total issued share capital.

V. 股份獎勵計劃

本公司已於2022年11月22日採納股份獎勵計劃。概無根據該計劃發行或配發新股份。然而，由於上市規則第17章涵蓋（其中包括）涉及上市發行人現有股份的股份計劃，該計劃受上市規則第17章項下可能適用的相關規定規管。

計劃規則的概要載列如下：

目的及目標

該計劃的目的及目標為(i)肯定若干僱員作出的貢獻並給予獎勵，務求挽留彼等繼續為本集團的持續營運及發展效力；及(ii)吸引合適的人員推動本集團的進一步發展。

參與者

該計劃的參與者由集團的全職員工組成。

期限

該計劃有效期自採納日期起至採納日期起計十年期間屆滿之日，惟於該計劃屆滿前根據計劃授出任何未歸屬獎勵股份，以使有關獎勵股份的歸屬生效或根據該計劃條文進行其他可能所需事宜者除外，惟董事會可根據計劃規則決定提早終止。該計劃尚餘的有效期約為9年。

管理

該計劃將由董事會按照計劃規則及信託契據之條款管理。受託人須按照信託契據的條款持有信託股份、獎勵股份（包括返還股份）及相關收入。

V. SHARE AWARDS SCHEME

The Company has adopted a share awards scheme on November 22, 2022. No new shares were or are to be issued or allotted under the Scheme. Nonetheless, since the Chapter 17 of the Listing Rules covers, among others, share schemes involving existing shares of listed issuers, the Scheme is governed by the relevant requirements under the Chapter 17 of the Listing Rules as may be applicable.

A summary of the Scheme Rules is set out below:

Purposes and objectives

The purposes and objectives of the Scheme are (i) to recognize the contributions by certain Employees and to provide them with incentives in order to retain them for the continual operation and development of the Group; and (ii) to attract suitable personnel for further development of the Group.

Participants

The participants of the Scheme consist of full-time employees of the Group.

Duration

Subject to any early termination as may be determined by the Board pursuant to the Scheme Rules, the Scheme shall be valid and effective from the Adoption Date to the end of the period of ten years commencing on the Adoption Date, except in respect of any non-vested Awarded Shares granted hereunder prior to the expiration of the Scheme, for the purpose of giving effect to the vesting of such Awarded Shares or otherwise as may be required in accordance with the provisions of the Scheme. The remaining life of the Scheme as at the date of this report is approximately 9 years.

Administration

The Scheme shall be subject to the administration of the Board in accordance with the Scheme Rules and the terms of the Trust Deed. The Trustee shall hold the Trust Shares, the Awarded Shares including the Returned Shares and the related income in accordance with the terms of the Trust Deed.

計劃限額及個人最高限額

倘進一步授出獎勵股份會導致董事會根據該計劃授出的H股數目超過本公司於採納日期已發行股份之5%，為19,969,921股，即於本報告日期已發行H股股份之18.03%，則董事會不得進一步授出獎勵股份。一名入選僱員根據該計劃可獲授的H股數目最多不得超過本公司於採納日期已發行股份之1%（亦即3,993,984股）。

運作

在考慮計劃規則及符合上市規則、章程細則、中國公司法及任何其他適用法律及法規後，於確定入選僱員之前或之後，董事會可隨時及不時全權酌情將一定數額的現金撥付予受託人，以便受託人在市場上購買股份作為信託股份。

授出獎勵股份

根據計劃規則，董事會有權不時選定任何僱員作為入選僱員授出獎勵。在被選中之前，任何僱員都無權參與該計劃。接納獎勵後無需支付對價或任何形式的購買價。

釐定入選僱員的獎勵股份數目時，董事會可考慮的事項包括（但不限於）本集團的整體財務狀況及有關入選僱員的職級及表現。董事會有權在獎勵股份歸屬前，全權酌情實施其認為適當的任何條款（包括但不限於入選僱員須符合的業績、營運及財務目標及其他標準（如有））。董事會須(i)知會入選僱員獎勵股份數目、歸屬條件及歸屬時間表；及(ii)知會受託人有關入選僱員的資料及獎勵股份的有關條件。

Scheme limit and maximum individual limit

The Board shall not make any further award of Awarded Shares which will result in the number of H Shares awarded by the Board under the Scheme exceeding 5% of the issued shares, amounts to 19,969,921 Shares, i.e. 18.03% of the issued H Shares as at the date of this report, of the Company as at the Adoption Date. The maximum number of H Shares which may be awarded to a Selected Employee under the Scheme shall not exceed 1% of the issued shares of the Company as at the Adoption Date (i.e. 3,993,984 Shares).

Operation

The Board may, at any time and from time to time at its absolute discretion after having regard to the Scheme Rules and subject to compliance with the Listing Rules, the Articles, PRC Company Law and any other applicable laws and regulations, either before or after identification of the Selected Employee(s) cause to be paid an amount of cash to the Trustee for the purchase of the Shares on the market as Trust Shares.

Grant of Awarded Shares

Subject to the Scheme Rules, the Board may, from time to time, at its absolute discretion select any Employee as a Selected Employee for grant of an award. Until so selected, no Employee shall be entitled to participate in the Scheme. No consideration or any form of purchase price is payable upon acceptance of award.

In determining the number of Awarded Shares for a Selected Employee, the Board may take into consideration matters including (without limitation), the general financial condition of the Group and the rank and performance of the relevant Selected Employee. The Board is entitled to impose any conditions (including, without limitation, the performance, operating and financial targets and other criteria, if any, to be satisfied by the Selected Employee), as it deems appropriate in its sole and absolute discretion before the Awarded Shares can vest. The Board shall inform (i) such Selected Employee the number of Awarded Shares, the vesting conditions and the vesting schedule and (ii) the Trustee the relevant information of the Selected Employee and the relevant conditions of the Awarded Shares.

任何獎勵須屬入選僱員個人所有，且於歸屬日期前不得向任何其他人士、入選僱員全資擁有的任何公司或入選僱員為委託人的信託轉讓或轉移（惟適用法律及法規（包括上市規則）所允許者除外），且入選僱員於歸屬日期前不得以任何方式出售、轉讓、質押、抵押根據該計劃授予其的獎勵或相關收入或任何返還股份，或就此設立產權負擔或以任何其他人士為受益人創設任何權益。

獎勵股份歸屬

根據該計劃的條款及條件，在所有相關歸屬的條件達成後，受託人根據計劃規則條款代入選僱員持有的有關獎勵股份須根據歸屬條件（如有）歸屬予有關入選僱員，且受託人須促使獎勵股份在歸屬日期轉讓予有關入選僱員，前提是入選僱員於獲得獎勵後一直保持僱員的身份，且在各相關歸屬日期均為僱員。倘以股份形式獲得的獎勵股份及相關收入根據計劃規則出於任何原因並未歸屬予入選僱員，所有該等未歸屬獎勵股份及相關收入就該計劃而言須成為返還股份。

獎勵失效

(1) 完全失效

倘於歸屬日期之前或當日有以下情況，根據該計劃之條款，獎勵將隨即失效，而相關獎勵股份將不會於相關歸屬日期歸屬，惟就該計劃而言將成為返還股份，董事會另行同意的除外：(i) 相關入選僱員不再為僱員；(ii) 僱用入選僱員的附屬公司不再為本公司（或本集團成員公司）的附屬公司；或(iii) 本公司接獲清盤令或本公司通過決議案自願清盤。

Any award shall be personal to the Selected Employee and shall not be transferrable or assignable to any other person prior to the Vesting Date, except for and to the extent permitted by the applicable laws and regulations (including the Listing Rules), any company that is wholly owned by the Selected Employee or a trust which the settlor is the Selected Employee, and no Selected Employee shall in any way sell, transfer, charge, mortgage, encumber or create any interest in favour of any other person over or in relation to such award or the related income or any of the Returned Shares under the Scheme prior to the Vesting Date.

Vesting of Awarded Shares

Subject to the terms and conditions of the Scheme and the fulfillment of all relevant vesting conditions, the respective Awarded Shares held by the Trustee on behalf of a Selected Employee pursuant to the terms of the Scheme Rules shall vest in such Selected Employee in accordance with the vesting condition (if any) and the Trustee shall cause the Awarded Shares to be transferred to such Selected Employee on the Vesting Date(s), provided that the Selected Employee remains at all times after the grant of the award and on each relevant Vesting Date(s) an Employee. Where any Awarded Shares and the related income which is in the form of Shares are not vested in any Selected Employee for whatever reasons in accordance with the Scheme Rules, all such unvested Awarded Shares and the related income shall become Returned Shares for the purposes of the Scheme.

Lapse of Award

(1) Total Lapse

In the event that prior to or on the Vesting Date, under the following circumstances and subject to the terms of the Scheme, the award shall, unless the Board otherwise agrees, lapse forthwith, and the relevant Awarded Shares shall not vest on the relevant Vesting Date but shall become Returned Shares for the purpose of the Scheme: (i) the relevant Selected Employee ceases to be an Employee, (ii) the Subsidiary by which a Selected Employee is employed ceases to be a Subsidiary of the Company (or of a member of the Group), or (iii) an order for the winding-up of the Company is made or a resolution is passed for the voluntary winding-up of the Company.

(2) 部分失效

倘於歸屬日期之前或當日有以下情況，根據該計劃之條款，向該入選僱員作出的相關部分獎勵將隨即失效，而相關獎勵股份將不會於相關歸屬日期歸屬，惟就該計劃而言將成為返還股份，董事會另行同意的除外：(i)入選僱員被發現為除外僱員（在此情況下僅適用於釋義所界定的(ii)類除外僱員中的任何人士）；或(ii)入選僱員未能於規定期限內按受託人要求就有關獎勵股份妥善簽署並交回轉讓文件。

(3) 死亡或協議退休

儘管上文所述，就於歸屬日期之前或當日之前任何時間身故或通過與本集團成員公司協議退休的入選僱員而言，有關入選僱員的所有獎勵股份或其權利應被視為於緊接其身故前一天或緊接其自本集團相關成員公司退休前一天被歸屬。

限制

倘任何董事擁有與本集團有關的內幕消息，或倘董事根據上市規則的任何守則或規定及所有不時適用的法律被禁止買賣H股，則董事會不得作出任何獎勵，不得向受託人交付H股或支付款項（視情況而定），且不得根據該計劃向受託人發出收購H股的指示。

該計劃之修訂

該計劃可通過董事會決議案進行任何方面的修訂，惟除例外情況外，有關修訂不得對入選僱員於計劃規則項下的任何存續權利造成重大不利影響。

(2) *Partial Lapse*

In the event that prior to or on the Vesting Date, under the following circumstances and subject to the terms of the Scheme, the relevant part of the award made to such Selected Employee shall, unless the Board otherwise agrees, lapse forthwith and the relevant Awarded Shares shall not vest on the relevant Vesting Date but shall become Returned Shares for the purpose of the Scheme: (i) a Selected Employee is found to be an Excluded Employee (in this context only applicable to any person in class (ii) of Excluded Employee as defined in the definitions); or (ii) a Selected Employee fails to return duly executed transfer documents prescribed by the Trustee for the relevant Awarded Shares within the stipulated period.

(3) *Death or retirement by agreement*

Notwithstanding the above, in respect of a Selected Employee who died or retired by agreement with a member of the Group at any time prior to or on the Vesting Date, all the Awarded Shares of the relevant Selected Employee or rights thereto shall be deemed to be vested on the day immediately prior to his death or the day immediately prior to his retirement with the relevant member of the Group.

Restrictions

No award shall be made by the Board and no H Shares or payment (as the case may be) shall be delivered or made to the Trustee and no instructions to acquire H Shares shall be given to the Trustee under the Scheme where any Director is in possession of inside information in relation to the Group or where dealings in H Shares by Directors are prohibited under any code or requirement of the Listing Rules and all applicable laws from time to time.

Alteration of the Scheme

The Scheme may be altered in any respect by a resolution of the Board provided that no such alteration shall operate to affect materially and adversely any subsisting rights of any Selected Employee under the Scheme Rules, subject to exceptions.

投票權

謹此說明，持有該計劃未歸屬信託股份的受託人（無論該等信託股份有否作為獎勵股份授予相應的入選僱員）一概不得直接或間接對根據上市規則須股東批准的事項投票表決，除非法律另行規定按實益擁有人的指示投票表決並發出有關指示。

終止

該計劃將於以下較早日期終止：

- (i) 自採納日期起計十年期間屆滿之日，惟於該計劃屆滿前根據計劃授出任何未歸屬獎勵股份，以使有關獎勵股份的歸屬生效或根據該計劃條文進行其他可能所需事宜者除外；及
- (ii) 董事會釐定的提前終止日期，惟有關終止不得影響該計劃項下任何入選僱員的任何存續權利。

該計劃終止後，受託人須出售信託下信託基金所餘下的所有股份及非現金收入。上述出售所得款項淨額及信託餘下其他資金須於出售後即時匯寄予本公司。謹此說明，受託人不得向本公司轉讓任何股份，本公司亦不得以其他方式持有任何股份（其於出售上述股份所得款項中的權益除外）。

Voting rights

For the avoidance of doubt, the Trustee holding unvested Trust Shares of the Scheme, regardless whether such Trust Shares have been granted to the corresponding Selected Employees as Awarded Shares or not, shall abstain from voting, whether directly or indirectly, on matters that require Shareholders' approval under the Listing Rules, unless otherwise required by law to vote in accordance with the beneficial owner's direction and such a direction is given.

Termination

The Scheme shall terminate on the earlier of:

- (i) the end of the period of ten years commencing on the Adoption Date, except in respect of any non-vested Awarded Shares granted hereunder prior to the expiration of the Scheme, for the purpose of giving effect to the vesting of such Awarded Shares or otherwise as may be required in accordance with the provisions of the 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 Employee hereunder.

Upon termination of the Scheme, all Shares and non-cash income remaining in the trust fund of the Trust shall be sold by the Trustee. The net proceeds of aforesaid sale and such other funds remaining in the Trust shall be remitted to the Company forthwith after the sale. For the avoidance of doubt, the Trustee may not transfer any Shares to the Company nor may the Company otherwise hold any Shares whatsoever (other than its interest in the proceeds of sale of such Shares mentioned above).

