

XtalPi

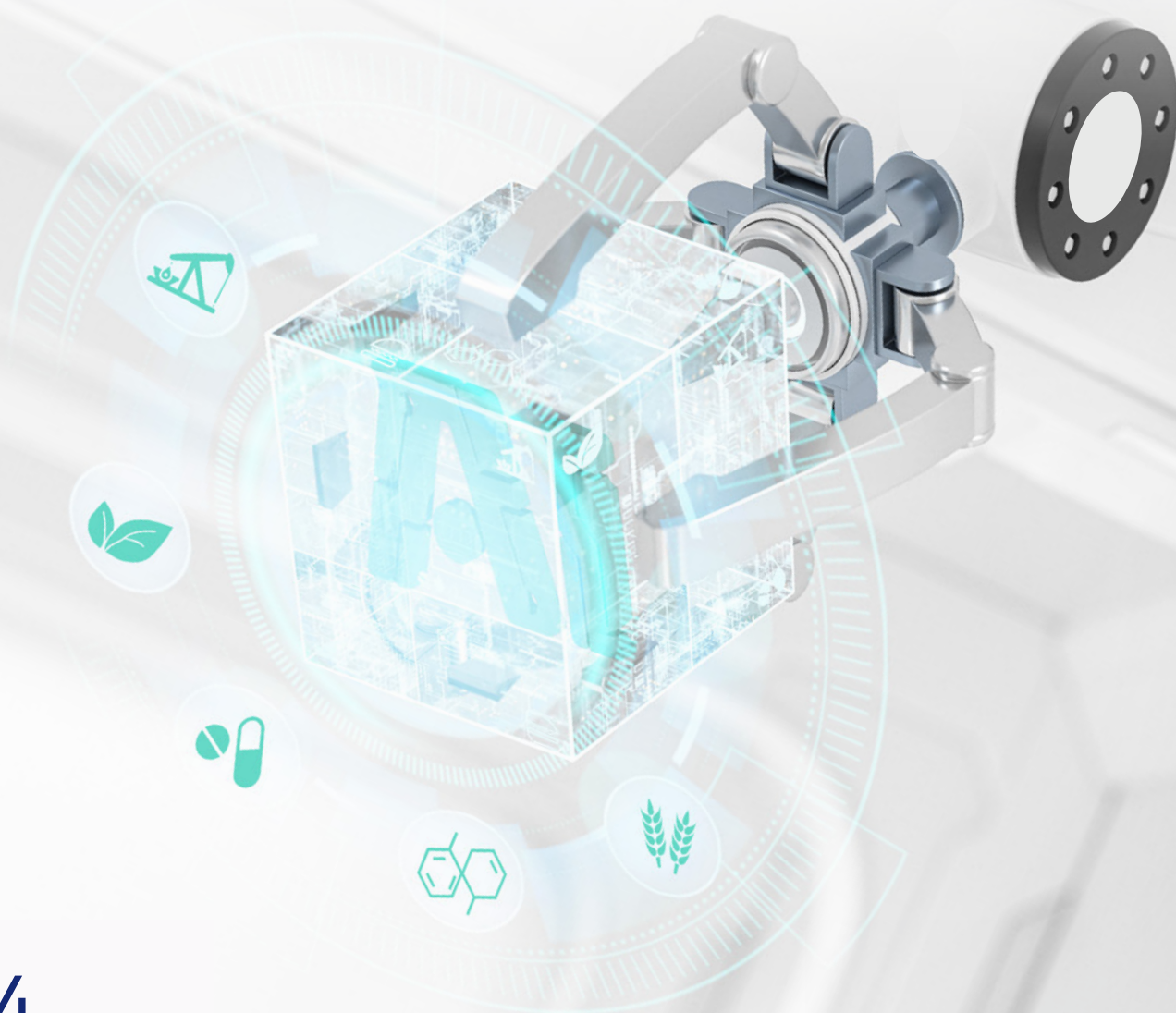
晶泰科技

XtalPi Holdings Limited

晶泰控股有限公司

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 2228



2024
ANNUAL REPORT

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Corporate Information

BOARD OF DIRECTORS

Executive Directors

Dr. Wen Shuhao (*Chairman*)
Dr. Ma Jian (*Chief Executive Officer*)
Dr. Lai Lipeng
Dr. Jiang Yide Alan

Non-executive Director

Dr. Gu Cuiping (*resigned with effect from 30 October 2024*)

Independent Non-executive Directors

Mr. Law Cheuk Kin Stephen
Ms. Chan Wing Ki
Mr. Chow Ming Sang

AUTHORISED REPRESENTATIVES

Dr. Wen Shuhao
Ms. Liu Shimei (*appointed with effect from 20 December 2024*)
Mr. Tam Man Hong (*resigned with effect from 20 December 2024*)

AUDIT COMMITTEE

Mr. Law Cheuk Kin Stephen (*Chairman*)
Ms. Chan Wing Ki
Mr. Chow Ming Sang

REMUNERATION COMMITTEE

Mr. Law Cheuk Kin Stephen (*Chairman*)
Dr. Ma Jian
Mr. Chow Ming Sang

NOMINATION COMMITTEE

Dr. Wen Shuhao (*Chairman*)
Mr. Law Cheuk Kin Stephen
Ms. Chan Wing Ki

JOINT COMPANY SECRETARIES

Ms. Liu Shimei (*appointed with effect from 20 December 2024*)
Ms. Chan Sau Ling
Mr. Tam Man Hong (*resigned with effect from 20 December 2024*)

LEGAL ADVISORS

As to Hong Kong laws

Sidley Austin

39/F, Two International Finance Centre
8 Finance Street
Central
Hong Kong

AUDITOR

PricewaterhouseCoopers

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

COMPLIANCE ADVISOR

UOB Kay Hian (Hong Kong) Limited

6/F, Harcourt House
39 Gloucester Road
Hong Kong

REGISTERED OFFICE

PO Box 309
Ugland House
Grand Cayman
KY1-1104
Cayman Islands

HEADQUARTERS AND PRINCIPAL PLACE OF BUSINESS IN THE PRC

3/F, Second Phase of the International
Biomedical Industrial Park
No. 2 Hongliu Road
Futian District
Shenzhen
PRC

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Room 1917, 19/F, Lee Garden One
33 Hysan Avenue
Causeway Bay
Hong Kong

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Maples Fund Services (Cayman) Limited

PO Box 1093
Boundary Hall
Cricket Square
Grand Cayman KY1-1102
Cayman Islands

HONG KONG SHARE REGISTRAR

Tricor Investor Services Limited

17/F, Far East Finance Centre
16 Harcourt Road
Hong Kong

STOCK CODE

The Company's shares are listed on the Main Board of
The Stock Exchange of Hong Kong Limited
Stock code: 2228

COMPANY WEBSITE

www.xtalpi.com

Financial Summary

A summary of the published results and of the assets and liabilities of the Group for the last four financial years¹ is set out below:

	Year ended 31 December			
	2024 RMB'000	2023 RMB'000	2022 RMB'000	2021 RMB'000
Revenue	266,433	174,420	133,353	62,799
Research and development expenses	(418,238)	(480,664)	(358,952)	(212,603)
Loss for the year	(1,514,869)	(1,906,323)	(1,438,617)	(2,137,332)
Adjusted net loss (non-IFRS measure) ²	(456,799)	(522,157)	(437,434)	(270,967)

	As at 31 December			
	2024 RMB'000	2023 RMB'000	2022 RMB'000	2021 RMB'000
Assets				
Non-current assets	1,039,473	1,060,338	719,441	462,207
Current assets	3,315,267	2,945,363	3,596,665	3,919,564
Total assets	4,354,740	4,005,701	4,316,106	4,381,771
Liabilities				
Non-current liabilities	82,709	10,949,567	9,428,254	7,824,871
Current liabilities	279,724	297,376	197,645	160,868
Total liabilities	362,433	11,246,943	9,625,899	7,985,739

¹ The Shares were listed on the Stock Exchange under Chapter 18C of the Listing Rules on 13 June 2024.

² Adjusted net loss is not defined under the IFRS. It represents the net loss for the year adjusted by adding back (i) changes in fair value of CRPS, (ii) share-based compensation expenses, and (iii) listing expenses.

We are a quantum physics-based, AI-powered, and robotics-driven, innovative R&D platform. We adopt a combination of quantum physics-based first-principles calculation³, AI, high performance cloud computing, and scalable and standardized robotic automation to provide drug and material science R&D solutions and services to global and domestic companies in the pharmaceutical and material science (including agritech, energy and new chemicals, and cosmetics) industries and beyond.

We have a diverse customer base, ranging from start-ups to global biotechnology and pharmaceutical companies, as well as unicorns and leading companies in the field of new materials. Our customer base includes 16 of the top 20 global biotechnology and pharmaceutical companies, which we believe is an indicator of the caliber of our solutions and services. With operations in both China and the U.S., we strive to take advantage of the best capabilities and resources available to us in each region to meet the evolving needs of our customers and collaborators and academic partners. We have well-established and longstanding relationship with many of the world's leading biotechnology and pharmaceutical conglomerates and leading companies in the field of new materials, such as Pfizer Inc., Johnson & Johnson, Merck KGaA, Darmstadt, Germany, and Sinopec Shanghai Research Institute many of which are our repeat customers.