VII. 所得款項用途

經扣除我們就全球發售應付的包銷費及相關開支後，本公司來自全球發售的所得款項淨額（包括部分行使超額配股權）為約537.1百萬港元（相當於人民幣436.3百萬元）。

截至2023年6月30日，本集團已將全球發售所得款項淨額用於以下用途：

VII. USE OF PROCEEDS

The net proceeds received by the Company from the Global Offering (including the partial exercise of the Over-allotment Option) amounted to approximately HK\$537.1 million (equivalent to RMB436.3 million) after the deduction of underwriting fees, and related expenses in connection with the exercise of the Global Offering.

As of June 30, 2023, the Group had used the net proceeds from the Global Offering for the following purposes:

	佔所得款項 淨額總額 概約百分比	全球發售 所得款項淨額	於2022年	報告期間	於2023年
			12月31日未動用 所得款項淨額 Unused net proceeds as at December 31, 2022	已動用所得款項 Utilized proceeds during the Reporting Period	6月30日未動用 所得款項 Proceeds unused as of June 30, 2023
	Approximately % of total net proceeds (%)	Net proceeds from Global Offering 百萬港元 HK\$' million	百萬港元 HK\$' million	百萬港元 HK\$' million	百萬港元 HK\$' million
(A) 為我們核心產品的進一步臨床研發提供資金					
(A) Fund further clinical research and development of our Core Products	70	376.0	363.9	154.1	209.8
(i) 為YH003的研發提供資金					
(i) Fund the research and development of YH003	35	188.0	184.0	61.6	122.4
(ii) 為YH001的臨床研發提供資金					
(ii) Fund the clinical research and development of YH001	35	188.0	179.9	92.6	87.3
(B) 根據我們的千鼠萬抗為抗體藥物發現及開發提供資金					
(B) Fund antibody drug discovery and development in connection with Project Integrum	15	80.6	45.3	33.8	11.4
(i) 投入千鼠萬抗下的設施建設和抗體藥物發現所用的設備採購					
(i) Investment in the facilities construction and purchase of equipment used for antibody drug discovery under Project Integrum	5	26.9	26.6	15.5	11.1
(ii) 支付千鼠萬抗的員工成本					
(ii) Cover staff costs in Project Integrum	5	26.9	5.6	5.5	0.04
(iii) 用於千鼠萬抗的抗體發現與開發之實驗開支及其他成本					
(iii) Trial consumables and other costs in antibody discovery and development for Project Integrum	5	26.9	13.1	12.8	0.3

企業管治及其他資料

Corporate Governance and Other Information

	佔所得款項 淨額總額 概約百分比	全球發售 所得款項淨額	於2022年 12月31日未動用 所得款項淨額	報告期間 已動用所得款項	於2023年 6月30日未動用 所得款項
	Approximately % of total net proceeds (%) (%)	Net proceeds from Global Offering 百萬港元 HK\$' million	Unused net proceeds as at December 31, 2022 百萬港元 HK\$' million	Utilized proceeds during the Reporting Period 百萬港元 HK\$' million	Proceeds unused as of June 30, 2023 百萬港元 HK\$' million
(C) 我們的其他管線產品的臨床前及臨床開發					
(C) Pre-clinical and clinical development of other pipeline products	10	53.7	43.9	31.6	12.3
(i) 為我們即將進行的YH002臨床試驗提供資金					
(i) Fund upcoming clinical trials of YH002	3	16.1	16.1	8.9	7.2
(ii) 為我們的YH004臨床試驗提供資金					
(ii) Fund clinical trials of YH004	2	10.7	10.1	5.3	4.8
(iii) 為我們的數項候選藥物(包括YH008、YH009、YH006、YH010、YH012及YH013)臨床前試驗提供資金					
(iii) Fund pre-clinical trials of several drug candidates, including YH008, YH009, YH006, YH010, YH012 and YH013	5	26.9	17.7	17.4	0.3
(D) 用作營運資金及其他一般公司用途					
(D) Working capital and other general corporate purposes	5	26.9	19.4	19.2	0.1
總計					
Total	100	537.0	472.3	238.7	233.7

* 該等金額已約整至最接近的百萬位。

* The amounts have been rounded to the nearest million.

本公司擬按招股章程「未來計劃及所得款項用途」一節所述的相同方式及比例動用截至2023年6月30日尚未動用的所得款項。預期餘下未動用所得款項淨額將於2026年12月31日前悉數動用。動用餘下所得款項的預期時間以本集團對應當前及未來市況發展而有所不同的該時間的見解作依據。

The Company intends to use proceeds that had not been utilized as of June 30, 2023 in the same manners and proportions as stated under the section headed “Future Plans and Use of Proceeds” in the Prospectus. It is expected that all remaining unutilized net proceeds will be fully utilized by December 31, 2026. The expected timing of the utilization of the remaining proceeds is based on the Group’s view that such timing will vary depending on current and future developments in market conditions.

VIII. 購買、出售或贖回本公司上市證券

截至2023年6月30日止六個月，本公司或其任何附屬公司概無購買、出售或贖回任何本公司上市證券。

IX. 重大訴訟及仲裁事宜

截至2023年6月30日止六個月，本集團成員公司概無牽涉任何重大訴訟或仲裁，且據董事所知，截至2023年6月30日止六個月，本集團並無尚未完結或面臨的任何其他重大訴訟或申索。

X. 報告期間董事、監事及高級管理層變動

根據上市規則第13.51B(1)條，於自2022年年度報告日期直至本報告日期期間，董事、監事及最高行政人員資料變動如下：

董事及董事會委員會架構變動

截至2023年6月30日止六個月，董事及董事會委員會架構概無變動。

監事變動

截至2023年6月30日止六個月，監事概無變動。

董事及監事履歷變動

截至2023年6月30日止六個月，董事及監事履歷概無變動。

高級管理層變動

截至2023年6月30日止六個月，高級管理層概無變動。

VIII. PURCHASE, SALE OR REDEMPTION OF LISTED SECURITIES OF THE COMPANY

During the six months ended June 30, 2023, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities.

IX. MATERIAL LITIGATION AND ARBITRATION MATTERS

During the six months ended June 30, 2023, no member of the Group was involved in any material litigation or arbitration. The Directors are also not aware of any other material litigations or claims that are pending or threatened against the Group during the six months ended June 30, 2023.

X. CHANGE IN DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT DURING THE REPORTING PERIOD

According to Rule 13.51B(1) of the Listing Rules, changes in information of Directors, Supervisors and chief executive during the period from the date of the 2022 annual report up to the date of this report are as follows:

Change in Directors and Composition of Board Committees

During the six months ended June 30, 2023, there were no changes in Directors and composition of Board Committees.

Change in Supervisors

During the six months ended June 30, 2023, there were no changes in Supervisors.

Change in Biographies of Directors and Supervisors

During the six months ended June 30, 2023, there were no changes in Biographies of Directors and Supervisors.

Change in Senior Management

During the six months ended June 30, 2023, there were no changes in Senior Management.

經本公司作出具體查詢以及獲董事、監事及最高行政人員確認後，除上文所披露外，上述期間概無須根據上市規則第13.51(2)條第(a)至(e)段以及第(g)段披露的有關任何董事、監事及最高行政人員資料的其他變動須根據上市規則第13.51B(1)條予以披露。

報告期間，本公司僱員及薪酬政策概無變動。對報告期間本集團僱員及薪酬政策之審閱載於本中期報告「管理層討論與分析－II.財務回顧－僱員及薪酬政策」。

XI. 上市規則規定的持續披露責任

截至2023年6月30日，本公司並無上市規則第13.20、13.21及13.22條項下的任何其他披露責任。

XII. 董事及監事進行證券交易的標準守則

本公司已採納一套有關董事及監事進行證券交易的行為守則，其條款不比上市規則附錄十標準守則所載的規定標準寬鬆。

經向全體董事及監事作出具體查詢後，彼等確認截至2023年6月30日止六個月一直遵守本公司有關董事及監事進行證券交易的行為守則。

可能擁有本公司未公佈內幕消息的本公司僱員亦須遵守標準守則。於報告期間，本公司並無獲悉僱員違反標準守則的事件。

After making specific enquiries by the Company and confirmed by the Directors, Supervisors and chief executives, save as disclosed above, no other changes in the information of any Directors, Supervisors and chief executives that are required to be disclosed pursuant to paragraphs (a) to (e) and paragraph (g) of Rule 13.51(2) of the Listing Rules have to be disclosed pursuant to Rule 13.51B(1) of the Listing Rules during the above-mentioned period.

During the Reporting Period, there was no change in the employees and remuneration policies of the Company. A review of the employees and remuneration policies of the Group during the Reporting Period is set out in "Management Discussion and Analysis – II. Financial Review – Employees and Remuneration Policies" in this interim report.

XI. CONTINUING DISCLOSURE OBLIGATION PURSUANT TO THE LISTING RULES

As of June 30, 2023, the Company does not have any other disclosure obligations under Rules 13.20, 13.21 and 13.22 of the Listing Rules.

XII. MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS AND SUPERVISORS

The Company has adopted a code of conduct regarding Directors' and Supervisors' securities transactions on terms no less exacting than the required standard set out in the Model Code in Appendix 10 to the Listing Rules.

Specific enquiries have been made to all Directors and the Supervisors, and they have confirmed that they have complied with our Company's code of conduct regarding Directors' and Supervisors' securities transactions during the six months ended June 30, 2023.

The Company's employees, who are likely to be in possession of unpublished inside information of the Company, are also subject to the Model Code. No incident of non-compliance with the Model Code by the employees was noted by the Company during the Reporting Period.

XIII. 遵守企業管治守則

本公司致力達到高水平的企業管治，以保障股東的利益。

本公司已採納上市規則企業管治守則所載原則及守則條文。董事會認為，於報告期間，本公司已遵守企業管治守則所有適用守則條文，惟偏離企業管治守則的守則條文第C.2.1條，本公司董事長與首席執行官之間的職責並未分開，均由沈博士執行。鑑於沈博士的經驗、個人資料及在本公司擔任的職務，沈博士作為首席執行官，廣泛了解本公司的業務，是最適合識別戰略機會及董事會重點的董事。董事會相信，由同一人兼任董事長及首席執行官有利於確保本集團的領導一致，使本集團的整體策略規劃更加有效及高效。目前安排的權力及權限平衡不會受到損害，而本公司通過該架構可迅速有效地作出及執行決策。董事會將繼續檢討並考慮於適當時經考慮本集團整體情況後分拆本公司董事長及首席執行官之職務。

XIII. COMPLIANCE WITH THE CG CODE

The Company has committed to achieving high standards of corporate governance with a view to safeguarding the interests of the Shareholders.

The Company has adopted the principles and code provisions as set out in the CG Code to the Listing Rules. The Board is of the view that the Company has complied with all applicable code provisions of the CG Code during the Reporting Period, except for a deviation from the code provision C.2.1 of the CG Code, the roles of the chairman of the Board and the chief executive officer of the Company are not separate and are both performed by Dr. Shen. In view of Dr. Shen's experience, personal profile and his roles in our Company, Dr. Shen is the Director best suited to identify strategic opportunities and focus of the Board due to his extensive understanding of the Company's business as the chief executive officer. The Board believes that vesting the roles of both the chairman and the chief executive officer in the same person has the benefit of ensuring consistent leadership within the Group and enables more effective and efficient overall strategic planning for the Group. The balance of power and authority for the present arrangement will not be impaired and this structure will enable the Company to make and implement decisions promptly and effectively. The Board will continue to review and consider splitting the roles of chairman of the Board and the chief executive officer of the Company at a time when it is appropriate by taking into account the circumstances of the Group as a whole.

審計委員會

審計委員會有四名成員，包括一名非執行董事及三名獨立非執行董事，即梁曉燕女士（主席）、華風茂先生、喻長遠博士及魏義良先生，彼等的職權範圍符合上市規則第3.21條。

審計委員會已審閱及檢討中期報告，本集團採納的會計原則及慣例，並已與管理層討論有關內部監控、風險管理及財務報告的事宜，包括審閱本集團截至2023年6月30日止六個月的未經審核簡明綜合中期財務業績。審計委員會認為，本集團截至2023年6月30日止六個月的中期財務業績符合相關會計準則、規則及規例，並已作出適當披露。

核數師

本公司的獨立核數師（即執業會計師畢馬威會計師事務所）已根據香港會計師公會頒佈的香港審閱委聘準則第2410號「由實體的獨立核數師執行中期財務資料審閱」審閱中期財務資料。

承董事會命

百奧賽圖（北京）醫藥科技股份有限公司

董事長

沈月雷

中國北京，2023年9月19日

Audit Committee

The Audit Committee has four members comprising one non-executive Director and three independent non-executive Directors, being Ms. Liang Xiaoyan (chairman), Mr. Hua Fengmao, Dr. Yu Changyuan and Mr. Wei Yiliang, with terms of reference in compliance with Rule 3.21 of the Listing Rules.

The Audit Committee has considered and reviewed the interim report, the accounting principles and practices adopted by the Group and has discussed matters in relation to internal controls, risk management and financial reporting with the management, including the review of the unaudited condensed consolidated interim financial results of the Group for the six months ended June 30, 2023. The Audit Committee considers that the interim financial results for the six months ended June 30, 2023 are in compliance with the relevant accounting standards, rules and regulations, and appropriate disclosures have been duly made.

Auditor

The Company's independent auditor, KPMG, Certified Public Accounts, has reviewed the interim financial information in accordance with the Hong Kong Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Hong Kong Institute of Certified Public Accountants.

By order of the Board

Biocytogen Pharmaceuticals (Beijing) Co., Ltd.

Shen Yuele

Chairman of the Board

Beijing, the PRC, September 19, 2023



致百奧賽圖(北京)醫藥科技股份有限公司
董事會之審閱報告

(於中華人民共和國註冊成立的有限公司)

引言

我們已審閱列載於第77至106頁的中期財務報告，包括百奧賽圖(北京)醫藥科技股份有限公司(「貴公司」)及其附屬公司(統稱「貴集團」)截至2023年6月30日的綜合財務狀況表及截至該日止六個月期間的相關綜合損益及其他全面收入表、綜合權益變動表及簡明綜合現金流量表，以及附註解釋。香港聯合交易所有限公司證券上市規則要求遵照上市規則中的相關規定和國際會計準則理事會頒佈的國際會計準則第34號中期財務報告編製中期財務報告。董事須負責根據國際會計準則第34號編製及列報本中期財務報告。

我們的責任是根據我們的審閱對中期財務報告作出結論，並按照我們雙方所協定的應聘條款，僅向全體董事會報告，不可用作其他用途。我們概不就本報告的內容，對任何其他人士負責或承擔法律責任。

審閱範圍

我們已根據香港會計師公會頒佈的香港審閱委聘準則第2410號由實體的獨立核數師執行中期財務資料審閱進行審閱。中期財務報告的審閱工作包括主要向負責財務及會計事項的人員查詢，並應用分析和其他審閱程序。由於審閱的範圍遠小於根據香港審計準則進行的審計範圍，故不能保證我們會注意到審計中可能發現的所有重大事項。因此，我們不發表任何審計意見。

Review report to the board of directors of Biocytogen
Pharmaceuticals (Beijing) Co., Ltd.