VISION

Our vision is becoming the global leader in quantum physics-based, AI-powered drug and material science R&D.

MISSION

Our mission is a world of smarter science, better lives. We aim to accelerate the design and discovery of novel drugs and materials leveraging quantum physics⁴, AI and robotic automation.

CORPORATE AND CAPITAL MARKET MILESTONES

The ordinary shares of our Company have been listed on the Stock Exchange since 13 June 2024. We are the first Specialist Technology Company listed under Chapter 18C of the Listing Rules.

Effective from 9 September 2024, our Company has been included as a constituent stock of the Hang Seng Composite Index, one of the benchmark indexes of the Stock Exchange.

Effective from 10 September 2024, our Company's shares have been included in the Shanghai-Hong Kong Stock Connect and the Shenzhen-Hong Kong Stock Connect programs. Following its inclusion, eligible investors in mainland China will have direct access to the trading of the Company's shares.

Effective from 22 November 2024, our Company has been included as a constituent stock of the Hang Seng Biotech Index which reflects the overall performance of the 50 largest biotech companies that are listed in Hong Kong.

Effective from 8 November 2024, the English name of our Company has been changed from "QuantumPharm Inc." to "XtalPi Holdings Limited" and the Chinese name "晶泰控股有限公司" has been adopted as the dual foreign name.

³ Quantum physics is the study of matter and energy at the most fundamental level, aiming to uncover the properties and behaviors of the very building blocks of nature. First-principles calculation is a method to calculate physical properties directly from basic physical quantities, such as the mass and charge, and the electrostatic force of an electron, based on the principle of quantum mechanics.

⁴ Our business does not involve quantum computing or the use of quantum computers, nor is quantum computing or the use of quantum computers a primary mode of our operations.

Corporate Profile

On 24 January 2025, we successfully completed a placing of 264,000,000 new Shares at the price of HK\$4.28 per Share. The total gross proceeds from the placing were approximately HK\$1,130 million, and the net proceeds (after deducting all applicable costs and expenses, including commission and levies) arising from the placing amounted to approximately HK\$1,125 million.

On 19 February 2025, we successfully completed a further placing of 342,288,000 new Shares at the price of HK\$6.10 per Share. The total gross proceeds from the placing were approximately HK\$2,088 million, and the net proceeds (after deducting all applicable costs and expenses, including commission and levies) arising from the placing amounted to approximately HK\$2,080 million.

BUSINESS OVERVIEW AND PROSPECTS

1. OVERALL PERFORMANCE

As the first Specialist Technology Company listed under Chapter 18C of the Listing Rules on the Stock Exchange, we are honored to publish our first annual results since our listing. In 2024, the Group achieved operating revenue of RMB266.4 million, a year-on-year increase of 52.8%; the adjusted net loss narrowed by 12.5% to RMB456.8 million. In addition, we are delighted to see that we have reached the Commercial Company revenue threshold (HK\$250 million) under Chapter 18C of the Listing Rules ahead of schedule. This shows that, with the joint efforts of all the employees and partners of the company, the company is moving towards a new stage of large-scale development at a more steady pace.

In terms of operational efficiency, we have achieved remarkable results by implementing our AI tools and high-efficiency operation strategy: the monthly average cash burn in 2024 decreased by 22.6% year-on-year to RMB48.1 million.

2. BUSINESS DEVELOPMENT PROGRESS

(1) “AI + Robotics” reshapes the R&D paradigms and ushers in the era of intelligent drug and materials development

We employ an **AI + robotics framework** to create a self-reinforcing flywheel, powered by high-throughput experimentation, high-quality data, and advanced AI models. Our robotic laboratory platform operates 24/7, rapidly accumulating high-quality data, which is being utilized to train different types of AI models. These models are applicable across various stages, including target identification and validation, virtual screening, recommending synthesis strategy, synthesis reaction prediction, patent analysis, and unstructured data transformation. **We are transforming traditional R&D methodologies, driving a paradigm shift in developing new therapeutics and materials.** Currently, our models are empowering researchers in their daily operations, accelerating project delivery timelines, breaking through bottlenecks in drug discovery and new material molecule development, and significantly expanding the explorable chemical space. We believe that the adoption of **vertical AI for Science (AI4S) models**, driven by high-quality data, will become a disruptive force for various industries.

In addition to the over 200 AI models trained and developed by the company in the past, including the molecular generation model Xreactor, the free energy perturbation algorithm XFEP, and the crystal structure prediction model CSP, we achieved several significant technological breakthroughs in 2024, including:

- **Data Moat Construction:** Our automated robotic laboratory can cover over 80% of common medicinal chemistry reaction types, accumulating 200,000+ reaction process data points monthly. The experimental results and data generated by these automated robotic workstations exhibit high consistency, and the data quality far surpasses that of open-source datasets. AI models trained on this dataset achieve higher accuracy and confidence levels.
- **AI Models Outperform Human Experts:** In 2024, we developed 20+ new AI models for reactivity and experimental condition prediction, all with accuracy rates exceeding 80%. These models significantly outperform chemists, especially in identifying and predicting failed reactions. Leveraging first-principles based quantum physics and datasets generated in our robotic laboratories, we independently developed a UV spectrum prediction model and an LCMS spectrum-based yield prediction model. These models can predict experimental yields without the need for product separation and purification, achieving accuracy rates of over 90%, and greatly enhancing data annotation efficiency.

Chairman's Statement

- **Deep Integration of Vertical AI and LLMs:** In collaboration with the IDEA (International Digital Economy Academy), we developed the PatSight data mining platform based on large language models (LLMs) and deep neural networks. This platform enables rapid and precise extraction of structural, activity, efficacy, and reaction data from literature and patents. Tasks that traditionally took 2–3 days can now be completed within one hour, with accuracy rates exceeding 95%. The platform eliminates the inefficiencies of manual data acquisition, improves the efficiency of small-molecule compound structure analysis, and provides a robust source of publicly available big data for building vertical AI4S models.
- **End-to-End AI Multi-Agent System:** Through our independently developed Multi-Agent system, we are progressively building an intelligent and automated workflow encompassing reaction design, synthesis, post-processing, and data analysis. This enhances experimental efficiency, lowers the barrier to experimentation, and achieves full-scenario coverage of software and hardware. In the design phase, our AI agents assist in synthesizability assessment and raw material selection for the planned experiments. During synthesis, AI agents perform spectrum analysis, results determination, separation method recommendation, and quality control results analysis to drive the reaction process. In the management phase, AI agents ensure the accuracy of data across all processes, compiling project reports, and facilitating final molecule delivery. Leveraging these capabilities, we can efficiently conduct chemical experiments and accumulate large-scale, high-quality experimental data.

(2) **AI-Driven Bioplatform XtalFold™ Receives Global Recognition from Leading Pharmaceutical Companies, Pioneering a Transformative Era in Antibody Drug Innovation**

We have developed the XtalFold™ structural modeling platform, the XenProT™ generative AI platform, and the Xentient™ Predictive AI platform, continuously advancing antibody R&D technologies such as deep humanization, high-throughput antibody humanization, and pH-dependent engineering. In 2024, leveraging our globally leading protein interaction prediction algorithm, XtalFold™, we secured collaborations with multinational pharmaceutical companies and leading biotech companies such as Johnson&Johnson and UCB, earning endorsements from top-tier pharmaceutical firms. Notably, the high-quality data assets generated by XtalFold™ are continuously feeding back into our multimodal AI platform, enabling us to establish significant competitive advantages in therapeutic antibody humanization and affinity optimization.

Our antibody platform has achieved the following three major breakthroughs:

- **3D Structure Resolution:** With only amino acid sequence information as the input, we can accurately predict the spatial structure of antigen-antibody complexes within one day.
- **Modeling Breakthroughs:** In rigorous benchmark tests, our platform leads the industry in success rates and the ability to model challenging regions.
- **Scenario Validation:** The platform has been thoroughly validated in 30+ internal and external projects, delivering outstanding results across various application scenarios, including antigen design, epitope identification, affinity maturation, pH-sensitive engineering, and bispecific antibody design.

(3) We Continue to Drive the Application of AI + Robotics in Life Sciences, Achieving Milestone Breakthroughs in Our Clients' Pipeline Projects

Building on the successful progression of an innovative drug development initiative with a leading biopharmaceutical company, we have secured a few AI drug discovery collaborations with the same partner in 2024. Our integrated computational and experimental platform has demonstrated transformative potential in accelerating early-stage therapeutic breakthroughs for complex chronic diseases. Leveraging the momentum from these advancements, we are positioned to further broaden the scale and scope of our partnerships in 2025, targeting a wider range of therapeutic indications and disease targets to address unmet medical needs.

In 2024, we successfully collaborated with number of leading biotech companies in East Asia to efficiently discover and design lead compounds for number of highly challenging targets. Leveraging our innovative active learning-driven XFEP accelerated computing technology, we used our algorithm to screen through a trillion-scale virtual compound library. Supported by our high-efficiency, high-quality automated synthesis platform, we successfully identified lead compounds for two difficult targets in the fields of synthetic lethality and CNS, earning high praise from our partners' technical committees.