(Incorporated in the People's Republic of China with limited liability)

INTRODUCTION

We have reviewed the interim financial report set out on pages 77 to 106 which comprises the consolidated statement of financial position of Biocytogen Pharmaceuticals (Beijing) Co., Ltd. (the "Company") and its subsidiaries (collectively referred to as "the Group") as of 30 June 2023 and the related consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and condensed consolidated cash flow statement for the six-month period then ended and explanatory notes. The Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited require the preparation of an interim financial report to be in compliance with the relevant provisions thereof and International Accounting Standard 34, *Interim financial reporting*, issued by the International Accounting Standards Board. The directors are responsible for the preparation and presentation of the interim financial report in accordance with International Accounting Standard 34.

Our responsibility is to form a conclusion, based on our review, on the interim financial report and to report our conclusion solely to you, as a body, in accordance with our agreed terms of engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

SCOPE OF REVIEW

We conducted our review in accordance with Hong Kong Standard on Review Engagements 2410, *Review of interim financial information performed by the independent auditor of the entity*, issued by the Hong Kong Institute of Certified Public Accountants. A review of the interim financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Hong Kong Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly we do not express an audit opinion.

審閱報告 Review Report

結論

根據我們的審閱工作，我們並未發現任何事項令我們相信，於2023年6月30日的中期財務報告在所有重大方面未根據國際會計準則第34號中期財務報告編製。

畢馬威會計師事務所
執業會計師
香港中環
遮打道10號
太子大廈8樓
2023年8月28日

CONCLUSION

Based on our review, nothing has come to our attention that causes us to believe that the interim financial report as at 30 June 2023 is not prepared, in all material respects, in accordance with International Accounting Standard 34, *Interim financial reporting*.

KPMG
Certified Public Accountants
8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong
28 August 2023

綜合損益及其他全面收入表

Consolidated Statements of Profit or Loss and Other Comprehensive Income

截至2023年6月30日止六個月 – 未經審核 For the six months ended 30 June 2023 – unaudited

(以人民幣列示)

(Expressed in RMB)

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB' 000	RMB' 000
		附註	
		Notes	
收益	Revenue	3	326,836
銷售成本	Cost of sales		229,131
			(91,472)
			(62,161)
毛利	Gross profit		235,364
其他收益及虧損淨額	Other gains and losses, net	4	166,970
生物資產公允價值變動淨額	Net change in fair value of biological assets	5	20,960
			38,381
銷售及營銷開支	Selling and marketing expenses		942
一般及行政開支	General and administrative expenses		10,233
研發開支	Research and development expenses		(29,506)
			(24,241)
			(117,532)
			(107,625)
			(247,970)
			(327,819)
經營虧損	Loss from operations		(137,742)
財務成本	Finance costs	6(a)	(244,101)
分佔聯營公司虧損	Share of loss of an associate		(46,664)
			(19,008)
			(4,983)
			(9,484)
除稅前虧損	Loss before taxation		(189,389)
所得稅	Income tax	7	(272,593)
			(420)
			-
期內虧損	Loss for the period		(189,809)
期內其他全面收入(除稅後)	Other comprehensive income for the period (after tax)		(272,593)
– 換算境外業務財務報表的匯兌差額	– Exchange differences on translation of financial statements of foreign operations		(289)
			357
期內全面收入總額	Total comprehensive income for the period		(190,098)
			(272,236)
以下應佔期內虧損：	Loss for the period attributable to:		
本公司權益股東	Equity shareholders of the Company		(189,808)
非控股權益	Non-controlling interests		(272,385)
			(1)
			(208)
期內虧損	Loss for the period		(189,809)
			(272,593)
以下應佔期內全面收入總額：	Total comprehensive income for the period attributable to:		
本公司權益股東	Equity shareholders of the Company		(190,097)
非控股權益	Non-controlling interests		(272,028)
			(1)
			(208)
期內全面收入總額	Total comprehensive income for the period		(190,098)
			(272,236)
每股虧損	Loss per share		
基本及攤薄(人民幣)	Basic and diluted (RMB)	8	(0.48)
			(0.73)

第82頁至第106頁的附註構成本中期財務報告的組成部分。

The notes on pages 82 to 106 form part of this interim financial report.

綜合財務狀況表

Consolidated Statements of Financial Position

截至2023年6月30日止六個月 – 未經審核 At 30 June 2023 – unaudited

(以人民幣列示)

(Expressed in RMB)

			於6月30日 At 30 June	於12月31日 At 31 December
			2023年 2023	2022年 2022
		附註 Notes	人民幣千元 RMB'000	人民幣千元 RMB'000
非流動資產	Non-current assets			
物業、廠房及設備	Property, plant and equipment	9	1,591,535	1,599,079
無形資產	Intangible assets		31,969	30,652
於聯營公司的權益	Interests in associates		193,419	197,944
其他非流動資產	Other non-current assets		54,344	52,861
			1,871,267	1,880,536
流動資產	Current assets			
存貨	Inventories		14,350	18,604
合約成本	Contract costs		49,274	41,361
生物資產	Biological assets	10	76,839	76,498
貿易應收款項及應收票據	Trade and bills receivables	11	114,681	107,682
預付款項及其他應收款項	Prepayments and other receivables	12	31,706	40,332
其他金融資產	Other financial assets		8,583	8,198
銀行及庫存現金	Cash at bank and on hand	13	551,088	626,621
			846,521	919,296
流動負債	Current liabilities			
貿易應付款項及應付票據	Trade and bills payables	14	124,881	146,190
合約負債	Contract liabilities		81,369	56,377
其他應付款項	Other payables	15	212,293	231,072
銀行及其他貸款	Bank and other loans		182,257	126,665
租賃負債	Lease liabilities		47,537	44,938
即期稅項	Current taxation		1,224	804
			649,561	606,046
流動資產淨值	Net current assets		196,960	313,250
總資產減流動負債	Total assets less current liabilities		2,068,227	2,193,786

綜合財務狀況表
Consolidated Statements of Financial Position

截至2023年6月30日止六個月－未經審核 At 30 June 2023 – unaudited

(以人民幣列示)

(Expressed in RMB)

			於6月30日 At 30 June	於12月31日 At 31 December
			2023年 2023	2022年 2022
		附註 Notes	人民幣千元 RMB'000	人民幣千元 RMB'000
非流動負債	Non-current liabilities			
遞延收入	Deferred income		88,503	89,934
租賃負債	Lease liabilities		186,776	191,507
長期應付款項	Long-term payables		775,531	709,359
銀行及其他貸款	Bank and other loans		52,509	52,170
			1,103,319	1,042,970
資產淨值	NET ASSETS		964,908	1,150,816
資本及儲備	CAPITAL AND RESERVES			
股本	Share capital	16	399,398	399,398
儲備	Reserves		560,960	746,867
本公司權益股東應佔權益總額	Total equity attributable to equity shareholders of the Company		960,358	1,146,265
非控股權益	Non-controlling interests		4,550	4,551
總權益	TOTAL EQUITY		964,908	1,150,816

第82頁至第106頁的附註構成本中期財務報告的組成部分。

The notes on pages 82 to 106 form part of this interim financial report.

綜合權益變動表

Consolidated Statements of Changes in Equity

截至2023年6月30日止六個月 – 未經審核 For the six months ended 30 June 2023 – unaudited

(以人民幣列示)

(Expressed in RMB)

		本公司權益股東應佔									
		Attributable to equity shareholders of the Company									
		股本	股份溢價	就股份獎勵計劃持有的股份	其他儲備	累計虧損	匯兌儲備	總計	非控股權益	總權益	
		Share capital	Share Premium	Share award scheme	Other reserve	Accumulated losses	Exchange reserve	Total	Non-controlling interests	Total equity	
		附註	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	
		Note	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	
於2023年1月1日的結餘	Balance at 1 January 2023		399,398	1,991,802	(18,986)	176,045	(1,404,268)	2,274	1,146,265	4,551	1,150,816
截至2023年6月30日	Changes in equity for six months ended 30 June 2023:										
止六個月權益變動：											
期內虧損及全面收入總額	Loss and total comprehensive income for the period		-	-	-	-	(189,808)	(289)	(190,097)	(1)	(190,098)
確認股份支付	Recognition of share-based payment		-	-	-	12,399	-	-	12,399	-	12,399
就股份獎勵計劃購買自身股份	Purchase of own shares for share award scheme	16(b)	-	-	(8,667)	-	-	-	(8,667)	-	(8,667)
分佔聯營公司儲備變動	Share of reserve change of an associate		-	-	-	458	-	-	458	-	458
於2023年6月30日的結餘	Balance at 30 June 2023		399,398	1,991,802	(27,653)	188,902	(1,594,076)	1,985	960,358	4,550	964,908

		本公司權益股東應佔									
		Attributable to equity shareholders of the Company									
		股本	股份溢價	其他儲備	累計虧損	匯兌儲備	總計	非控股權益	總權益		
		Share capital	Share Premium	Other reserve	Accumulated losses	Exchange reserve	Total	Non-controlling interests	Total equity		
		附註	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元		
		Note	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000		
於2022年1月1日的結餘	Balance at 1 January 2022		374,930	1,515,574	158,194	(802,323)	833	1,247,208	4,763	1,251,971	
截至2022年6月30日止六個月	Changes in equity for six months ended 30 June 2022:										
權益變動：											
期內虧損及全面收入總額	Loss and total comprehensive income for the period		-	-	-	(272,385)	357	(272,028)	(208)	(272,236)	
確認股份支付	Recognition of share-based payment		-	-	-	18,127	-	-	18,127	-	18,127
於2022年6月30日的結餘	Balance at 30 June 2022		374,930	1,515,574	176,321	(1,074,708)	1,190	993,307	4,555	997,862	

第82頁至第106頁的附註構成本中期財務報告的組成部分。

The notes on pages 82 to 106 form part of this interim financial report.

簡明綜合現金流量表

Condensed Consolidated Cash Flow Statements

截至2023年6月30日止六個月 – 未經審核 For the six months ended 30 June 2023 – unaudited

(以人民幣列示)

(Expressed in RMB)

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB' 000	RMB' 000
經營活動	Operating activities		
經營所得現金	Cash generated from operations	(17,569)	(111,159)
已付稅項	Tax paid	-	-
經營活動所用現金淨額	Net cash used in operation activities	(17,569)	(111,159)
投資活動	Investing activities		
購買物業、廠房及設備、 無形資產支付	Payment for purchase of property, plant and equipment, intangible assets	(90,243)	(136,197)
出售其他金融資產所得款項	Proceeds from disposal of other financial assets	-	100,000
出售物業、廠房及 設備所得款項	Proceeds from disposal of property, plant and equipment	232	85
視作出售一間附屬公司	Deemed disposal of a subsidiary	-	(6,857)
投資活動所用現金淨額	Net cash used in investing activities	(90,011)	(42,969)
融資活動	Financing activities		
銀行及其他貸款所得款項	Proceeds from bank and other loans	113,370	57,215
償還銀行貸款	Repayments of bank loans	(57,800)	-
支付上市開支	Payments for listing expenses	(2,569)	(9,602)
存入受限制存款	Placement of restricted deposits	-	(15,167)
償還長期應付款項	Repayments of long-term payables	-	(5,009)
已付銀行及其他貸款利息	Interest paid for bank and other loans	(3,747)	(304)
購買自身股份	Purchase of own shares	(8,667)	-
已付租賃租金的本金部分	Capital element of lease rentals paid	(12,843)	(11,831)
已付租賃租金的利息部分	Interest element of lease rentals paid	(6,233)	(3,342)
融資活動所得現金淨額	Net cash generated from financing activities	21,511	11,960
現金及現金等價物減少淨額	Net decrease in cash and cash equivalents	(86,069)	(142,168)
匯率變動的影響	Effects of foreign exchange rate changes	9,946	7,551
於1月1日的現金及現金等價物	Cash and cash equivalents at 1 January	610,882	466,445
於6月30日的現金及 現金等價物	Cash and cash equivalents at 30 June	534,759	331,828

第82頁至第106頁的附註構成本中期財務報告的組成部分。

The notes on pages 82 to 106 form part of this interim financial report.

未經審核中期財務報告附註

Notes to the Unaudited Interim Financial Report

(以人民幣列示)

(Expressed in RMB)

1 編製基準

本中期財務報告乃根據香港聯合交易所有限公司證券上市規則的適用披露條文而編製，包括符合國際會計準則理事會（「國際會計準則理事會」）頒佈的國際會計準則（「國際會計準則」）第34號中期財務報告。中期財務報告已於2023年8月28日獲授權刊發。

中期財務報告乃根據2022年年度財務報表所採納的相同會計政策編製，惟預期將在2023年度財務報表中反映的會計政策變動除外。該等會計政策變動的詳情載於附註2。

遵照國際會計準則第34號編製中期財務報告需要管理層作出判斷、估計及假設，有關判斷、估計及假設會影響政策的應用以及按年初至今基準呈報的資產及負債、收入及開支的金額。實際結果可能與此等估計不盡相同。

本中期財務報告包括簡明綜合財務報表及經選定解釋附註。附註包括對了解自2022年年度財務報表以來本集團財務狀況及表現變動而言屬重大的事件及交易的闡釋。簡明綜合中期財務報表及其附註並不包括就根據國際財務報告準則（「國際財務報告準則」）編製完整財務報表所需的所有資料。

中期財務報告未經審核，惟畢馬威會計師事務所已經根據香港會計師公會頒佈的香港審閱委聘準則第2410號由實體的獨立核數師執行中期財務資料審閱進行審閱。

1 BASIS OF PREPARATION

This interim financial report has been prepared in accordance with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, including compliance with International Accounting Standard (“IAS”) 34, Interim financial reporting, issued by the International Accounting Standards Board (“IASB”). It was authorised for issue on 28 August 2023.

The interim financial report has been prepared in accordance with the same accounting policies adopted in the 2022 annual financial statements, except for the accounting policy changes that are expected to be reflected in the 2023 annual financial statements. Details of these changes in accounting policies are set out in Note 2.

The preparation of an interim financial report in conformity with IAS 34 requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses on a year to date basis. Actual results may differ from these estimates.

This interim financial report contains condensed consolidated financial statements and selected explanatory notes. The notes include an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the Group since the 2022 annual financial statements. The condensed consolidated interim financial statements and notes thereon do not include all of the information required for a full set of financial statements prepared in accordance with International Financial Reporting Standards (“IFRSs”).

The interim financial report is unaudited, but has been reviewed by KPMG in accordance with Hong Kong Standard on Review Engagements 2410, Review of interim financial information performed by the independent auditor of the entity, issued by the Hong Kong Institute of Certified Public Accountants.

2 會計政策變更

本集團已於本會計期間對本中期財務報告應用以下由國際會計準則理事會頒佈的新訂國際財務報表準則及國際財務報表準則修訂本：

- 國際財務報告準則第17號，*保險合約*
- 國際會計準則第8號修訂本，*會計政策、會計估計變更及錯誤：會計估算的定義*
- 國際會計準則第12號修訂本，*所得稅：與單一交易產生的資產及負債相關的遞延稅項*
- 國際會計準則第12號修訂本，*所得稅：國際稅制改革 – 第二支柱示範規則*

本集團並無應用於本會計期間尚未生效的任何新訂準則或詮釋。採納新訂國際財務報表準則及國際財務報表準則修訂本之影響論述如下：

國際財務報告準則第17號，*保險合約*

國際財務報告準則第17號取代國際財務報告準則第4號，規定適用於保險合約發行人的確認、計量、列報和披露的要求。由於本集團並無訂立國際財務報告準則第17號範圍內的合同，因此該準則對本財務報表並無重大影響。

國際會計準則第8號修訂本，*會計政策、會計估計變更及錯誤：會計估算的定義*

該修訂本為區分會計政策變更與會計估算變更提供進一步指導。由於本集團區分會計政策變更與會計估算變更的方法與修訂本一致，因此修訂本不會對本財務報表產生重大影響。

2 CHANGES IN ACCOUNTING POLICIES

The Group has applied the following new and amended IFRSs issued by IASB to this interim financial report for the current accounting period:

- IFRS 17, *Insurance contracts*
- Amendments to IAS 8, *Accounting policies, changes in accounting estimates and errors: Definition of accounting estimates*
- Amendments to IAS 12, *Income taxes: Deferred tax related to assets and liabilities arising from a single transaction*
- Amendments to IAS 12, *Income taxes: International tax reform – Pillar Two model rules*

The Group has not applied any new standard or interpretation that not yet effective for the current accounting period. Impacts of the adoption of the new and amended IFRSs are discussed below:

IFRS 17, *Insurance contracts*

IFRS 17, which replaces IFRS 4, sets out the recognition, measurement, presentation and disclosure requirements applicable to issuers of insurance contracts. The standard does not have a material impact on these financial statements as the Group does not have contracts within the scope of IFRS 17.

Amendments to IAS 8, *Accounting policies, changes in accounting estimates and errors: Definition of accounting estimates*

The amendments provide further guidance on the distinction between changes in accounting policies and changes in accounting estimates. The amendments do not have a material impact on these financial statements as the Group's approach in distinguishing changes in accounting policies and changes in accounting estimates is consistent with the amendments.

2 會計政策變更(續)

國際會計準則第12號修訂本，所得稅：與單一交易產生的資產及負債相關的遞延稅項

該修訂本縮小初始確認豁免的範圍，使其不適用於在初始確認時產生相等且可抵銷的暫時性差異的交易，如租賃和清拆負債必須從最早列報的比較期期初確認，任何累積影響在該日確認為對保留盈利或其他權益組成部分的調整。對於所有其他交易，該修訂本適用於最早列報期期初後發生的交易。該修訂本對本財務報表並無重大影響。

國際會計準則第12號修訂本，所得稅：國際稅制改革－第二支柱示範規則

對於為實施經濟合作與發展組織(「經合組織」)發佈的第二支柱示範規則而頒佈或實質上頒佈的稅法(包括實施該等規則中所述的合格國內最低補充稅的稅法)所產生的所得稅(此類稅法所產生的所得稅以下稱為「第二支柱所得稅」)，該修訂本引入遞延所得稅會計的臨時強制性例外規定。該修訂還引入有關此類稅項的披露要求。該修訂本一經發佈立即生效，並要求追溯適用。該修訂本對本財務報表並無重大影響。

2 CHANGES IN ACCOUNTING POLICIES (CONTINUED)

Amendments to IAS 12, *Income taxes: Deferred tax related to assets and liabilities arising from a single transaction*

The amendments narrow the scope of the initial recognition exemption such that it does not apply to transactions that give rise to equal and offsetting temporary differences on initial recognition such as leases and decommissioning liabilities are required to be recognised from the beginning of the earliest comparative period presented, with any cumulative effect recognised as an adjustment to retained earnings or other components of equity at that date. For all other transactions, the amendments are applied to those transactions that occur after the beginning of the earliest period presented. The amendments do not have a material impact on these financial statements.

Amendments to IAS 12, *Income taxes: International tax reform – Pillar Two model rules*

The amendments introduce a temporary mandatory exception from deferred tax accounting for the income tax arising from tax laws enacted or substantively enacted to implement the Pillar Two model rules, published by the Organisation for Economic Co-operation and Development (“OECD”) (income tax arising from such tax laws is hereafter referred to as “Pillar Two income taxes”), including tax laws that implement qualified domestic minimum top-up taxes described in those rules. The amendments also introduce disclosure requirements about such tax. The amendments are immediately effective upon issuance and require retrospective application. The amendments do not have a material impact on these financial statements.

3 收益及分部報告

(a) 收益

本集團主要從事提供基因編輯服務、臨床前藥理藥效評估服務、抗體開發、模式動物銷售及創新藥開發。本集團目前並無產品獲批准進行商業銷售，亦未自銷售候選藥品獲得任何收入。來自客戶合約的收益按主要服務項目劃分如下：

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
基因編輯	Gene editing	33,429	29,252
臨床前藥理藥效評估	Pre-clinical pharmacology and efficacy evaluation	89,541	65,416
模式動物銷售	Animal models selling	115,219	72,858
抗體開發	Antibody development	88,245	61,345
其他	Others	402	260
		326,836	229,131

截至2023年6月30日止六個月，一名客戶與本集團的交易額佔本集團收益的10%以上，金額為人民幣50,441,000元（截至2022年6月30日止六個月：一名客戶的交易額為人民幣40,000,000元）。

3 REVENUE AND SEGMENT REPORTING

(a) Revenue

The Group is principally engaged in providing gene editing services, pre-clinical pharmacology and efficacy evaluation services, antibody development, selling animal models and innovative drugs development. Currently the Group have no products approved for commercial sale and have not generated any revenue from sales of drug candidates. Disaggregation of revenue from contracts with customers by major service lines is as follows:

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
基因編輯	Gene editing	33,429	29,252
臨床前藥理藥效評估	Pre-clinical pharmacology and efficacy evaluation	89,541	65,416
模式動物銷售	Animal models selling	115,219	72,858
抗體開發	Antibody development	88,245	61,345
其他	Others	402	260
		326,836	229,131

For the six months ended 30 June 2023, one customer had transactions with the Group which exceeded 10% of the Group's revenue, amounting to RMB50,441,000 (For the six months ended 30 June 2022: one customer with RMB40,000,000).

3 收益及分部報告 (續)

(b) 分部報告

本集團按業務線管理其業務。按與內部向本集團最高執行管理層匯報資料用於資源分配及表現評估的方式一致的方式，本集團已呈列以下五個可報告分部。並無經營分部已為形成以下可報告分部而合併。

- 基因編輯服務

該分部提供基於動物和細胞的定制化基因編輯服務，以滿足客戶基礎科學研究和藥物研發的需求。

- 臨床前藥理藥效評估

該分部提供用於藥物療效和毒性評估的臨床前藥理學服務。

- 模式動物銷售

該分部培育和銷售外用和內用模式動物，包括基因工程小鼠、疾病小鼠模型和大齡小動物。該分部亦向客戶授出若干模式動物的許可。

- 抗體開發

該分部利用本集團自身抗體發現平台識別有可能成為我們候選藥物的抗體，以及對外授權或與合作夥伴合作開發潛在的治療性抗體分子。

- 創新藥開發

該分部研發創新藥，專注腫瘤學和自身免疫性疾病治療。

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting

The Group manages its businesses by business lines. In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has presented the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- Gene editing services

This segment provides the customized gene editing services based on animals as well as cells to meet the needs of basic science research and drug development of the customers.

- Pre-clinical pharmacology and efficacy evaluation

This segment provides the pre-clinical pharmacology service for drug efficacy and toxicity evaluation.

- Animal models selling

This segment breeds and sells the animal models for the external and internal use, including set of genetically engineered mice, disease mouse models and aged small animals. This segment also out-licenses certain animal models to customers.

- Antibody development

This segment utilizes the Group's own antibody discovery platforms to identify antibodies which have the potential to become our drug candidates and out-license or collaborate with partners for potential therapeutic antibody molecules.

- Innovative drugs development

This segment is engaged in research and developing of innovative drugs with a focus on oncology and autoimmune disease therapeutics.

3 收益及分部報告 (續)

(b) 分部報告 (續)

(i) 分部業績

為評估分部表現及在分部間分配資源，本集團最高執行管理層根據以下基準監察各可報告分部應佔的業績：

收益及開支參考可報告分部產生的銷售額及發生的開支分配至該等分部。報告分部業績使用的計量標準為毛利。

本集團的其他經營收入及開支(如其他收益及虧損淨額與銷售及行政開支)以及資產與負債未按個別分部計量。因此，未呈列有關分部資產及負債的資料以及有關資本開支、利息收入及利息開支的資料。

期內按收益確認時間劃分的來自客戶合約的收益明細，以及有關提供予本集團最高執行管理層用於資源分配及分部表現評估的本集團可報告分部的資料載列如下。

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(i) Segments results

For the purposes of assessing segment performance and allocating resources between segments, the Group's most senior executive management monitors the results attributable to each reportable segment on the following bases:

Revenue and expenses are allocated to the reportable segments with reference to sales generated by those segments and the expenses incurred by those segments. The measure used for reporting segment result is gross profit.

The Group's other operating income and expenses, such as other gains and losses, net and selling and administrative expenses, and assets and liabilities are not measured under individual segments. Accordingly, neither information on segment assets and liabilities nor information concerning capital expenditure, interest income and interest expenses is presented.

Disaggregation of revenue from contracts with customers by the timing of revenue recognition, as well as information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the period is set out below.

3 收益及分部報告 (續)

(b) 分部報告 (續)

(i) 分部業績 (續)

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(i) Segments results (continued)

截至2023年6月30日止六個月

Six months ended 30 June 2023

		基因編輯	藥理藥效評估	模式動物銷售	抗體開發	創新藥開發	其他	總計
		Gene editing	and efficacy evaluation	Animal models selling	Antibody development	Innovative drugs development	Others	Total
		人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元	人民幣千元
		RMB' 000	RMB' 000	RMB' 000	RMB' 000	RMB' 000	RMB' 000	RMB' 000
按收益確認時間劃分		Disaggregated by timing of revenue recognition						
時間點	Point in time	33,429	89,541	115,219	88,245	-	402	326,836
來自外部客戶的收益	Revenue from external customers	33,429	89,541	115,219	88,245	-	402	326,836
分部間收益	Inter-segment revenue	-	-	11,231	-	-	-	11,231
可報告分部收益	Reportable segment revenue	33,429	89,541	126,450	88,245	-	402	338,067
可報告分部毛利	Reportable segment gross profit	14,071	57,363	87,591	76,751	-	402	236,178

3 收益及分部報告 (續)

(b) 分部報告 (續)

(i) 分部業績 (續)

		截至2022年6月30日止六個月 Six months ended 30 June 2022						
		基因編輯	藥理藥效評估	模式動物銷售	抗體開發	創新藥開發	其他	總計
		Pre-clinical pharmacology Gene editing	and efficacy evaluation	Animal models selling	Antibody development	Innovative drugs development	Others	Total
		人民幣千元 RMB'000	人民幣千元 RMB'000	人民幣千元 RMB'000	人民幣千元 RMB'000	人民幣千元 RMB'000	人民幣千元 RMB'000	人民幣千元 RMB'000
按收益確認時間劃分	Disaggregated by timing of revenue recognition							
時間點	Point in time	29,252	65,416	72,858	61,345	-	260	229,131
來自外部客戶的收益	Revenue from external customers	29,252	65,416	72,858	61,345	-	260	229,131
分部間收益	Inter-segment revenue	-	-	19,599	-	-	-	19,599
可報告分部收益	Reportable segment revenue	29,252	65,416	92,457	61,345	-	260	248,730
可報告分部毛利	Reportable segment gross profit	12,799	43,552	59,943	54,415	-	78	170,787

(ii) 可報告分部毛利對賬

(ii) Reconciliations of reportable segment gross profit

		截至6月30日止六個月 Six months ended 30 June	
		2023年 2023 人民幣千元 RMB'000	2022年 2022 人民幣千元 RMB'000
可報告分部毛利	Reportable segment gross profit	236,178	170,787
抵銷分部間毛利	Elimination of inter-segment gross profit	(814)	(3,817)
綜合毛利	Consolidated gross profit	235,364	166,970

3 收益及分部報告 (續)

(c) 地區資料

下表載列本集團來自外部客戶的收益的地理位置資料。按外部客戶各自所在國家／地區劃分的收益地區資料如下：

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
中國	The PRC	154,187	141,002
美利堅合眾國(「美國」)	The United States of America ("USA")	116,577	62,736
其他	Others	56,072	25,393
		326,836	229,131

特定非流動資產的地理位置基於該資產的實際地點(就物業、廠房及設備而言)及其獲分配至的經營地點(就無形資產而言)。

3 REVENUE AND SEGMENT REPORTING (CONTINUED)

(c) Geographic information

The following tables set out information about the geographical location of the Group's revenue from external customers. The geographical information on the revenue by external customers' respective country/region of domicile is as follows:

		於6月30日	於12月31日
		As at	As at
		30 June	31 December
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
中國	The PRC	1,384,330	1,453,038
美國	USA	240,318	176,693
其他	Others	339	-
		1,624,987	1,629,731

The geographical location of the specified non-current assets is based on the physical location of the asset, in the case of property, plant and equipment, and the location of the operation to which they are allocated, in the case of intangible assets.