Our collaboration with Signet Therapeutics (Shenzhen) Co., Ltd. (希格生科(深圳)有限公司) ("**Signet**") led to the development of the world's first targeted candidate drug for treating diffuse gastric cancer. After receiving Investigational New Drug (IND) approval from the FDA (U.S. Food and Drug Administration) in June, the drug also secured IND approval from the NMPA (National Medical Products Administration) in September. The first solid tumor patient was successfully dosed at Peking University Cancer Hospital (First Patient In, FPI). This pipeline project has also been granted the Orphan Drug Designation (ODD) by the FDA for gastric cancer and received the Fast Track Designation in February 2025, which is expected to significantly shorten the approval timeline and accelerate its market launch. This marks the world's first innovative drug candidate discovered with organoid + AI.

Our collaboration with META Biotechnology Co., Ltd. (北京默達生物科技有限公司) ("**META**") resulted in the development of a preclinical candidate drug for treating Primary Hyperoxaluria (PH), which has received Orphan Drug Designation (ODD) and Rare Pediatric Disease Designation (RPDD) from the FDA. Currently, in the IND-enabling stage, this project has the potential to address the unmet medical needs of patients with Type 2 and Type 3 PH, as well as provide a more patient-friendly oral treatment option for Type 1 PH patients.

Earlier, we entered into a \$250 million collaboration with a globally leading pharmaceutical company headquartered in Indianapolis for AI-enabled small-molecule drug discovery. The collaboration is progressing smoothly, and in 2024, we expanded our partnership into new areas such as solid-state research.

In 2024, Leman Biotech Co., Ltd (深圳萊芒生物科技有限公司) ("**Leman**"), a biotech company we empowered, achieved groundbreaking progress. Its metabolism-enhanced CD19 CAR-T therapy completed the first dosing in a systemic lupus erythematosus (SLE) patient, marking its first foray into autoimmune disease treatment. Leveraging XtalPi's AI algorithms combined with high-throughput experimentation, Leman optimized the core metabolic-enhancing factors in its CAR-T design. This significantly improved receptor-binding affinity and immunological activity. This optimized design has been implemented in preclinical studies targeting solid tumors, enabling metabolism-enhanced CAR-T therapies to better overcome the immunosuppressive tumor microenvironment.

Chairman's Statement

In 2024, our strategic collaboration with a biotechnology industry partner in oncology vaccine development was highlighted through a peer-reviewed poster presentation at the American Association for Cancer Research (AACR) Annual Meeting. Building on this foundation, subsequent advancements generated further experimental evidence, including successful *in vivo* validation outcomes. Our AI-driven platform has demonstrated considerable potential in accelerating the development of off-the-shelf cancer vaccines, with encouraging implications for enhancing clinical outcomes in patient care.

We independently developed an mRNA sequence pre-training model and mRNA property prediction platform, achieving state-of-the-art (SOTA) performance across multiple benchmarks including protein expression levels and stability optimization. These advancements were documented in a peer-reviewed paper accepted by the 2025 AAAI Conference on Artificial Intelligence.

Our collaboration with Pfizer on the development of the XtalPi Force Field (XFF) Model has been published in a leading scientific journal. This computational framework demonstrates exceptional performance in quantum mechanical (QM) energy prediction, small molecule conformational analysis, and binding affinity prediction through free energy perturbation (FEP) calculations. The partnership is to be renewed in 2025, focusing on developing enhanced predictive models tailored to Pfizer's proprietary chemical space and expanding applications in small-molecule drug discovery.

Through our strategic alliance with N1 Life, we are co-developing a non-invasive ocular delivery platform for nucleic acids and macromolecular therapeutics. Leveraging N1 Life's peptide carrier library (partially developed through Stanford University research initiatives) and our proprietary AI-driven peptide design platform, this collaboration aims to enhance the drugability of macromolecular drugs, such as mRNA therapeutic and accelerate novel ophthalmic drug development.

Our AI peptide discovery platform has established new drug development partnership with multiple top-tier Singaporean research institutions. Utilizing our integrated AI and robotics-driven platform, we will pursue pre-clinical drug candidates against a novel ccRCC (Clear Cell Renal Cell Carcinoma) target identified by our collaborators, with plans for co-commercialization in the future.

In 2024, we secured the bid for Guangdong Provincial Laboratory's Intelligent Automation Integration Platform for Traditional Chinese Medicine (TCM) Development project and delivered project milestones by the year-end. As of the end of 2024, the project had achieved phased delivery. As China's first fully automated system for bioactive component isolation and analysis in herbal medicine, this platform achieves complete automation of extraction, separation, purification, characterization, and bioactivity assessment processes. The system enables intelligent structural analysis and activity profiling of TCM compounds and formulations.

In 2025, we executed a commercial agreement with the Sheikh Hamad Rakadh Salem Rakadh Office of the UAE to establish the Middle East's first automated modernization platform for regional traditional medicines. This groundbreaking initiative, supported by an initial \$30 million contract, represents a significant paradigm shift in the development of regional traditional medicines.

(4) AI + Robotics Empowering Future Molecular

According to the latest analysis by industry research leaders, the total global new materials market size is expected to reach ten trillion US dollars. Capitalizing on strategic opportunities in material science innovation, we continue to deepen the integration of AI and robotics within different industry verticals to empower the overall sectors. Leveraging our high-precision AI and ultra-flexible robotic technologies, we have successfully implemented collaborations across materials science, agriculture, and consumer industries:

Future Materials

- **Global Leadership in Material Structure Prediction:** We ranked as a top performer at the 7th global CSP Blind Test organized by the Cambridge Crystallographic Data Centre (CCDC), excelling across diverse materials systems such as optoelectronic molecules, biomedical compounds, and agrochemicals, solidifying our global leadership in solid state research.
- **Expanding the Application of Solid-State Research:** Our expertise in solid-state R&D technologies has extended into collaborations on electrochemical materials, polymer composites, and ceramic oxides, with multiple projects delivered and revenue realized.
- **New Energy Materials:** In 2024, we signed a 5-year strategic agreement with GCL Group Limited (“**GCL**”) to co-develop AI models for next-gen materials such as perovskite. Additionally, we delivered an intelligent robotic R&D platform for EV battery electrolytes to Peking University, enabling large-scale formulation testing and data generation for algorithm optimization.
- **Chemical Catalysts:** We deployed a high-throughput synthesis and catalyst pre-treatment solution for Sinopec’s Research Institute, enhancing production efficiency, speed of analysis, and operational safety while minimizing human error.
- **Material Micro-Mechanisms:** We incubated Deep Principle (深度原理), a team from MIT. Through synergizing generative AI and quantum chemistry, that company is decoding material behaviors at the atomic level. Through the partnership between XtalPi and Deep Principle, we are working together to accelerate the discovery of novel chemical reactions and materials.
- **Carbon-Based Materials:** In 2025, we signed a partnership agreement with Fangda Carbon New Material Co., Ltd. (“**Fangda Carbon**”), centered on AI as the core driver to advance intelligent R&D as well as production capabilities of high-end carbon-based materials. This collaboration aligns with China’s strategy to “empower industries through the AI+ application” and its industrial modernization goals.
- **Super Plastic:** Our investment in and collaboration with Future Bio, whose founding team from the University of California, Berkeley focuses on producing easily recyclable or biodegradable products, such as bioplastics, from renewable biomass or waste feedstock, advancing sustainable material science, and driving the industry transition to a low-carbon and circular economy.
- **Southeast Asia AI Collaboration:** A strategic cooperation with Indonesia’s Sinar Mas Group positions us to jointly advance AI-driven solutions for different industries across the Asia-Pacific region.

Chairman's Statement

Future Agriculture

- **Desert Remediation:** Through our incubation of Green Technology (Shanghai) Agricultural Technology Co., Ltd. (“綠技行”), we have successfully developed advanced new materials that remediate desert soils into arable lands in China and the Middle East.
- **AI-Driven Seed Improvement:** In 2025, we partnered with Guangdong Hengjian Investment Holding Co., Ltd. (“Guangdong Hengjian Holding”) and Shandong Shouguang Vegetable Industry Group Co., Ltd. (“Shouguang Vegetable”) to establish an intelligent plant breeding platform. By integrating quantum physics and AI algorithms to optimize genomic selection, we aim to develop high-value seed products and catalyze agricultural modernization.
- **Biofertilizers:** Our multi-million USD collaboration with Kula Bio (U.S.) combines our AI and Robotic expertise with Kula’s microbial innovation to co-develop next-generation biofertilizers, accelerating the transition to sustainable and efficient agricultural practices.

Future Consumer Goods

- In 2025, we entered a strategic partnership with the Ministry of Industry and Information Technology’s Center for SME Development to launch the “AI+ Initiative”, empowering industries ranging from cosmetics and biopharma to advanced materials and agritech, thereby driving AI adoption across broader industrial ecosystems.

2025 is poised to be a pivotal year when AI4S begins to realize industrial applications. Guided by our mission to build future scientific infrastructure, we are upgrading our team to better meet the evolving market needs.