4 其他收益及虧損淨額

4 OTHER GAINS AND LOSSES, NET

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
出售物業、廠房及設備的利潤／ (虧損)淨額	Net gain/(loss) on disposal of property, plant and equipment	27	(151)
按公允價值計量且其變動計入當 期損益(「按公允價值計量且其 變動計入當期損益」)之金融資 產的公允價值變動	Change in fair value of financial assets at fair value through profit or loss ("FVTPL")	75	—
利息收入	Interest income	5,504	821
政府補助	Government grants	2,463	3,230
出售聯營公司權益的收益	Gain on disposal of interest in an associate	—	24,124
視作出售附屬公司權益的收益	Gain on deemed disposal of interest in a subsidiary	—	1,702
衍生金融工具已實現虧損淨額	Net realised losses on derivative financial instruments	—	(2,414)
匯兌收益淨額	Net foreign exchange gain	12,899	10,488
其他	Others	(8)	581
		20,960	38,381

5 生物資產公允價值變動淨額

生物資產公允價值變動淨額指期初到期末的公允價值差額。截至2023年6月30日止六個月，公允價值變動淨額包括(i)已變現公允價值負變動為人民幣59,940,000元(截至2022年6月30日止六個月：人民幣56,018,000元)；及(ii)未變現公允價值正變動為人民幣60,882,000元(截至2022年6月30日止六個月：人民幣66,251,000元)。

5 NET CHANGE IN FAIR VALUE OF BIOLOGICAL ASSETS

Net change in fair value of biological assets represents the difference in fair value from the beginning to the end of the period. During the six months ended 30 June 2023, net fair value change consists of (i) negative realised fair value changes of RMB59,940,000 (six months ended 30 June 2022: RMB56,018,000) and (ii) positive unrealised fair value changes of RMB60,882,000 (six months ended 30 June 2022: RMB66,251,000).

6 除稅前虧損

除稅前虧損乃經扣除／(計入)下列各項：

(a) 財務成本

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
長期應付款項的利息	Interest on long-term payables	36,323	15,299
租賃負債利息	Interest on lease liabilities	6,233	3,342
銀行及其他貸款利息	Interest on bank and other loans	4,108	367
		46,664	19,008

(b) 員工成本

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
薪金、工資及其他福利	Salaries, wages and other benefits	167,322	170,220
界定供款退休計劃供款	Contributions to defined contribution retirement schemes	15,457	15,717
以權益結算的股份支付開支	Equity-settled share-based payment expenses	12,399	18,127
		195,178	204,064

6 LOSS BEFORE TAXATION

Loss before taxation is arrived at after charging/(crediting):

(a) Finance costs

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
長期應付款項的利息	Interest on long-term payables	36,323	15,299
租賃負債利息	Interest on lease liabilities	6,233	3,342
銀行及其他貸款利息	Interest on bank and other loans	4,108	367
		46,664	19,008

(b) Staff costs

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
薪金、工資及其他福利	Salaries, wages and other benefits	167,322	170,220
界定供款退休計劃供款	Contributions to defined contribution retirement schemes	15,457	15,717
以權益結算的股份支付開支	Equity-settled share-based payment expenses	12,399	18,127
		195,178	204,064

6 除稅前虧損（續）

(b) 員工成本（續）

附註：

根據中國相關規定，本公司及其中國附屬公司為其僱員參加由省市級政府組織的界定供款退休計劃。於有關年度，本集團須按照僱員薪金、花紅及若干津貼的若干百分比向該等退休計劃供款。

美國附屬公司為美國僱員實施一項界定供款401(k)儲蓄計劃（「401(k)計劃」）。401(k)計劃涵蓋所有美國僱員，並允許參與者按稅前基準遞延部份年度薪酬。此外，本集團對401(k)計劃作出匹配供款，將僱員供款與參與者薪酬的最高5%相匹配。

(c) 其他項目

6 LOSS BEFORE TAXATION (CONTINUED)

(b) Staff costs (Continued)

Notes:

As stipulated by the regulations of the PRC, the Company and its subsidiaries in the PRC participates in a defined contribution retirement plan organised by municipal and provincial governments for its employees. The Group is required to make contributions to the retirement plans at certain percentages of the salaries, bonuses and certain allowances of the employees during the year.

Subsidiaries in the USA implemented a defined contribution 401(k) savings plan (the "401(k) Plan") for U.S. employees. The 401(k) Plan covers all U.S. employees, and allows participants to defer a portion of their annual compensation on a pretax basis. In addition, the Group implemented a matching contribution to the 401(k) Plan, matching employee's contribution up to a maximum of 5% of the participant's compensation.

(c) Other items

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
物業、廠房及設備折舊費用	Depreciation charge on property, plant and equipment	80,640	76,477
無形資產攤餘成本	Amortisation cost of intangible assets	3,423	925
貿易應收款項及其他應收款項的減值虧損確認／(撥回)	Recognition/(reversal) of impairment losses on trade receivables and other receivables	1,072	(865)
存貨及合約成本減值	Impairment of inventories and contract costs	1,941	1,389
存貨成本	Cost of inventories	58,311	93,005

7 綜合損益及其他全面收入表中的所得稅

7 INCOME TAX IN THE CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
即期稅項	Current tax		
期內撥備	Provision for the period	(420)	—
		(420)	—

8 每股虧損

8 LOSS PER SHARE

(a) 每股基本虧損

截至2023年6月30日止六個月每股基本盈利基於本公司普通股股東應佔虧損人民幣189,808,000元（截至2022年6月30日止六個月：人民幣272,385,000元）及已發行398,379,000股（經計及就股份獎勵計劃所購買股份的影響）（截至2022年6月30日止六個月：374,930,000股）普通股加權平均數計算。

(a) Basic loss per share

The calculation of basic earnings per share is based on the loss attributable to ordinary equity shareholders of the Company of RMB189,808,000 (six months ended 30 June 2022: RMB272,385,000) and the weighted average of 398,379,000 ordinary shares in issue during the six months ended 30 June 2023 after considering the effect of the shares purchased for share incentive plan (six months ended 30 June 2022: 374,930,000 shares).

(b) 每股攤薄虧損

截至2023年及2022年6月30日止六個月，概無潛在攤薄普通股，因此期內每股攤薄虧損與各期間的每股基本虧損相同。

(b) Diluted loss per share

There were no potential dilutive ordinary shares for the six months ended 30 June 2023 and 2022, therefore diluted loss per share for the period were the same as basic loss per share for the respective period.

9 物業、廠房及設備

截至2023年6月30日止六個月，本集團在建工程產生成本人民幣81,256,000元（截至2022年6月30日止六個月：人民幣58,057,000元），並以成本人民幣992,000元（截至2022年6月30日止六個月：人民幣57,080,000元）購買機器及設備，以成本人民幣1,386,000元（截至2022年6月30日止六個月：人民幣7,433,000元）購買車輛、家具及其他，用於擴大生產設施及研發能力。

2023年4月，海門三期項目竣工，建築成本人民幣228,570,000元從在建工程轉入廠房和建築物。

10 生物資產

本集團的生物資產主要包括三種模式動物：B-NDG (NOD-Prkdcscid IL2rgtm1/Bcgen)小鼠、人源化小鼠及常規品系小鼠，經培育用於不同類型的醫學測試。所有小鼠可進一步分類為用於繁殖其他小鼠的小鼠（「繁殖用小鼠」）及用於銷售以獲取收益的小鼠（「銷售用小鼠」）。

9 PROPERTY, PLANT AND EQUIPMENT

During the six months ended 30 June 2023, the Group incurred costs for construction in progress of RMB81,256,000 (six months ended 30 June 2022: RMB58,057,000) and acquired machineries and equipment at a cost of RMB992,000 (six months ended 30 June 2022: RMB57,080,000), vehicles, furniture and others at a cost of RMB1,386,000 (six months ended 30 June 2022: RMB7,433,000) for the expansion of production facilities and research capacity.

In April 2023, Haimen Phase III Project was completed, and the construction cost of RMB228,570,000 was transferred from construction in progress to plant and buildings.

10 BIOLOGICAL ASSETS

The biological assets of the Group mainly include three animal models: B-NDG (NOD-Prkdcscid IL2rgtm1/Bcgen) mice, humanized mice and conventional strain mice which have been developed for different types of medical testing. All mice can be further separated into mice used to breed other mice (“mice for breeding”) and mice to be sold for revenue (“mice for selling”).

		於6月30日 As at 30 June 2023年 2023 人民幣千元 RMB'000	於12月31日 As at 31 December 2022年 2022 人民幣千元 RMB'000
– B-NDG	– B-NDG	3,135	5,083
– 人源化小鼠	– Humanized mice	71,788	67,422
– 常規品系小鼠	– Conventional strain mice	1,916	3,993
		76,839	76,498

10 生物資產(續)

(a) 繁殖用小鼠及銷售用小鼠分析

10 BIOLOGICAL ASSETS (CONTINUED)

(a) Analysis of mice for breeding and mice for selling

		繁殖用小鼠 Mice for breeding 人民幣千元 RMB'000	銷售用小鼠 Mice for selling 人民幣千元 RMB'000	總計 Total 人民幣千元 RMB'000
於2023年1月1日	At 1 January 2023	28,196	48,302	76,498
養殖成本*	Breeding cost*	–	38,780	38,780
因銷售及死亡而減少	Decrease due to sales and mortality	(8,768)	(30,613)	(39,381)
生物資產公允價值變動	Fair value changes of biological assets	2,810	(1,868)	942
轉移	Transfer	8,698	(8,698)	–
於2023年6月30日	At 30 June 2023	30,936	45,903	76,839
於2022年1月1日	At 1 January 2022	28,648	39,483	68,131
養殖成本*	Breeding cost*	–	41,991	41,991
因銷售及死亡而減少	Decrease due to sales and mortality	(6,068)	(35,887)	(41,955)
生物資產公允價值變動	Fair value changes of biological assets	2,836	7,397	10,233
轉移	Transfer	6,684	(6,684)	–
於2022年6月30日	At 30 June 2022	32,100	46,300	78,400

附註：

* 小鼠產生的養殖成本主要包括飼養成本、員工成本、折舊及攤銷開支與水電費。

Note:

* Breeding cost incurred for mice mainly include feeding costs, staff costs, depreciation and amortisation expenses and utilities costs.

10 生物資產(續)

(b) 生物資產的公允價值計量

公允價值層級

估值技術所用輸入數據如下所示：

第一級估值：公允價值僅採用第一級輸入數據計量，即在活躍市場中相同資產或負債於計量日期的未經調整報價。

第二級估值：公允價值採用第二級輸入數據(即不符合第一級的可觀察輸入數據)且不會採用重大不可觀察輸入數據計量。不可觀察輸入數據為無法取得市場數據的輸入數據。

第三級估值：公允價值採用重大不可觀察輸入數據計量。

生物資產的公允價值計量屬於公允價值層級的第三級。

本集團的銷售用小鼠及繁殖用小鼠於2023年6月30日重新估值。估值由獨立估值師亞太評估諮詢有限公司進行。於各報告期末，本集團的財務經理及首席財務官已與估值師討論估值假設及估值結果。

生物資產的公允價值使用市場法及成本法釐定。計算公允價值時已採用近期成交價及基於生物資產特點(包括年齡、性別、育種使用壽命、預期死亡率等)的調整因素。

10 BIOLOGICAL ASSETS (CONTINUED)

(b) Fair value measurement of biological assets

Fair value hierarchy

The inputs used in the valuation technique as follows:

Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available.

Level 3 valuations: Fair value measured using significant unobservable inputs.

The fair value measurements of biological assets fall into level 3 of the fair value hierarchy.

The Group's mice for selling and mice for breeding were revalued as at 30 June 2023. The valuations were carried out by Asia-Pacific Consulting and Appraisal Limited, an independent valuer. The Group's finance manager and chief financial officer have discussed with the valuers on the valuation assumptions and valuation results as at the end of each reporting period.

The fair values of biological assets are determined using market approach and cost approach. Recent trading price and adjustment factors based on the characteristics of the biological assets (including age, gender, breeding useful life, expected rate of mortality etc.) were used in the calculations of fair values.

10 生物資產(續)

(b) 生物資產的公允價值計量(續)

有關第三級公允價值計量的資料：

10 BIOLOGICAL ASSETS (CONTINUED)

(b) Fair value measurement of biological assets (continued)

Information about Level 3 fair value measurements:

	重大不可觀察輸入數據 Significant unobservable inputs	2023年6月30日 30 June 2023
繁殖用小鼠 Mice for breeding	近期成交價 Recent trading price 剩餘使用壽命 Remaining useful life	每隻人民幣40元至人民幣4,484元 RMB40 to RMB4,484 per head 0至16週 0 – 16 weeks
銷售用小鼠 Mice for selling	近期成交價 Recent trading price 預期死亡率 Expected rate of mortality	每隻人民幣40元至人民幣4,484元 RMB40 to RMB4,484 per head 3% – 73% 3% – 73%
	重大不可觀察輸入數據 Significant unobservable inputs	2022年12月31日 31 December 2022
繁殖用小鼠 Mice for breeding	近期成交價 Recent trading price 剩餘使用壽命 Remaining useful life	每隻人民幣40元至人民幣5,869元 RMB40 to RMB5,869 per head 0至16週 0 – 16 weeks
銷售用小鼠 Mice for selling	近期成交價 Recent trading price 預期死亡率 Expected rate of mortality	每隻人民幣40元至人民幣5,869元 RMB40 to RMB5,869 per head 2% – 57% 2% – 57%

估計市價大幅上升／下跌，將令生物資產的公允價值大幅增加／減少。

繁殖用小鼠及銷售用小鼠的估計公允價值主要因市價上升／下跌而增加／減少。於2023年6月30日，如成交價上升／下跌10%，生物資產的估計公允價值將增加／減少人民幣7,727,000元（於2022年12月31日：人民幣7,649,800元）。

生物資產的公允價值變動於綜合損益表中呈列為「生物資產公允價值變動淨額」。

A significant increase/decrease in the estimated market price would result in a significant increase/decrease in the fair value of the biological assets.

The estimated fair value of mice for breeding and mice for selling increased/decreased primarily due to an increase/decrease in the market price. At 30 June 2023, if transaction price increases/decreases by 10%, the estimated fair value of biological assets would have increased/decreased by RMB7,727,000 (At 31 December 2022: RMB7,649,800).

The changes in fair value of biological assets are presented in “Net change in fair value of biological assets” in the consolidated statements of profit or loss.

11 貿易應收款項及應收票據

11 TRADE AND BILLS RECEIVABLES

		於6月30日	於12月31日
		As at	As at
		30 June	31 December
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
貿易應收款項	Trade receivables	122,646	114,750
減：虧損撥備	Less: loss allowance	(8,162)	(7,068)
		114,484	107,682
應收票據	Bills receivable	197	-
		114,681	107,682

貿易應收款項的賬齡分析

本集團一般向其貿易客戶提供0至90天的信貸期。貿易應收款項基於發票日期或收益確認日期的較早者並扣除呆賬撥備的賬齡分析如下：

Ageing analysis of trade receivables

The Group generally provides a credit period of 0 – 90 days to its trade customers. The ageing analysis of trade receivables, based on the earlier of invoice date or revenue recognition date and net of allowance for doubtful debts, is as follows:

		於6月30日	於12月31日
		As at	As at
		30 June	31 December
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
1年內	Within 1 year	107,072	97,183
1至2年	1 to 2 years	6,313	9,157
2至3年	2 to 3 years	1,099	1,342
		114,484	107,682

12 預付款項及其他應收款項

12 PREPAYMENTS AND OTHER RECEIVABLES

		於6月30日	於12月31日
		As at	As at
		30 June	31 December
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB'000	RMB'000
預付服務供應商款項	Advances to service suppliers	8,031	18,857
預付材料供應商款項	Advances to materials suppliers	3,871	5,127
預付公用事業費	Prepayments for utility fee	2,519	2,496
就本公司A股發行所產生成本的 預付款項(附註(i))	Prepayments for costs incurred in connection with the issuance of the Company's A shares (Note(i))	1,442	–
可收回增值稅	VAT recoverable	4,396	3,445
按金	Deposits	9,184	9,153
其他	Others	2,751	1,705
		32,194	40,783
減：虧損撥備	Less: loss allowance	(488)	(451)
		31,706	40,332

附註：

- (i) 有關結餘將於本公司A股於科創板上市後轉入權益內的股份溢價賬。2023年6月20日，本公司提交申請材料，隨後收到上海證券交易所就擬發行A股申請出具的受理函。A股發行尚需獲得上海證券交易所和中國證券監督管理委員會的批准。

所有預付款項及其他應收款項預期於一年內收回或確認為開支。

Note:

- (i) The balance will be transferred to the share premium account within equity upon the listing of the Company's A shares on Sci-Tech innovation board. On 20 June 2023, the Company submitted the application materials and then received a letter of acceptance issued by the Shanghai Stock Exchange in respect of the application for the proposed issue of A Shares. The issue of A Shares will be subject to approvals by the Shanghai Stock Exchange and the China Securities Regulatory Commission.

All the prepayments and other receivables are expected to be recovered or recognised as expense within one year.

13 銀行及庫存現金

13 CASH AT BANK AND ON HAND

		於6月30日	於12月31日
		As at	As at
		30 June	31 December
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB' 000	RMB' 000
庫存現金	Cash on hand	–	3
銀行現金	Cash at bank	534,753	603,068
本公司就股份獎勵計劃設立的信託持有的按金	Deposits held by the Trust established by the Company for share award scheme	6	7,811
受限制銀行存款	Restricted bank deposits	16,329	15,739
		551,088	626,621
減：受限制銀行存款	Less: restricted bank deposits	(16,329)	(15,739)
綜合現金流量表中的現金及現金等價物	Cash and cash equivalents in the consolidated statements of cash flows	534,759	610,882

14 貿易應付款項及應付票據

14 TRADE AND BILLS PAYABLES

		於6月30日	於12月31日
		As at	As at
		30 June	31 December
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB' 000	RMB' 000
貿易應付款項	Trade payables	107,316	105,501
應付票據	Bills payable	17,565	40,689
		124,881	146,190

14 貿易應付款項及應付票據 (續)

賬齡分析

於報告期間末，貿易應付款項基於發票日期的賬齡分析如下：

		於6月30日 As at 30 June 2023年 2023 人民幣千元 RMB'000	於12月31日 As at 31 December 2022年 2022 人民幣千元 RMB'000
1年內	Within 1 year	119,186	145,467
1年後但2年內	After 1 year but within 2 years	5,023	312
2年後但3年內	After 2 years but within 3 years	672	411
		124,881	146,190

15 其他應付款項

14 TRADE AND BILLS PAYABLES (CONTINUED)

Ageing analysis

As of the end of the reporting period, the ageing analysis of trade payables, based on the invoice date, is as follows:

15 OTHER PAYABLES

		於6月30日 As at 30 June 2023年 2023 人民幣千元 RMB'000	於12月31日 As at 31 December 2022年 2022 人民幣千元 RMB'000
員工相關成本應付款項	Payables for staff related costs	24,505	36,436
建設成本應付款項(附註(i))	Payables relating to construction cost (Note (i))	117,641	111,680
其他稅項應付款項	Payables for other taxes	2,547	3,391
購買設備應付款項	Payables relating to purchases of equipment	44,654	59,542
就專業服務應付款項	Payables for professional services	17,693	15,183
其他	Others	5,253	4,840
		212,293	231,072

附註：

(i) 於2023年6月30日，金額包括將於一年內支付的長期應付款項的即期部份人民幣46,797,000元(於2022年12月31日：人民幣62,688,000元)。

所有其他應付款項預期於一年內結清或須按要求償還。

Note:

(i) The amounts include the current portion of long-term payables which are to be paid within one year of RMB46,797,000 as at 30 June 2023 (as at 31 December 2022: RMB62,688,000).

All the other payables are expected to be settled within one year or are repayable on demand.

16 資本、儲備及股息

(a) 股息

截至2023年6月30日止六個月，本公司並無宣派或支付股息（截至2022年6月30日止六個月：零）。

(b) 購買自身股份

於2022年10月17日，董事會批准一項股份獎勵計劃（「2022年股份獎勵計劃」），據此，本公司可向本集團合資格董事及僱員（「入選僱員」）授出受限制股份。2022年股份獎勵計劃自2022年11月7日起至2032年11月7日止期間維持有效。

本公司已委任一名受託人（「受託人」）管理2022年股份獎勵計劃。受託人之主要業務為就股份獎勵計劃為本公司入選僱員之利益管理及持有本公司股份。根據2022年股份獎勵計劃，受託人將以本公司提供的現金在市場上購買本公司股份，並以信託形式代相關僱員持有，直至該等股份根據2022年股份獎勵計劃的條文無償歸屬予相關受益人為止。

於2023年6月30日，受託人持有的股份總數為1,148,000股，總成本（包括相關交易成本）為人民幣27,654,000元，反映為就2022年股份獎勵計劃而持有的股份。

截至2023年6月30日止六個月，本公司已向入選僱員授予共計1,138,388股股份，於2023年6月30日該等股份尚未歸屬。

16 CAPITAL, RESERVES AND DIVIDENDS

(a) Dividends

No dividends have been declared or paid by the Company during the six months ended 30 June 2023 (during the six months ended 30 June 2022: nil).

(b) Purchase of own shares

On 17 October 2022, the Board of Directors approved a share award scheme (the "2022 Share Award Scheme"), pursuant to which the Company are able to grant restricted shares to the eligible directors and employees of the Group (the "Selected Employees"). The 2022 Share Award Scheme remained in force for a period commencing on 7 November 2022 and ended on 7 November 2032.

The Company has appointed a trustee for administration of the 2022 Share Award Scheme (the "Trustee"). The principal activity of the Trustee is administrating and holding the Company's shares for the Share Award Scheme for the benefit of the Selected Employees. Pursuant to the 2022 Share Award Scheme, the Company's shares will be purchased by the Trustee in the market out of cash contributed by the Company and held in the trust for relevant employees until such shares are vested in the relevant beneficiary in accordance with the provisions of the 2022 Share Award Scheme at no cost.

As at 30 June 2023, total number of shares held by the Trustee was 1,148,000 at a total cost (including related transaction costs) of RMB27,654,000, which is reflected as shares held for 2022 Share Award Scheme.

During the six months ended 30 June 2023, the Company has granted a total of 1,138,388 shares to the Selected Employees which had not been vested as at 30 June 2023.

17 公允價值計量

(i) 按公允價值計量的金融資產

層級根據計量金融資產及負債的公允價值時使用的重大輸入數據的相對可靠性，將該等金融資產及負債分為三個級別。公允價值層級有以下級別：

- 第一級：相同資產及負債於活躍市場的報價（未經調整）；
- 第二級：除計入第一級的報價外，資產或負債可直接（即價格）或間接（自價格衍生）觀察的輸入數據；及
- 第三級：資產或負債並非基於可觀察市場數據的輸入數據（不可觀察輸入數據）。

17 FAIR VALUES MEASUREMENT

(i) Financial assets measured at fair value

The hierarchy groups financial assets and liabilities into three levels based on the relative reliability of significant inputs used in measuring the fair value of these financial assets and liabilities. The fair value hierarchy has the following levels:

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

	於2023年6月30日 As at 30 June 2023		於2022年12月31日 As at 31 December 2022	
	Fair value measurements categorised into		Fair value measurements categorised into	
	分類為第二級的公允價值計量 Level 2	分類為第三級的公允價值計量 Level 3	分類為第二級的公允價值計量 Level 2	分類為第三級的公允價值計量 Level 3
	人民幣千元 RMB'000	人民幣千元 RMB'000	人民幣千元 RMB'000	人民幣千元 RMB'000
按公允價值計量且其變動計入當期損益之金融資產				
— 私募股權基金發行 – wealth management 的理財產品		8,583	8,198	–
— 於愷作的股權投資 – equity investment in Kactus	–	52,861	–	52,861
	8,583	52,861	8,198	52,861

17 公允價值計量(續)

(i) 按公允價值計量的金融資產(續)

截至2023年6月30日止六個月，第一級與第二級之間並無轉移，亦並無轉入或轉出第三級。本集團的政策是將公允價值層級之間的轉移於發生轉移的報告期間末確認。

有關第二級公允價值計量的資料

私募股權基金發行的理財產品的公允價值基於投資本金的年化利率計算。

有關第三級公允價值計量的資料

本集團按公允價值計量且其變動計入當期損益之金融資產公允價值 – 於私人公司的股權投資經參考被投資方作出的最新一輪融資所用價格釐定，未經調整。

(ii) 並非按公允價值計量的金融資產及負債的公允價值

本集團及本公司按成本或攤餘成本計量的金融工具的賬面值與其於2023年6月30日的公允價值之間並無重大差別。

18 承擔

中期財務報告中未作出撥備的於2023年6月30日未履行的資本承擔如下：

17 FAIR VALUES MEASUREMENT (CONTINUED)

(i) Financial assets measured at fair value (continued)

During the six months ended 30 June 2023, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3. The Group's policy is to recognise transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

Information about Level 2 fair value measurements

The fair value of wealth management products issued by private equity funds are calculated based the annualized interest rate of the investment principal.

Information about Level 3 fair value measurements

The fair value of Group's financial assets at FVTPL – equity investment in a private company is determined with reference to the price used in the latest round of financing undertaken by the investee without adjustment.

(ii) Fair values of financial assets and liabilities carried at other than fair value

The carrying amounts of the Group's and the Company's financial instruments carried at cost or amortized cost are not materially different from their fair values as at 30 June 2023.

18 COMMITMENTS

Capital commitments outstanding at 30 June 2023 not provided for in the interim financial report were as follows:

		於6月30日 As at 30 June 2023年 2023 人民幣千元 RMB'000	於12月31日 As at 31 December 2022年 2022 人民幣千元 RMB'000
建設項目	Construction projects	4,975	8,838

19 重大關聯方交易

報告期間與關聯方的交易如下：

19 MATERIAL RELATED PARTY TRANSACTIONS

Transactions with related parties for the reporting period were as follows:

		截至6月30日止六個月	
		Six months ended 30 June	
		2023年	2022年
		2023	2022
		人民幣千元	人民幣千元
		RMB' 000	RMB' 000
提供服務	Provision of services	20,920	40,000
購買商品	Purchase of goods	–	3,718
利息開支	Interest expenses	18,100	–

「A股」 “A Share(s)”	指	指建議配發、發行並在科創板上市的本公司股本中每股面值人民幣1.00元的普通股
		the ordinary Share(s) with a nominal value of RMB1.00 each in the Share capital of the Company proposed to be allotted, issued and listed on the Sci-Tech Board
「ADC」 “ADC”	指	抗體藥物偶聯物，通過將小分子抗癌藥或另一種治療劑與抗體連接產生的新型高效生物藥，具有永久或不穩定的連接分子
		antibody-drug-conjugates, a new class of highly potent biological drugs built by attaching a small molecule anticancer drug or another therapeutic agent to an antibody, with either a permanent or a labile linker
「採納日期」 “Adoption Date”	指	股東批准該股份獎勵計劃的日期
		the date on which the Share Awards Scheme is approved by the Shareholders
「模式動物」 “animal model”	指	醫學研究所用非人類物種，模仿人類疾病的各個方面以獲得有關疾病及其預防、診斷和治療的資料
		a non-human species used in medical research to mimic aspects of a disease found in humans, so as to obtain information about a disease and its prevention, diagnosis, and treatment
「章程細則」或「組織章程細則」 “Articles” or “Articles of Association”	指	本公司不時的組織章程細則
		the articles of association of the Company from time to time
「星赫」 “Astral”	指	Astral Eminent Limited Astral Eminent Limited
「審計委員會」 “Audit Committee”	指	董事會審計委員會 the audit committee of the Board
「獎勵股份」 “Awarded Share(s)”	指	就入選僱員而言，董事會釐定並向有關入選僱員授出的有關H股數目
		in respect of a Selected Employee, such number of H Shares determined by the Board and granted to such Selected Employee
「B細胞」 “B-cell” or “B cell”	指	通過在其表面表達B細胞受體而與其他類型的淋巴細胞不同的白細胞，負責產生抗體
		a type of white blood cell that differs from other types of lymphocytes by expressing B cell receptors on its surface, and responsible for producing antibodies