By integrating our compounding big data in vertical sectors, industry-leading AI modeling expertise, and proprietary intelligent robotic systems, we are redefining traditional industry paradigms through a unified framework of intelligence. We are committed to collaborating with global industry leaders to accelerate the transformation of pioneering AI innovations into scalable, market-ready products and solutions that drive operational excellence and commercial value.

3. OUTLOOK AND PROSPECTS

Recent advancements in general-purpose big models and AI Agent, alongside the commercialization of AI in fields such as healthcare, mark a new stage in AI development. However, in the vertical applications of AI, general models struggle with specialized tasks due to limited cross-domain high-quality data and widespread data noise. This underscores a pivotal insight that revolutionizing the R&D process of drug and advanced material requires vertical field AI for Science models built on “high-quality data-driven frameworks”.

Our proprietary and continuously evolving AI + robotics solutions generate critical, high-quality data, serving both as indispensable fuel for our vertical AI models and a key competitive advantage in otherwise data-hungry industries. By synergizing AI with automated robotic laboratories, we have established a closed-loop workflow: quantum physics-based accuracy → AI-driven molecular generation/design → robotic high-throughput experimental validation → targeted data feedback for iterations. This workflow creates a self-optimizing flywheel effect, significantly accelerating growth velocity while reducing costs.

Chairman's Statement

Building upon this foundation, we will continue to refine our next-generation AI + robotic infrastructure and actively advance the development of our highly flexible and high-precision automated experimental robotic laboratories. As we deepen our accumulation of domain-specific data and proprietary models, the intelligence and accuracy of AI-driven decision-making will only continue to improve. Coupled with advancements in embodied experimental robotics, the entire DMTA cycle (Design, Make, Test, Analyze) for drug and material discovery will be autonomously executed through closely interwoven AI and robotic systems. This accelerating convergence of AI and automation will enable an ever-evolving data-powered intelligent platform, elevating efficiency benchmarks for the pharmaceutical and materials industries.

As an innovation-driven AI4S company, we prioritize talent as a cornerstone of growth. By fostering a multi-tiered talent ecosystem, implementing agile incentive mechanisms, and strengthening global collaboration networks, we continue to bolster our intellectual capital. Our integration of an international vision with localized execution, supported by cross-regional workflows and adaptive operational frameworks, has yielded industry-leading advantages in key metrics such as talent retention and innovation-to-commercialization efficiency, ensuring sustainable momentum for technological breakthroughs and market readiness.

We remain committed to expanding our global footprint, with deepening engagement in regions including the U.S., Southeast Asia, Europe, and the Middle East. Ongoing in-depth dialogues with international leaders in drug discovery and robotic automation solutions will further solidify our leadership.

As a pioneering platform in AI and robotics-empowered therapeutics and advanced materials discovery, XtalPi is dedicated to unlocking value for industries and society through foundational scientific exploration and applied innovation. Leveraging our technological edge, diverse client portfolio, scalable and commercializable products and solutions, and visionary leadership, we are well-positioned to capture all possible opportunities across both global and Chinese markets.

Management Discussion and Analysis

REVENUE

We generate revenue from the provision of (i) intelligent robotics solutions and (ii) drug discovery solutions. We provide either standalone solutions or services or a combination of our solutions or services, depending on our customers' needs.

The table below sets forth a breakdown of our revenue by business line:

	Year ended 31 December	
	2024 RMB'000 (Audited)	2023 RMB'000 (Audited)
Intelligent robotics solutions ⁽¹⁾	162,771	86,692
Drug discovery solutions	103,662	87,728
Total	266,433	174,420

Note:

- (1) We have renamed this business line from "intelligent automation solutions" to "intelligent robotics solutions" to better describe our solutions which are designed for flexible demands in R&D environment.

Our revenue increased by 52.8% from RMB174.4 million for the year ended 31 December 2023 to RMB266.4 million for the year ended 31 December 2024.

Intelligent robotics solutions. Our revenue generated from intelligent robotics solutions increased significantly by 87.8% from RMB86.7 million for the year ended 31 December 2023 to RMB162.8 million for the year ended 31 December 2024, primarily attributable to substantial growth in our XtalPi R&D solutions (such as TCMs and electrolyte robotics solutions) driving strong revenue growth, coupled with growth in revenue generated from automated chemical synthesis services, slightly offset by the decrease in our revenue generated from solid-state R&D services.

Drug discovery solutions. Our revenue generated from our provision of drug discovery solutions increased by 18.2% from RMB87.7 million for the year ended 31 December 2023 to RMB103.7 million for the year ended 31 December 2024, primarily due to (i) the increase in the number of our customers for our drug discovery solutions and (ii) the increase in the number of revenue-generating programmes for our drug discovery solutions.

RESEARCH AND DEVELOPMENT EXPENSES

Our R&D expenses decreased by 13.0% from RMB480.7 million for the year ended 31 December 2023 to RMB418.2 million for the year ended 31 December 2024, primarily attributable to the enhanced capabilities of our technology platform and the increased efficiency in our R&D activities, as well as the decrease in sample material costs due to decreased consumption of materials in R&D activities after the validation of certain research platforms' capabilities. In the future, we will continue to recruit R&D talents with strong academic background and profound industry experience to upgrade and optimize our quantum physics-based closed-loop integrated technology platform, and to enhance our ability to develop solutions in the biotechnology, pharmaceutical, materials science (including agritech, energy and new chemicals, and cosmetics).

GENERAL AND ADMINISTRATIVE EXPENSES

Our general and administrative expenses increased by 41.2% from RMB296.0 million for the year ended 31 December 2023 to RMB417.9 million for the year ended 31 December 2024, primarily due to the increases in share-based compensation expenses, listing expenses and depreciation and amortisation expenses. Share-based compensation expenses and depreciation and amortisation expenses are non-cash in nature. Listing expenses are expenses relating to the Global Offering (as defined in the Prospectus).

CONTRACT FULFILLMENT COSTS

Our contract fulfillment costs represent the direct expenses incurred in relation to the fulfillment of our obligations under contracts with our customers.

Our contract fulfillment costs increased by 13.3% from RMB126.2 million for the year ended 31 December 2023 to RMB143.0 million for the year ended 31 December 2024, primarily attributable to the increase of services we delivered. Benefiting from our increased delivery efficiency, our revenue in 2024 (with a growth rate of 52.8%) significantly outpaced the increase of our contract fulfillment cost in the same year.

SELLING AND MARKETING EXPENSES

Our selling and marketing expenses increased by 13.6% from RMB62.5 million for the year ended 31 December 2023 to RMB71.0 million for the year ended 31 December 2024, primarily due to the increases in share-based compensation expenses, which are non-cash in nature, and IT expenses.

OTHER INCOME

Our other income increased by 139.6% from RMB27.5 million for the year ended 31 December 2023 to RMB65.9 million for the year ended 31 December 2024, primarily due to an increase in the government grants recognised as the corresponding recognition conditions were fulfilled.

OTHER GAINS, NET

Our other gains, net decreased by 15.7% from RMB41.3 million for the year ended 31 December 2023 to RMB34.8 million for the year ended 31 December 2024, primarily attributable to the decrease in the gain on fair value of financial assets at FVTPL, partially offset by the decrease in net foreign exchange losses.

OPERATING LOSS

Our operating loss narrowed, decreasing by 5.3% from RMB722.3 million for the year ended 31 December 2023 to RMB684.2 million for the year ended 31 December 2024, primarily attributable to the abovementioned factors.

FINANCE INCOME, NET

Our finance income, net decreased by 47.5% from RMB93.1 million for the year ended 31 December 2023 to RMB48.9 million for the year ended 31 December 2024, primarily due to the decrease in interest income from our term deposits, contributed by the decrease in average balance of our term deposits for the year ended 31 December 2024.

CHANGES IN FAIR VALUE OF CRPS

Our fair value loss of CRPS decreased by 31.4% from RMB1,275.2 million for the year ended 31 December 2023 to RMB875.4 million for the year ended 31 December 2024, primarily due to the increase in our Company's valuation. All of our CRPS were automatically converted into Ordinary Shares upon our Listing and no further gains or losses related to valuation changes in these instruments will be recorded after the conversion in 2024.

Management Discussion and Analysis

LOSS FOR THE YEAR

As the result of the abovementioned factors, our net loss narrowed, decreasing by 20.5%, from RMB1,906.3 million for the year ended 31 December 2023 to RMB1,514.9 million for the year ended 31 December 2024.

NON-IFRS MEASURE

In evaluating our business, we consider and use adjusted net loss, a non-IFRS financial measure, to supplement the review and assessment of our operating performance. We believe such non-IFRS measure facilitates comparisons of our operating performance from period to period by eliminating the potential impact of certain items. We believe that the measure provides useful information to investors in understanding and evaluating our consolidated results of operations in the same manner as they help our management. The use of the non-IFRS measure has limitations as an analytical tool, and you should not consider it in isolation from, as a substitute for analysis of, or superior to, our results of operations or financial conditions as reported under IFRS. In addition, the non-IFRS financial measure may be defined differently from similar terms used by other companies, and may not be comparable to other similarly titled measures used by other companies.