釋義

Definition

「百奧常盛」 “Baiao Changsheng”	指	北京百奧常盛科技發展中心(有限合夥)，於2019年6月24日在中國成立的有限合夥，沈博士為其唯一普通合夥人，是一致行動人士的成員 Beijing Baiao Changsheng Technology Development Center (Limited Partnership)* (北京百奧常盛科技發展中心(有限合夥)), a limited partnership established in the PRC on June 24, 2019, of which Dr. Shen is the sole general partner, and a member of a Concert Party
「百奧常青」 “Baiao Evergreen”	指	北京百奧常青科技發展中心(有限合夥)，於2016年4月12日在中國成立的有限合夥，沈博士為其唯一普通合夥人，是一致行動人士的成員 Beijing Baiao Evergreen Technology Development Center (Limited Partnership)* (北京百奧常青科技發展中心(有限合夥)), a limited partnership established in the PRC on April 12, 2016, of which Dr. Shen is the sole general partner, and a member of a Concert Party
「百奧維達」 “BioVeda”	指	BioVeda China Fund II RMB, Limited BioVeda China Fund II RMB, Limited
「董事會」 “Board” or “Board of Directors”	指	本公司董事會 the board of directors of the Company
「雙抗」 “BsAb”	指	雙特异性抗體，一種可同時結合兩種抗原或表位的抗體 bispecific antibody, an antibody that binds specifically to two antigens or epitopes simultaneously
「雙抗ADC」 “BsADC”	指	雙特异性ADC，可將小分子抗癌藥物或其他治療劑與兩種抗原或表位同時結合於一個抗體 bispecific ADC, attaching small molecule anticancer drugs or another therapeutic agents to an antibody with two antigens or epitopes simultaneously
「CAR-NK」 “CAR-NK”	指	嵌合抗原受體自然殺傷細胞，一種可改變自然殺傷(NK)細胞(身體免疫系統的一部分)的新型免疫療法，以提高其識別及破壞癌細胞的能力 Chimeric Antigen Receptor Natural Killer cells, a new type of immunotherapy that modifies natural killer (NK) cells, which are part of the body's immune system, to enhance their ability to recognize and destroy cancer cells

「CD40」 “CD40”	指	細胞分化簇40，在抗原遞呈細胞上發現的共刺激蛋白，在介導免疫及炎症反應中必不可少 Cluster of Differentiation 40, a costimulatory protein found on antigen-presenting cells, essential in mediating immune and inflammatory responses
「CDMO」 “CDMO(s)”	指	合同研發生產企業，按合約基準為醫藥行業其他公司提供藥物開發至藥物生產等綜合服務的公司 contract development manufacturing organization(s), a company that serves other companies in the pharmaceutical industry on a contract basis to provide comprehensive services from drug development through drug manufacturing
「企業管治守則」 “CG Code”	指	上市規則附錄14所載企業管治守則 the Corporate Governance Code set out in Appendix 14 to the Listing Rules
「中國」 “China” or “the PRC”	指	中華人民共和國，但僅就本報告及作地區參考而言，除文義另有所指外，不包括香港、澳門特別行政區及台灣 the People’s Republic of China, but for the purpose of this report and for geographical reference only and except where the context requires, excluding Hong Kong, Macau Special Administrative Region and Taiwan
「CMC」 “CMC”	指	化學、生產及控制 Chemistry, Manufacturing, and Controls
「本公司」 “Company”, “our Company” or “the Company”	指	百奧賽圖(北京)醫藥科技股份有限公司，於2009年11月13日在中國註冊成立的有限公司，於2020年12月29日改制為於中國註冊成立的股份有限公司，前身為北京百奧賽圖基因生物技術有限公司 Biocytogen Pharmaceuticals (Beijing) Co., Ltd.* (百奧賽圖(北京)醫藥科技股份有限公司), a limited liability company incorporated in the PRC on November 13, 2009 and converted into a joint stock limited liability company incorporated in the PRC on December 29, 2020 whose predecessor was Beijing Biocytogen Gene Biotechnology Co., Ltd.* (北京百奧賽圖基因生物技術有限公司)
「核心產品」 “Core Products”	指	YH001及YH003，上市規則第18A章所界定的指定「核心產品」 YH001 and YH003, the designated “core products” as defined under Chapter 18A of the Listing Rules

釋義

Definition

「CRO」 “CRO(s)”	指	合約研究機構，以按合約基準外包研發服務的形式向製藥、生物技術和醫療器械行業提供支持的公司 contract research organization(s), a company which provides support to the pharmaceutical, biotechnology, and medical device industries in the form of research and development services outsourced on a contract basis
「中國證監會」 “CSRC”	指	中國證券監督管理委員會 the China Securities Regulatory Commission (中國證券監督管理委員會)
「CTLA-4」 “CTLA-4”	指	在T細胞上組成型表達的蛋白質受體，作用機制為作為免疫檢查點起作用，並下調免疫應答 a protein receptor expressed constitutively on T cells that functions as an immune checkpoint and downregulates immune responses
「董事」 “Director(s)”	指	本公司董事 the director(s) of the Company
「內資股」 “Domestic Share(s)”	指	本公司發行的每股面值人民幣1.0元且以人民幣認購或列為繳足的普通股 ordinary share(s) issued by our Company, with a nominal value of RMB1.0 each, which are subscribed for or credited as paid in Renminbi
「僱員」 “Employee(s)”	指	本集團任何成員公司的任何全職僱員（不包括任何除外僱員） any full-time employee (excluding any Excluded Employee) of any member of the Group
「僱員激勵平台」 “Employee Incentive Platforms”	指	百奧常青、百奧常盛、祐和常青及祐和常盛 Baiao Evergreen, Baiao Changsheng, Eucure Evergreen and Eucure Changsheng
「僱員激勵計劃」 “Employee Incentive Schemes”	指	董事會批准採納的本公司僱員激勵計劃 the employee incentive schemes of our Company approved and adopted by the Board

「除外僱員」	指	(i)於建議授出獎勵時，按與本集團的僱傭合約中所載的試用期結束當日起計，在本集團任職不超過1年的任何僱員（除非董事會根據個別情況全權酌情決定），或(ii)根據僱員居住地法律及法規，不得根據該計劃的條款向其授出獎勵股份及／或歸屬及轉讓獎勵股份的任何僱員，或董事會或受託人（視情況而定）認為就遵守當地適用法律及法規而不納入該僱員屬必要或權宜的任何僱員
“Excluded Employee(s)”		(i) at the time of the proposed grant of an award, any Employee whose service in the Group does not exceed 1 year from the expiry date of his probationary period as stated in his employment contract with the Group, except as otherwise determined by the Board at its absolute discretion on a case by case basis, or (ii) any Employee who is resident in a place where the award of the Awarded Shares and/or the vesting and transfer of the Awarded Shares pursuant to the terms of the Scheme is not permitted under the laws and regulations of such place or where in the view of the Board or the Trustee (as the case may be), compliance with applicable laws and regulations in such place makes it necessary or expedient to exclude such Employee
「祐和常盛」	指	北京祐和常盛科技發展中心（有限合夥），於2020年9月1日在中國成立的有限合夥，沈博士為其唯一普通合夥人，是一致行動人士
“Eucure Changsheng”		Beijing Eucure Changsheng Technology Development Center (Limited Partnership)* (北京祐和常盛科技發展中心(有限合夥)), a limited partnership established in the PRC on September 1, 2020, of which Dr. Shen is the sole general partner, and a Concert Party
「祐和常青」	指	北京祐和常青科技發展中心（有限合夥），於2020年5月9日在中國成立的有限合夥，沈博士為其唯一普通合夥人，是一致行動人士
“Eucure Evergreen”		Beijing Eucure Evergreen Technology Development Center (Limited Partnership)* (北京祐和常青科技發展中心(有限合夥)), a limited partnership established in the PRC on May 9, 2020, of which Dr. Shen is the sole general partner, and a Concert Party
「FDA」	指	食品藥品監督管理局
“FDA”		Food and Drug Administration
「FIH」	指	首次人體試驗
“FIH”		first-in-human
「按公允價值計量且其變動計入當期損益」	指	按公允價值計量且其變動計入當期損益
“FVTPL”		fair value through profit or loss
「GCP」	指	藥物臨床試驗質量管理規範
“GCP”		Good Clinical Practice

釋義

Definition

「啟德醫藥」 “GeneQuantum”	指	啟德醫藥科技(蘇州)有限公司，致力於開發新型高端生物藥的中國創新高科技企業 GeneQuantum Healthcare (Suzhou) Co., Ltd. (啟德醫藥科技(蘇州)有限公司), an innovative high-tech enterprise dedicated to the development of new high-end biological drugs in China
「全球發售」 “Global Offering”	指	本公司H股於聯交所全球發售 the global offering of the Company’s H Shares on the Stock Exchange
「GMP」 “GMP”	指	藥品生產質量管理規範 Good Manufacture Practices
「GPCR」 “GPCR”	指	G蛋白偶聯受體，人類基因中最豐富的膜蛋白。其主要功能是將細胞外信息傳輸到細胞中，引起各種細胞反應 G protein-coupled receptor, the most abundant membrane protein in the human genome. Its primary function is to transmit extracellular information into the cell, causing various cellular responses
「本集團」或「我們」 “Group,” “our Group,” “we” or “us”	指	本公司及其附屬公司 our Company and our subsidiaries
「H股」 “H Share(s)”	指	本公司股本中每股面值人民幣1.0元的境外上市外資股，將以港元認購及買賣並將於香港聯交所上市 overseas listed foreign share(s) in the share capital of our Company with a nominal value of RMB1.0 each, which is/are subscribed for and traded in HK dollars and listed on the Hong Kong Stock Exchange
「HCC」 “HCC”	指	肝細胞癌 hepatocellular carcinoma
「港元」 “HK\$” or “HKD”	指	香港的法定貨幣港元 Hong Kong dollars, the lawful currency of Hong Kong
「香港」 “Hong Kong” or “HK”	指	中國香港特別行政區 the Hong Kong Special Administrative Region of the PRC
「IgG」 “IgG”	指	免疫球蛋白G，血液循環中最常見的抗體類型，由血漿B細胞產生和釋放 Immunoglobulin G, the most common type of antibody found in blood circulation, created and released by plasma B cells
「IgG1」 “IgG1”	指	免疫球蛋白G1，人血清中最豐富的IgG亞類，對於介導針對病毒病原體的抗體反應至關重要 Immunoglobulin G1, the most abundant IgG subclass in human sera and is important for mediating antibody responses against viral pathogens

「IgG2」 “IgG2”	指	免疫球蛋白G2，主要負責針對細菌莢膜多糖的抗碳水化合物IgG反應 Immunoglobulin G2, predominantly responsible for anticarbohydrate IgG responses against bacterial capsular polysaccharides
「原位」 “ <i>in situ</i> ”	指	處於正常位置（原位）且沒有侵入鄰近組織或進入身體其他部位 in the normal location (site of origin) and has not invaded neighboring tissue or gone elsewhere in the body
「體外」 “ <i>in vitro</i> ”	指	利用微生物、細胞或生物分子在其正常生物環境外進行的一類研究條件 a category of study conditions which are performed with microorganisms, cells, or biological molecules outside their normal biological context
「體內」 “ <i>in vivo</i> ”	指	對整個活的生物體或細胞（通常是動物（包括人體）及植物）測試各種生物體的影響的一類研究條件，有別於對組織提取物或死去生物體進行的研究條件類別 a category of study conditions in which the effects of various biological entities are tested on whole, living organisms or cells, usually animals, including humans, and plants, as opposed to a tissue extract or dead organism
「IND」 “IND”	指	臨床研究用新藥或臨床研究用新藥申請，在中國亦稱為臨床試驗申請 investigational new drug or investigational new drug application, also known as clinical trial application in China
「獨立第三方」 “independent third party(ies)”	指	並非本公司關連人士（定義見香港上市規則）的任何實體或人士 any entity(ies) or person(s) who is not a connected person of our Company within the meaning of the Hong Kong Listing Rules
「關鍵意見領袖」 “KOL(s)”	指	關鍵意見領袖 Key Opinion Leader(s)
「最後可行日期」 “Latest Practicable Date”	指	2023年9月18日 September 18, 2023
「上市」 “Listing”	指	H股於香港聯交所主板上市 listing of the H Shares on the Main Board of the Hong Kong Stock Exchange
「上市日期」 “Listing Date”	指	H股於香港聯交所上市並獲准買賣的日期為2022年9月1日 September 1, 2022, being the date on which our H Shares are listed and from which dealings therein are permitted to take place on the Hong Kong Stock Exchange
「上市規則」或「香港上市規則」 “Listing Rules” or “Hong Kong Listing Rules”	指	香港聯交所證券上市規則，經不時修訂、補充或以其他方式修改 the Rules Governing the Listing of Securities on the Hong Kong Stock Exchange, as amended, supplemented or otherwise modified from time to time

釋義

Definition

「單抗」或「單克隆抗體」 “mAb” or “monoclonal antibody”	指	由均屬唯一母細胞克隆的相同免疫細胞產生的抗體 antibodies that are made by identical immune cells which are all clones belonging to a unique parent cell
「主板」 “Main Board”	指	香港聯交所運營的股票交易市場（不包括期權市場），其獨立於香港聯交所GEM市場並與其並行運作 the stock exchange (excluding the option market) operated by the Hong Kong Stock Exchange which is independent from and operated in parallel with GEM of the Hong Kong Stock Exchange
「標準守則」 “Model Code”	指	上市規則附錄10所載的上市發行人董事進行證券交易的標準守則 the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix 10 to the Listing Rules
「MRCT」 “MRCT(s)”	指	多區域臨床試驗 multi-regional clinical trial(s)
「mRNA-LNP」 “mRNA-LNP”	指	信使RNA (mRNA)封裝於脂質納米粒(LNP)，該技術用於開發mRNA疫苗 messenger RNA (mRNA) encapsulated in lipid nanoparticles (LNP), the technology is used in the development of mRNA vaccines
「NK」 “NK”	指	自然殺傷細胞，因具有迅速尋找及破壞異常細胞的天賦能力而成為人體第一道防線 natural killer cell, the human body's first line of defense due to their innate ability to rapidly seek and destroy abnormal cells
「國家藥監局」 “NMPA”	指	國家藥品監督管理局 National Medical Products Administration
「提名委員會」 “Nomination Committee”	指	董事會提名委員會 the nomination committee of the Board
「國家醫保藥品目錄」 “NRDL”	指	國家醫保藥品目錄 National Reimbursement Drug List
「NSCLC」 “NSCLC”	指	非小細胞肺癌 non-small-cell lung carcinoma
「超額配股權」 “Over-allotment Option”	指	本公司就全球發售授予國際包銷商的超額配股權 the over-allotment option granted by the Company to the international underwriters in connection with the Global Offering
「OX40」 “OX40”	指	在活化的T細胞上表達的受體，可提供共刺激信號促進T細胞分裂及存活 a receptor expressed on activated T cells which gives costimulatory signals to promote T cell division and survival

「PD-1」	指	程序性細胞死亡蛋白1或程序性死亡受體1，一種在T細胞、B細胞和巨噬細胞上表達的免疫檢查點受體。PD-1的正常功能是關閉T細胞介導的免疫應答，阻止健康免疫系統攻擊體內其他病原細胞。當T細胞表面的PD-1與正常細胞或癌細胞表面的某些蛋白質結合時，T細胞就會關閉其殺死細胞的能力
“PD-1”		programmed cell death protein 1 or programmed death receptor 1, an immune checkpoint receptor expressed on T cells, B cells and macrophages. The normal function of PD-1 is to turn off the T cell mediated immune response as part of the process that stops a healthy immune system from attacking other pathogenic cells in the body. When PD-1 on the surface of a T cell attaches to certain proteins on the surface of a normal cell or a cancer cell, the T cell turns off its ability to kill the cell
「PD-L1」	指	PD-1配體1，一種位於正常細胞或癌細胞表面的蛋白，與T細胞表面的PD-1結合會致使T細胞關閉其殺死癌細胞的能力
“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
「I期臨床試驗」	指	研究人員首次在一小群人中測試一種實驗性藥物或療法的研究。研究人員評估治療的安全性，確定安全劑量範圍，並確定副作用
“Phase I clinical trial”		a study in which the researchers test an experimental drug or treatment in a small group of people for the first time. The researchers evaluate the treatment’s safety, determine a safe dosage range, and identify side effects
「II期臨床試驗」	指	針對更多人測試實驗性藥物或療法以了解其是否有效並進一步評估其安全性的研究
“Phase II clinical trial”		a study in which the experimental drug or treatment is given to a larger group of people to see if it is effective and to further evaluate its safety
「主要研究者」	指	主要研究者
“PIs”		principal investigators
「千鼠萬抗」	指	千鼠萬抗於2020年3月啟動，為大規模體內抗體發現計劃
“Project Integrum”		Project Integrum (千鼠萬抗) launched in March 2020, a large-scale <i>in vivo</i> antibody discovery program
「招股章程」	指	本公司就全球發售於2022年8月19日刊發的招股章程
“Prospectus”		the prospectus published by the Company on August 19, 2022 in relation to the Global Offering
「RC118」	指	YH005 ADC
“RC118”		YH005 ADC
「研發」	指	研究與開發
“R&D”		research and development

釋義

Definition

「榮昌生物」	指	榮昌生物製藥(煙台)股份有限公司，一家於聯交所(股份代號：9995)及上海證券交易所(股份代號：688331)上市的公司，是一家已經進入商業化階段的生物製藥公司，致力於發現、開發和商業化創新的、有特色的生物藥，用於治療中國乃至全球多種醫療需求未被滿足的自身免疫、腫瘤科和眼科疾病
“RemeGen”		RemeGen Co., Ltd. (榮昌生物製藥(煙台)股份有限公司), a listed company in the Stock Exchange (stock code: 9995) and the Shanghai Stock Exchange (stock code: 688331), a commercial-stage biopharmaceutical company committed to the discovery, development and commercialization of innovative and differentiated biologics for the treatment of autoimmune, oncology and ophthalmic diseases with unmet medical needs in China and globally
「薪酬與考核委員會」	指	董事會薪酬與考核委員會
“Remuneration and Evaluation Committee”		the remuneration and evaluation committee of the Board
「RenLite」	指	本公司的平台，使用RenLite小鼠生成多種親和力高的雙特异性抗體及雙特异性ADC
“RenLite”		a platform of the Company, using RenLite mice to produce diverse bi-specific antibodies with high affinity and to generate bi-specific ADCs
「RenMab」	指	本公司的平台，使用具有全人源可變區的轉基因RenMab小鼠，允許在體內自然配對人類重鏈及輕鏈，以開發具有高親和力、低免疫原性及良好成藥性的全人源抗體
“RenMab”		a platform of the Company, using transgenic RenMab mice with full human variable region, which allows for the natural in vivo pairing of human heavy and light chains for the development of fully human antibodies with high affinity, low immunogenicity, and favorable
「RenNano」	指	使用RenNano小鼠以RenMab小鼠為基礎生產重鏈抗體的平台，對抗體重鏈恆定區域作進一步修改
“RenNano”		a platform uses RenNano mice to produce heavy chain antibodies on the basis of RenMab mice with further modification on antibody heavy chain constant region
「報告期間」	指	2023年1月1日至2023年6月30日止六個月期間
“Reporting Period”		the six-months period from January 1, 2023 to June 30, 2023
「返還股份」	指	根據該計劃的條款不予歸屬及／或被沒收的獎勵股份或相關收入，或根據該計劃及信託契據的條款被視為返還股份的股份
“Returned Shares”		such Awarded Shares or related income which are not vested and/or forfeited in accordance with the terms of the Scheme, or such Shares being deemed to be Returned Shares in accordance with the terms of the Scheme and the Trust Deed

「人民幣」 “RMB” or “Renminbi”	指	中國的法定貨幣人民幣 Renminbi Yuan, the lawful currency of China
「RP2D」 “RP2D”	指	II期推薦劑量 recommended Phase II dose
「計劃」或「股份獎勵計劃(H股)」 “Scheme” or “Share Award Scheme (H Shares)”	指	計劃規則規定的本公司「僱員股份獎勵計劃」 the “Employees’ Share Award Scheme” of the Company constituted by the Scheme Rules
「計劃規則」 “Scheme Rules”	指	董事會於採納日期以目前的形式批准及採納或根據本報告規定不時修訂的計劃相 關規則 the rules relating to the Scheme, as approved and adopted by the Board on the Adoption Date in its present form or as amended from time to time in accordance with the provisions hereof
「國投」 “SDIC”	指	國家開發投資集團有限公司 State Development & Investment Group Co., Ltd.
「國投寧波」 “SDIC Ningbo”	指	國投(寧波)科技成果轉化創業投資基金合夥企業(有限合夥) State Development & Investment Corporation (SDIC) VC Fund (Ningbo) of Technology Transfer and Commercialization (Limited Partnership)
「國投上海」 “SDIC Shanghai”	指	國投(上海)科技成果轉化創業投資基金企業(有限合夥) State Development & Investment Corporation (SDIC) VC Fund (Shanghai) of Technology Transfer and Commercialization (Limited Partnership)
「國投深圳」 “SDIC Shenzhen”	指	國投高新(深圳)創業投資基金(有限合夥) State Development & Investment Corporation (SDIC) Gaoxin (Shenzhen) VC Fund (Limited Partnership)
「入選僱員」 “Selected Employee(s)”	指	董事會全權酌情不時挑選參與計劃的任何僱員 Employee(s) selected by the Board pursuant to the Board’s absolute discretion to, from time to time, select any Employee for participation in the Scheme
「證券及期貨條例」 “SFO”	指	香港法例第571章證券及期貨條例，經不時修訂 Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended from time to time
「股份」 “Share(s)”	指	本公司股本中每股面值人民幣1.0元的普通股，包括非上市股份及H股 ordinary share(s) in the capital of our Company with a nominal value of RMB1.0 each, comprising our Unlisted Shares and H Shares

釋義

Definition

「股東」 "Shareholder(s)"	指	股份持有人 holder(s) of the Share(s)
「聯交所」或「香港聯交所」 "Stock Exchange" or "Hong Kong Stock Exchange"	指	香港聯合交易所有限公司 The Stock Exchange of Hong Kong Limited
「戰略發展委員會」 "Strategy Development Committee"	指	董事會戰略發展委員會 the strategy development committee of the Board
「SUPCE」 "SUPCE"	指	不限大小精準染色體工程系統，一種基因操縱技術 Size-unlimited and Precise Chromosome Engineering System, a genetic manipulation technique
「監事」 "Supervisor(s)"	指	本公司監事會成員 member(s) of the supervisory committee of the Company
「T細胞」 "T-cell" or "T cell"	指	一種淋巴細胞，由胸腺產生或加工並且積極參與免疫反應，在細胞介導免疫中起著核心作用。細胞可以通過細胞表面存在的T細胞受體與其他淋巴細胞（如B細胞和NK細胞）區分開來 a lymphocyte of a type produced or processed by the thymus gland and actively participating in the immune response, which plays a central role in cell-mediated immunity. T-cells can be distinguished from other lymphocytes, such as B cells and NK cells, by the presence of a T-cell receptor on the cell surface
「TCR」 "TCR"	指	T細胞受體，位於T細胞表面的一種蛋白質複合物，負責識別與主要組織相容性複合體分子結合的抗原肽片段 T-cell receptor, a protein complex found on the surface of T cells that is responsible for recognizing fragments of antigen as peptides bound to major histocompatibility complex molecules
「TGA」 "TGA"	指	澳大利亞藥物管理局，澳大利亞政府的藥物及治療管理機構 The Therapeutic Goods Administration, the medicine and therapeutic regulatory agency of the Australian Government
「信託」 "Trust"	指	信託契據所構成之信託 the trust constituted by the Trust Deed
「信託契據」 "Trust Deed"	指	本公司與受託人就委任受託人管理該計劃而訂立的信託契據（經不時重述、補充及修訂） a trust deed to be entered into between the Company and the Trustee (as restated, supplemented and amended from time to time) in respect of the appointment of the Trustee for the administration of the Scheme

「信託股份」 “Trust Share(s)”	指	為結算獎勵股份，受託人利用本公司自其資金撥付予受託人的現金從市場上購入的任何H股以及與該等H股相關的權利股份或紅股 any H Share purchased by the Trustee on the market out of cash arranged to be paid by the Company out of the Company’s funds to the Trustee, together with in each case any scrip Shares or bonus Shares referable to those H Shares, for the purposes of settlement of the Awarded Shares
「受託人」 “Trustee”	指	招商永隆信託有限公司，或由本公司不時委任以管理該計劃的其他信託公司 CMB Wing Lung (Trustee) Limited, or other trustee corporations to be appointed by the Company for the administration of the Scheme from time to time
「非上市股份」 “Unlisted Share(s)”	指	本公司發行的每股面值人民幣1.0元的普通股（外國投資者持有以人民幣以外貨幣認購或列為繳足且並無於任何證券交易所上市）及內資股 ordinary share(s) issued by our Company, with a nominal value of RMB1.0 each, which is/are subscribed for or credited as paid in a currency other than Renminbi, held by foreign investors and not listed on any stock exchange, and Domestic Shares
「美元」 “USD”	指	美國的法定貨幣美元 United States dollars, the lawful currency of the United States of America
「YH001」 “YH001”	指	YH001為重組人源化抗CTLA-4 IgG1單克隆抗體 YH001 is a recombinant humanized anti-CTLA-4 IgG1 monoclonal antibody
「YH002」 “YH002”	指	YH002是一種以人類OX40受體為靶點的重組人源化IgG1抗體 YH002 is a recombinant humanized IgG1 antibody that targets the human OX40 receptor
「YH003」 “YH003”	指	YH003是一種重組人源化激動性抗細胞分化簇40IgG2單克隆抗體 YH003 is a recombinant, humanized agonistic anti-Cluster of Differentiation 40 IgG2 monoclonal antibody
「YH004」 “YH004”	指	YH004是一種人源化IgG1抗4-1BB激動劑 YH004 is a humanized IgG1 anti-4-1BB Agonists
「YH008」 “YH008”	指	YH008是治療實體瘤的抗PD-1/CD 40雙特异性抗體 YH008 is an anti-PD-1/CD 40 bi-specific antibody for the treatment of solid tumors

釋義

Definition

「YH012」及「YH013」 “YH012” and “YH013”	指	YH012及YH013是我們的RenLite平台開發的兩種雙特異性ADC，計劃用於治療實體瘤 YH012 and YH013 are two bi-specific ADCs developed using our RenLite platform, which are intended for the treatment of solid tumor
「YH015」及「YH016」 “YH015” and “YH016”	指	YH015及YH016是我們的RenLite平台開發的兩種抗體分子，計劃用於治療實體瘤及免疫性疾病 YH015 and YH016 are two antibody molecules developed using our RenMice platform, which are intended for the treatment of solid tumor and immune diseases
「招銀成長柒號」 “Zhaoyin Chengzhang Qihao”	指	招銀成長柒號投資（深圳）合夥企業（有限合夥） Zhaoyin Chengzhang Qihao Investment (Shenzhen) Partnership (Limited Partnership)
「招銀成長拾玖號」 “Zhaoyin Chengzhang Shijiu hao”	指	深圳市招銀成長拾玖號股權投資基金合夥企業（有限合夥） Shenzhen Zhaoyin Chengzhang Shijiu hao Equity Investment Fund Partnership (Limited Partnership)
「招銀朗曜」 “Zhaoyin Langyao”	指	深圳市招銀朗曜成長股權投資基金合夥企業（有限合夥） Shenzhen Zhaoyin Langyao Growth Equity Investment Fund Partnership (L.P.)
「4-1BB」 “4-1BB”	指	在活化T細胞及NK細胞表達的受體，可發出共刺激信號促進T細胞分裂及存活、激活細胞毒性效應並幫助形成記憶T細胞 a receptor expressed on activated T cells and NK cells which gives costimulatory signals to promote T cell division and survival, activate cytotoxic effects and help form memory T cells

* 僅供識別

* For identification purpose only



百奥赛图
BIOCYTOGEN