We define adjusted net loss (non-IFRS measure) as net loss adjusted by adding back (i) changes in fair value of CRPS, (ii) share-based compensation expenses, and (iii) listing expenses. Share-based compensation expenses mainly represent expenses incurred in connection with our employee stock ownership plan, reflecting equity awards granted to employees. All of our CRPS were automatically converted into Ordinary Shares upon the Listing and no further gains or losses related to valuation changes in these instruments will be recorded after the conversion. These two reconciling items are non-cash items. Listing expenses are expenses related to the Global Offering.

The following table sets forth our adjusted net loss (non-IFRS measure) for the periods indicated:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Loss for the year	(1,514,869)	(1,906,323)
Add:		
Changes in fair value of CRPS	875,356	1,275,165
Share-based compensation expenses	136,678	88,426
Listing expenses	46,036	20,575
Adjusted net loss (non-IFRS measure)	(456,799)	(522,157)

SHORT-TERM BANK BORROWINGS

Our short-term bank borrowings decreased by 13.5% from RMB60.0 million as of 31 December 2023 to RMB51.9 million as of 31 December 2024, reflecting the net decreased balance of our bank borrowings. Our short-term bank borrowings as of 31 December 2024 were denominated in Renminbi, repayable within one year, and guaranteed by our subsidiaries and one patent held by one of our subsidiaries, all of which carried fixed interest rate, ranging from 2.5% to 3.5% per annum.

NET CURRENT ASSETS

We had net current assets of RMB2,648.0 million as of 31 December 2023 and RMB3,035.5 million as of 31 December 2024. The 14.6% increase in our net current assets was primarily attributable to our proceeds from the Global Offering.

Management Discussion and Analysis

NET CASH POSITION

We recorded a net cash position of RMB3,071.5 million, calculated by deducting our interest-bearing borrowings from the sum of our cash and cash equivalents, term deposits, current portion of financial assets at FVTPL, which represented the investments in wealth management products and funds within our treasury activities and restricted cash, as of 31 December 2024.

GEARING RATIO

Our gearing ratio is calculated using interest-bearing borrowings divided by total equity and multiplied by 100%, was 1.3% and -0.8% as of 31 December 2024 and 31 December 2023.

LIQUIDITY AND CAPITAL RESOURCES

For the year ended 31 December 2024, we financed our capital expenditure and working capital requirements primarily through capital contributions from our shareholders and cash inflows from our business operations. We intend to continue relying on cash flows from operations and those from financing activities including net proceeds from the Global Offering. As of 31 December 2024, the sum of our cash and cash equivalents, term deposits, current portion of financial assets at FVTPL and restricted cash was RMB3,123.4 million, as compared with RMB2,848.4 million as of 31 December 2023.

With respect to cash management, we have established treasury and investment policies, such as our treasury management policy (資金管理制度), to monitor and manage our settlement activities and financing activities (including broadening and diversification of fundraising channels and cash management tools), and to control the risks relating to bank deposits and/or the purchase of financial instruments. We place term deposits and/or purchase financial instruments only when we have spare cash in addition to sufficient cash for our operations and in the best interest of our Company.

CASH BURN RATE AND WORKING CAPITAL SUFFICIENCY

Our cash burn rate refers to the average monthly aggregate amount of (i) net cash used in operating activities, (ii) capital expenditures, and (iii) lease payment. Due to our strong revenue growth and effective cost control benefiting from our enhanced automation capabilities, primarily enabled by our technology platform capable of delivering results across different business lines, featuring cost efficiency and standardized scalability, our monthly average cash burn rate decreased by 22.6% from RMB62.2 million in 2023 to RMB48.1 million in 2024. Assuming our average cash burn rate going forward will be similar to the cash burn rate level in 2024, we estimate that our cash and cash equivalents, term deposits, current portion of financial assets at FVTPL and restricted cash as of 31 December 2024, being RMB3,123.4 million, will be able to maintain our financial viability for approximately 65 months; if we take into account the net proceeds raised from the two placings in the first quarter of 2025, being approximately HK\$3,205 million (RMB2,968 million) in total, we have sufficient working capital to support our operations for approximately ten years.

CONTINGENT LIABILITIES

For the years ended 31 December 2024 and 2023, we did not have material contingent liabilities that were expected to materially and adversely affect our financial condition or results of operations.

Management Discussion and Analysis

RESEARCH AND DEVELOPMENT EXPENDITURE

For the years ended 31 December 2023 and 2024, our R&D expenditure primarily consisted of R&D expenses adjusted by adding back intangible assets acquired from third parties and capitalised, and deducting amortisation expenses for capitalised intangible assets for R&D purposes included in R&D expenditure. The table below sets forth our R&D expenditure for the periods indicated:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
R&D expenses	418,238	480,664
Adjustments:		
Add: Intangible assets for R&D purposes acquired from third parties and capitalised	1,997	4,263
Less: Amortisation expenses of capitalised intangible assets included in R&D expenditure	(1,740)	(4,593)
R&D expenditure	418,495	480,334

CAPITAL EXPENDITURES

Our capital expenditures are used to expand our operations and upgrade our facilities. For the years ended 31 December 2023 and 2024, we incurred capital expenditures of RMB130.0 million and RMB46.7 million, respectively, primarily consisting of expenditures on property, plant and equipment, and intangible assets.

FOREIGN EXCHANGE

Foreign exchange risk arises when future commercial transactions or recognised assets and liabilities are denominated in a currency that is not our entities' functional currency. We closely monitor our foreign exchange exposures and will take actions as necessary to mitigate the impact of exchange rate fluctuations.

PLEDGE OF ASSETS

As of 31 December 2024, one patent held by one of our subsidiaries was pledged by our Group (As at 31 December 2023: one patent held by one of our subsidiaries was pledged by our Group).

Management Discussion and Analysis

SIGNIFICANT INVESTMENTS HELD AND MATERIAL ACQUISITIONS AND DISPOSALS

Save as disclosed below, there were no other significant investments held, and no material acquisitions or disposals of subsidiaries, associates or joint ventures for the year ended 31 December 2024 (for the year ended 31 December 2023: nil).

The following table summarises the information regarding the Group's investments classified as financial assets at FVTPL with a carrying amount that accounted for 5% or more of the Group's total assets as of 31 December 2024:

Product invested	Description of the underlying investments	Principal amount held as of 31 December 2024 RMB (million)	Cost of investment RMB (million)	Fair value as of 31 December 2024 RMB (million)	Percentage of fair value relative to total assets	Fair value gain during the year ended 31 December 2024 (unrealised) RMB (million)
Notes issued by Guosen Securities (HK) Asset Management Company Limited	The product primarily invests in US Dollar short-term deposit or notes issued by government, quasi government, international organisations and financial institutions.	215.7	215.7	219.3	5.0%	3.6
Notes issued by Fosun Hani Global Limited	The product primarily invests in US Dollar time deposit, US treasury bill, US treasury note and US treasury bond, fixed rate notes and private equity assets.	575.2	575.2	595.5	13.7%	20.3

The investments in wealth management products under financial assets at FVTPL were made for treasury management purposes to maximise return on available funds held by the Group.

FUTURE PLANS FOR MATERIAL INVESTMENTS OR CAPITAL ASSETS

We did not have any plan for material investments or acquisition of capital assets other than the above mentioned and those mentioned in the Prospectus or in our previous announcements during the Reporting Period.

EMPLOYEES AND REMUNERATION POLICY

As of 31 December 2024, we had a total of 809 employees. For the Reporting Period, the total remuneration cost incurred by the Group was RMB602.4 million.

The remuneration of our Group's employees comprises salaries, bonuses, employees' provident fund, share-based payment, and social security contributions and other welfare payments, which are determined by their responsibilities, qualifications, positions and seniority. In accordance with applicable laws and regulations, we make contributions to social security insurance funds (including pension plans, medical insurance, work-related injury insurance, unemployment insurance and maternity insurance) and housing funds for the Group's employees.

We provide formal and comprehensive company-level and department-level training to our new employees, followed by on-the-job training. We also provide training and development programs to our employees from time-to-time to ensure their awareness and compliance with our various policies and procedures. Some of the training is conducted jointly by departments serving different functions but working with or supporting each other in our day-to-day operations.

Profiles of Directors and Senior Management

The biographical details of the Directors and senior management of the Company as of the date of this annual report are set out below.

DIRECTORS

Executive Directors

Dr. Wen Shuhao (溫書豪), aged 43, was appointed as our Director on 28 April 2017 and re-designated as our executive Director and chairman of the Board on 27 November 2023. He is primarily responsible for strategic management and planning, fundraising and investment. Dr. Wen has also contributed to our cooperation with world-leading research institutes and biotechnology and pharmaceutical companies.

Prior to founding our Group, from February 2010 to April 2013, Dr. Wen worked as a postdoctoral research scholar at the University of California at Riverside. He worked as a postdoctoral associate at the Massachusetts Institute of Technology from April 2013 to February 2015.

Dr. Wen obtained his bachelor's degree in electronic science and technology from Dalian University of Technology in the PRC in June 2004. Dr. Wen obtained his master's degree in physical chemistry from the University of Science and Technology of China in the PRC in June 2005. Dr. Wen obtained his Ph.D. degree in physical chemistry from Dalian Institute of Chemical Physics, Chinese Academy of Sciences in the PRC in January 2010. Dr. Wen is a published quantum physicist with over 14 years of research experiences in the field of computational physics and quantum chemistry and has published 36 papers with more than 2,100 citations. In 2020, Dr. Wen was awarded as one of "Fortune's 40 Business Elites Under 40 in China." In April 2023, Dr. Wen was awarded as one of the "Shenzhen Top Ten Outstanding Young Entrepreneurs."

Dr. Ma Jian (馬健), aged 40, was appointed as our Director on 28 April 2017 and re-designated as our executive Director and Chief Executive Officer on 27 November 2023. He is primarily responsible for overseeing our overall operation and management.

Prior to founding our Group, Dr. Ma completed his postdoctoral research at the Massachusetts Institute of Technology in June 2014. Dr. Ma obtained his bachelor's and Ph.D. degree in physics from Zhejiang University (浙江大學) in the PRC in June 2007 and June 2012, respectively. Dr. Ma has published 30 papers in international leading scientific journals, including Physics Reports, Physical Review and Journal of Chemical Physics. Dr. Ma was honored as "Innovators Under 35" by MIT Technology Review in 2019. Dr. Ma is also recognized as a Shenzhen regional leading talent (深圳市地方級領軍人才) and Shenzhen overseas high-calibre personnel (深圳市海外高層次人才).

Dr. Lai Lipeng (賴力鵬), aged 41, was appointed as our Director on 28 April 2017 and re-designated as our executive Director and Chief Innovation Officer on 27 November 2023. He is primarily responsible for overseeing our artificial intelligence development.

Prior to founding our Group, from April 2012 to August 2012, he served as a software developer at Epic Systems Corporation. From September 2012 to September 2014, Dr. Lai served as a postdoctoral associate at the Singapore University of Technology and Design-Massachusetts Institute of Technology (SUTD-MIT) Graduate Fellows Program. Dr. Lai obtained his bachelor's double degree in physics and mathematics from Peking University in the PRC in July 2006. Dr. Lai obtained his master's and Ph.D. degree in physics from the University of Chicago in December 2007 and March 2012, respectively. Dr. Lai has published multiple papers in leading journals, including Physical Review Letters, and is recognized as a Shenzhen overseas high-calibre personnel (深圳市海外高層次人才).

Profiles of Directors and Senior Management

Dr. Jiang Yide Alan, aged 61, was appointed as our Director on 17 November 2017 and re-designated as our executive Director and Chief Strategic Officer on 27 November 2023. He is primarily responsible for overseeing our strategic development including identification of growth opportunities, strategic planning and execution. Dr. Jiang has over 20 years of experience in scientific and research management. From July 2001 to July 2016, Dr. Jiang worked at Sanofi-Genzyme R&D Center with his last position held as the director of Asia R&D Strategy, where he was responsible for the development of Genzyme Asia/China R&D strategy and led cross-functional R&D external collaborations and projects in Asia. Dr. Jiang was a key member of the Translational Medicine team and focused on strategic implementation of pharmacogenomics and biomarker in early clinical development. Dr. Jiang obtained his bachelor's degree in medicine from Shanghai Medical College, Fudan University (formerly known as Shanghai Medical University) in the PRC in July 1987. He obtained his Ph.D. degree in molecular biology from University of Tennessee in the United States in June 1999. He completed his post-doctoral research in hematology and oncology at Brigham & Women's Hospital, Harvard Medical School in the United States in June 2001.

Independent Non-executive Directors

Mr. Law Cheuk Kin Stephen (羅卓堅), aged 62, was appointed as our independent non-executive Director on 28 May 2024. He is responsible for providing independent judgment on strategy, policy, performance, accountability, internal control and corporate governance.

Mr. Law worked at Wheelock Pacific Limited, a subsidiary of Wheelock and Company Limited (會德豐有限公司), a company formerly listed on the Stock Exchange (stock code: 0020) from February 1995 to July 1997, i-CABLE Communications Limited, a company listed on the Stock Exchange (stock code: 1097) from July 1997 to 2000, Morningside Technologies Inc., part of the Morningside Group (晨興創投集團) from 2000 to 2006, and TPG Growth Capital (Asia) Limited from July 2006 to September 2012, where he last served as a managing director. Mr. Law served as the chief financial officer of Guoco Group Limited (國浩集團有限公司), a company listed on the Stock Exchange (stock code: 0053) from October 2012 to June 2013, the finance director of MTR Corporation Ltd., a company listed on the Stock Exchange (stock code: 0066) from July 2013 to July 2016, an adjunct professor of the Hong Kong Polytechnic University from 2015 to 2017, an independent non-executive director of AAG Energy Holdings Limited (亞美能源控股有限公司), a company listed on the Stock Exchange (stock code: 2686) from July 2016 to September 2018, and an independent non-executive director of Stealth BioTherapeutics Inc., a company listed on NASDAQ (ticker symbol: MITO) from June 2018 to July 2019. From 1 November 2018 to 25 August 2022, Mr. Law has served as an independent non-executive director of Bank of Guizhou Co., Ltd, a company listed on the Stock Exchange (stock code: 6199). He has been the managing director and a responsible officer of ZhongYi Investment Managers Limited since January 2021.

Mr. Law obtained his bachelor's degree in civil engineering from the University of Birmingham in the United Kingdom in July 1984 and master's degree in business administration from the University of Hull in the United Kingdom in July 1996. Mr. Law is the vice president and a council member of the Hong Kong Institute of Certified Public Accountants (HKICPA). Mr. Law is also a member of the Institute of Chartered Accountants in England and Wales and an expert accounting consultant appointed by the Ministry of Finance of the PRC. Mr. Law has accounting qualifications in Hong Kong and the United Kingdom. Mr. Law was appointed as the Justice of the Peace by the Government of the Hong Kong Special Administrative Region ("HKSAR Government") in July 2022 and he was appointed as a CPPCC National Committee Member in January 2023. The HKSAR Government announced on 21 March 2025 that Mr. Law has been appointed as one of the new directors of Hong Kong Cyberport Management Company Limited for a two-year term from 1 April 2025 to 31 March 2027.

Mr. Law has directorships in certain Hong Kong listed companies. He is currently an independent non-executive director of each of China Everbright Limited (stock code: 165), Somerley Capital Holdings Limited (stock code: 8439), CSPC Pharmaceutical Group Limited (stock code: 1093), China Galaxy Securities Co., Ltd. (stock code: 6881), Keymed Biosciences Inc (stock code: 2162).

Ms. Chan Wing Ki (陳穎琪), aged 41, was appointed as our independent non-executive Director on 28 May 2024. She is responsible for providing independent judgment on strategy, policy, performance, accountability, internal control and corporate governance.

Profiles of Directors and Senior Management

Ms. Chan has over 10 years of legal and corporate governance experience. From September 2008 to September 2011, Ms. Chan worked at Allen & Overy with her last position as an associate. From October 2011 to June 2016, she worked at Davis Polk & Wardwell as an associate. Ms. Chan worked at King & Wood Mallesons as a managing associate from January 2017 to May 2017, and worked at Latham & Watkins as an associate from July 2017 to April 2018. From May 2018 to April 2021, she worked for Xiaomi Corporation, a company listed on the Stock Exchange (stock code: 1810), with her last position as the head of legal and finance and joint company secretary. From May 2021 to June 2021, she worked at Kuaishou Technology as a senior director of the company secretary department. From June 2021 to September 2022, she worked at ECARX Holdings Inc., a company listed on Nasdaq (ticker symbol: ECX), as the secretary to the board. Since October 2022, she has been serving as the group general counsel and company secretary of China Gas Holdings Limited, a company listed on the Stock Exchange (stock code: 384).

Ms. Chan obtained her bachelor's degree in business administration (law) and a bachelor's degree in law from the University of Hong Kong in 2006 and 2007, respectively. Ms. Chan was admitted as a solicitor of Hong Kong by the High Court of Hong Kong in January 2011, and as an attorney of the State of New York, United States, in January 2019. On 15 August 2024, Ms. Chan was awarded the title of Certified Environmental, Social and Governance Analyst CESGA by The European Federation of Financial Analysts Societies. Ms. Chan was also appointed as a member of the General Committee of The Chamber of Hong Kong Listed Companies in June 2024.

Mr. Chow Ming Sang (周明笙), aged 52, was appointed as our independent non-executive Director on 28 May 2024. He is responsible for providing independent judgment on strategy, policy, performance, accountability, internal control and corporate governance.

Mr. Chow has over 28 years of experience in accounting, corporate financial management and corporate governance. From January 2007 to September 2018, he served as an advisory partner of Ernst & Young (China) Advisory Limited (安永(中國)企業諮詢有限公司), where he was primarily responsible for managing the risk advisory sub-service line's strategic growth and development in various regions of the PRC. From September 2018 to June 2019, he served as the general manager of risk & control department of Tahoe Group, Beijing Branch (泰禾集團股份有限公司北京分公司), a property developer in the PRC, whose shares were previously listed on the Shenzhen Stock Exchange (stock code: 000732), where he was primarily responsible for risk management of the company. From 1 December 2020 to 31 August 2022, Mr. Chow served as an independent non-executive director of China Rundong Auto Group Limited, whose shares were listed on the Stock Exchange (stock code: 1365, delisted on 26 October 2022). Since July 2019, Mr. Chow has been serving as a managing director of Beijing Xinshi Anye Management Consulting Co., Ltd. (北京信實安業管理諮詢有限公司), a consulting firm in the PRC, where he has been primarily responsible for strategic planning and the overall management of the company. Since 21 December 2023, has been serving as an independent director of Muyuan Foods Co., Ltd. (牧原食品股份有限公司), whose shares are listed on the Shenzhen Stock Exchange (stock code: 002714).

From 2014 to 2016, Mr. Chow was the Committee Member of The Internal Controls General Standards Committee of The Ministry of Finance (PRC) (中國財政部內部控制標準委員會委員).

Mr. Chow obtained his bachelor's degree in accounting from the Hong Kong University of Science and Technology in Hong Kong in November 1995. He has been a Certified Internal Auditor since November 2003 and received the Certification of Fund Practice Qualification from the Asset Management Association of China in April 2019. He is currently a fellow member of the Hong Kong Institute of Certified Public Accountants and the Association of Chartered Certified Accountants.

Mr. Chow has directorships in certain Hong Kong listed companies. He is currently an independent non-executive director of each of Teamway International Group Holdings Limited (stock code: 1239), China Modern Dairy Holdings Ltd. (stock code: 1117), Redco Healthy Living Company Limited (stock code: 2370) and China Maple Leaf Educational Systems Limited (stock code: 1317).

Profiles of Directors and Senior Management

SENIOR MANAGEMENT

Dr. Zhang Peiyu (張佩宇), aged 42, is our Chief Scientific Officer and is primarily responsible for overseeing our scientific research operations.

Prior to joining our Group in September 2015, Dr. Zhang was appointed as an associate researcher in July 2013 at Dalian Institute of Chemical Physics, Chinese Academy of Sciences.

Dr. Zhang obtained his bachelor's degree in electronic science from Dalian University of Technology in the PRC in July 2004. He obtained his Ph.D. degree in physical chemistry from Dalian Institute of Chemical Physics, Chinese Academy of Sciences in the PRC in January 2011.

Mr. Tam Man Hong (譚文康), aged 48, is our Chief Financial Officer and is primarily responsible for executing our fundraising and corporate finance transactions, investor relations, financial reporting, legal and compliance, IPs, strategic formulation and business development. He was also one of the joint company secretaries from 27 November 2023 to 19 December 2024.

Mr. Tam has extensive management experience in finance and banking across the Asia-Pacific region. Prior to joining our Company, from August 2007 to September 2011, Mr. Tam served as director at UBS AG Hong Kong Branch. From December 2011 to November 2015, Mr. Tam served at Jefferies Hong Kong Limited, with his last position held as managing director. From February 2016 to January 2017, Mr. Tam served at Guosen Securities (HK) Financial Holdings Co., Ltd, with his last position held as managing director. From February 2017 to May 2018, he served at BOSC International Company Limited, with his last position held as managing director. He served at UBS AG Hong Kong Branch from June 2018 to July 2020, with his last position held as managing director. Mr. Tam also served as Chief Financial Officer of HUYA Bioscience International, LLC from October 2020 to November 2020.

Mr. Tam obtained his bachelor's degree in commerce from the University of Auckland in New Zealand in December 1997. He obtained his master's degree in sustainability leadership from University of Cambridge in England in July 2020. He was certified as a CFA charterholder by the CFA Institute (formerly the Association for Investment Management and Research) in September 2002. He was admitted as a fellow of CPA Australia in February 2016 and a member of the Hong Kong Institute of Certified Public Accountants in January 2003, respectively.

JOINT COMPANY SECRETARIES

Mr. Tam Man Hong (譚文康) was appointed as one of our joint company secretaries on 27 November 2023 and resigned as the company secretary with effect from 20 December 2024. For details of his background, see “— Senior Management” above.

Ms. Chan Sau Ling (陳秀玲) was appointed as one of our joint company secretaries on 14 February 2024. She is a director of corporate services of Tricor Services Limited, a global professional services provider specializing in integrated business, corporate and investor services. She has over 25 years of experience in the corporate secretarial field. She has been providing professional corporate services to Hong Kong listed companies as well as multinational, private and offshore companies. Ms. Chan Sau Ling is currently the company secretary or joint company secretary of a few listed companies on the Stock Exchange. She is a Chartered Secretary, a Chartered Governance Professional and a Fellow of both The Hong Kong Chartered Governance Institute and The Chartered Governance Institute in the United Kingdom.

Ms. Liu Shimei (劉石梅) was appointed as one of our joint company secretaries on 20 December 2024. Ms. Liu joined the Group in June 2019 as the Vice President of the Finance Department of the Group. Ms. Liu is responsible for financial accounting and reporting, budget management and business analysis, and funds management of the Group. She is also responsible for dealing with the Group's listing compliance and corporate governance-related matters.

Profiles of Directors and Senior Management

All Directors have access to the advice and services of the joint company secretaries on corporate governance and board practices and matters. Mr. Tam Man Hong (with effect from 27 November 2023 to 19 December 2024) and Ms. Liu (with effect from 20 December 2024) has been designated as the primary contact person of the Company who would work and communicate with Ms. Chan Sau Ling on the Company's corporate governance and secretarial and administrative matters.

Save as disclosed above, the Directors have confirmed that no other information is required to be disclosed pursuant to Rule 13.51B(1) of the Listing Rule.

The Board is pleased to present this corporate governance report in the annual report of the Company.

As the Ordinary Shares were listed on the Stock Exchange on 13 June 2024, the Corporate Governance Code was not applicable to the Company prior to the Listing Date.

CORPORATE GOVERNANCE PRACTICES

The Company aims to achieve high standards of corporate governance, which are crucial to the Company's development and safeguard the interests of the Shareholders, and to enhance corporate value and accountability. Since the Listing Date, the Company has applied the principles of good corporate governance and adopted the code provisions of the Corporate Governance Code as its own code of corporate governance. The Company has complied with all applicable code provisions set out in Part 2 of the Corporate Governance Code during the period from the Listing Date to 31 December 2024. The Board will review the corporate governance structure and practices from time to time and shall make necessary arrangements when the Board considers appropriate.

COMPANY'S CULTURE

The Board believes that corporate culture underpins the long-term business, economic success and sustainable growth of the Group. A strong culture enables the Company to deliver long-term sustainable performance and fulfill its role as a responsible corporate citizen. We aspire to create a sustainable, innovative ecosystem that empowers our global partners to accelerate drug and new materials discovery processes by leveraging the power of seamlessly integrated computational tools, AI, and automation infrastructure. We take a market-oriented and customer-centric approach and strive for excellence through value and innovation.

THE BOARD

(1) Responsibilities

The Board is responsible for, and has general powers for, the management and conduct of our business. The Board has delegated the authority and responsibility for day-to-day management and operation of the Group to the executive Directors and senior management of the Group. To oversee particular aspects of the Company's affairs, the Board has established three Board committees including the Audit Committee, the Remuneration Committee and the Nomination Committee. The Board has delegated to the Board committees responsibilities as set out in their respective terms of reference. All Board committees are provided with sufficient resources to perform their duties.

All Directors shall ensure that they carry out duties in good faith, in compliance with applicable laws and regulations, and in the interests of the Company and the Shareholders at all times.

(2) Directors' and Senior Management's Liability Insurance and Indemnity

The Company has arranged appropriate liability insurance to indemnify the Directors and senior management of the Company for their liabilities arising out of corporate activities. The insurance coverage will be reviewed on an annual basis.

Corporate Governance Report

(3) Board Composition

As of the date of this annual report, the Board comprises four executive Directors, and three independent non-executive Directors.

Executive Directors

Dr. Wen Shuhao (*Chairman*)

Dr. Ma Jian

Dr. Lai Lipeng

Dr. Jiang Yide Alan

Independent Non-executive Directors

Mr. Law Cheuk Kin Stephen

Ms. Chan Wing Ki

Mr. Chow Ming Sang

There is no any relationship (including financial, business, family or other material/relevant relationship(s)) between the Board members and the senior management members.

As of the date of this annual report, the Board at all times met the requirements of Rules 3.10(1), 3.10(2) and 3.10A of the Listing Rules relating to (i) the appointment of at least three independent non-executive Directors with at least one independent non-executive Director possessing appropriate professional qualifications or accounting or related financial management expertise, and (ii) the appointment of independent non-executive Directors representing at least one-third of the Board. Among the three independent non-executive Directors, Mr. Law Cheuk Kin Stephen and Mr. Chow Ming Sang have appropriate professional qualifications or accounting or related financial management expertise as required by Rule 3.10(2) of the Listing Rules.

(4) Board Diversity Policy

Pursuant to Rule 13.92 of the Listing Rules, the nomination committee (or the board) shall have a policy concerning diversity of board members, and shall disclose the policy on diversity or a summary of the policy in the corporate governance report. The Company has adopted the board diversity policy which sets out the objective and approach to achieve and maintain diversity of the Board. Pursuant to the board diversity policy, we seek to achieve board diversity through the consideration of a number of factors when selecting the candidates to the Board, including but not limited to gender, skills, age, professional experience, knowledge, cultural, education background and length of service. The decision of the appointment will be based on merit and the contribution which the selected candidates will bring to the Board.

Our Directors have a balanced mix of knowledge, skills, perspectives and experience, including overall management and strategic development, business, science, investment, accounting and consulting. They obtained professional and academic qualifications including holding doctoral degrees in pharmaceutical and other areas, as well as accounting qualifications. Furthermore, the Board possesses members spanning a wide range of ages, from 40 years old to 62 years old. The composition of the Board will be disclosed in the Corporate Governance Report every year and the Nomination Committee will supervise the implementation of the board diversity policy and review the effectiveness of the board diversity policy annually as appropriate, discuss any revisions that may be required, and recommend any such revisions to the Board for consideration and approval. Further details on the biographies and experience of the Directors are set out on pages 20 to 24 of this annual report.

As of the date of this annual report, the Nomination Committee has reviewed the membership, structure and composition of the Board, and is of the opinion that the structure of the Board is reasonable, and the experiences and skills of the Directors in various aspects and fields can enable the Company to maintain high standard of operation.

(5) Measurable Objectives

The Company aims to maintain an appropriate balance of diverse perspectives that are relevant to the Company's business growth. The Board and Nomination Committee shall take opportunities to increase the proportion of female members over time when selecting and making recommendation on suitable candidates for Board nomination and appointments. The Board and Nomination Committee would ensure that appropriate balance of gender diversity is achieved with reference to stakeholders' expectation and international and local recommended best practices.

The Nomination Committee will discuss periodically and when necessary, agree on the measurable objectives for achieving diversity, including gender diversity, on the Board and recommend them to the Board for adoption. In particular, the Nomination Committee will identify and make recommendations to the Board to implement programs that will assist in the development of a broader and more diverse pool of skilled and experienced employees that, in time, will prepare them for Board positions.

The Company has also taken, and will continue to take steps to promote gender diversity at all levels of the Company, including but without limitation at the Board and the management levels. At the Board level, Ms. Chan Wing Ki was appointed as an independent non-executive Director and therefore the Company has achieved the objective of keeping at least one female Director. At the management level, both of our joint company secretaries as of the date of this annual report, are female.

The Group has also assessed its diversity profile annually for all levels of employees and apply the diversity policy to attract, retain and motivate employees from the widest possible pool of available talent.

As of 31 December 2024, the Group had 753 full-time employees, of whom the number of female employees accounted for approximately 42.63%. Based on the Group's review, there was no mitigating factor or circumstance which makes achieving gender diversity across the workforce (including senior management) more challenging or less relevant.

(6) Board Independence

The Company recognizes that Board independence is key to good corporate governance. The Company has in place effective mechanisms that underpin an independent Board and ensure that independent views and input are available to the Board. The current composition of the Board, comprising more than one-third of independent non-executive Directors, along with members of the Audit Committee being all independent non-executive Directors, exceed the independence requirements under the Listing Rules. The Remuneration Committee and Audit Committee are all chaired by independent non-executive Directors. The remuneration of independent non-executive Directors are subject to a regular review to maintain competitiveness and commensurate with their responsibilities and workload. The independence of each independent non-executive Director is assessed upon his/her appointment and annually.

Directors are requested to declare their direct or indirect interests, if any, in proposals or transactions to be considered by the Board at the Board meetings and abstain from voting, where appropriate. External independent professional advice is available to all Directors, including independent non-executive Directors, whenever deemed necessary. The independent non-executive Directors have consistently demonstrated strong commitment and the ability to devote sufficient time to discharge their responsibilities at the Board.

The Company has also established channels through formal and informal means whereby independent non-executive Directors can express their views in an open manner, and in a confidential manner, should circumstances requires.

Confirmation of Independence by the Independent Non-executive Directors

The Company has received from each of the independent non-executive Directors an annual confirmation of his/her independence pursuant to Rule 3.13 of the Listing Rules. The Company considers that, as of the date of this annual report, all of the independent non-executive Directors are independent.

Corporate Governance Report

Induction and Continuous Professional Development

All Directors should participate in continuous professional development to develop and refresh their knowledge and skills to ensure their contribution to the Board remains informed and relevant pursuant to code provision C.1.4 of the Corporate Governance Code. In this regard, the joint company secretaries update the Directors on the latest developments of applicable laws, corporate governance issues, rules and regulations from time to time.

Every newly appointed Director should receive formal, comprehensive and tailored induction on the first occasion of his/her appointment to ensure appropriate understanding of the business and operations of the Company and full awareness of Director's responsibilities and obligations under the Listing Rules and relevant statutory requirements.

During the year ended 31 December 2024, all Directors had participated in appropriate continuous professional development activities by ways of attending trainings and/or reading materials relating to the latest development of Listing Rules and other regulatory requirements relevant to the Group, general business or directors' duties and responsibilities, etc. All Directors are encouraged to attend relevant training courses at the Company's expense.

Prior to the Listing, each of the Directors attended the training courses conducted by the legal adviser of the Company. The content of such training related to the duties of the directors and continuing obligations of listed companies. Each of the Directors has respectively obtained legal advice as regards the requirements under the Listing Rules that are applicable to him/her as a director of a listed issuer and the possible consequences of making a false declaration or giving false information to the Stock Exchange on 27 November 2023 and 23 May 2024 and confirmed that he/she understood his obligations as a director of a listed issuer.

Chairman and Chief Executive Officer

Under the code provision C.2.1 of the Corporate Governance Code, the roles of chairman and chief executive officer should be separate and performed by different individuals. As of the date of this annual report, Dr. Wen Shuhao acted as the chairman of the Board and Dr. Ma Jian acted as the chief executive officer of the Company. Dr. Wen Shuhao's responsibilities are more focused on strategic management and planning, fundraising and investment, while Dr. Ma Jian's responsibilities are more focused on business direction and daily management. Their respective responsibilities and division of labour have been set out in writing. The chairman of the Board and the chief executive officer of the Company do not have any relationships (including financial, business, family or other material or connected relationship).

Under the code provision C.2.7 of the Corporate Governance Code, the Chairman should at least annually hold meeting with the independent non-executive Directors without the presence of other Directors. On 28 March 2025, Dr. Wen Shuhao, the chairman of the Board, held a meeting with all the independent non-executive Directors without the presence of other Directors. Dr. Wen Shuhao is also responsible for the duties as specified in code provisions C.2.2 to C.2.9 of the Corporate Governance Code. The Board and the senior management, which comprises experienced and high calibre individuals, can ensure the balance of power and authority.

Appointment and Re-Election of Directors

Each of the executive Directors has entered into a service agreement with the Company for a term of three years commencing from the Listing Date, and subject to re-election as and when required under the Articles of Association, until terminated in accordance with the terms and conditions of the service agreement or by either party giving to the other not less than three months' notice in writing. Under the terms of the service agreement, each of our executive Directors is entitled to a fixed director's fee for their service as executive Director, which may be adjusted based on the recommendations of the Remuneration Committee. Executive Directors may receive bonuses and/or other compensation or rewards in accordance with the standards recommended by the Remuneration Committee.

Each of our independent non-executive Directors has entered into a letter of appointment with our Company for a term of three years commencing from the Listing Date, and subject to re-election as and when required under the Articles of Association, and may be terminated by not less than 30 days' notice in writing served by either party on the other. Each of our independent non-executive Directors is entitled to a fixed director's fee under the terms of the letter of appointment, which may be adjusted based on the recommendations of the Remuneration Committee.

In respect of appointment of Directors, the Directors may appoint any person to be a Director, either to fill a vacancy or as an additional Director provided that the appointment does not cause the number of Directors to exceed any number fixed by or in accordance with the Articles of Association as the maximum number of Directors. Any Director so appointed shall hold office only until the first annual general meeting of the Company after such Director's appointment and shall then be eligible for re-election at that meeting.

In accordance with the Articles of Association, at every annual general meeting of the Company, one-third of the Directors for the time being, or, if their number is not three or a multiple of three, then the number nearest to, but not less than, one-third, shall retire from office by rotation, provided that every Director (including those appointed for a specific term) shall be subject to retirement by rotation at least once every three years. A retiring Director shall retain office until the close of the meeting at which he retires and shall be eligible for re-election at such meeting. The Company at any annual general meeting at which any Directors retire may fill the vacated office by electing a like number of persons to be Directors.

None of the Directors proposed for re-election at the forthcoming annual general meeting of the Company has a service contract with the Company or any member of the Group which is not determinable by the employer within one year without payment of compensation (other than statutory compensation).

Board Meetings and Committee Meetings

The Company adopts the practice of holding Board meetings regularly, at least four times a year, and at approximately quarterly intervals. Both the Nomination Committee and the Remuneration Committee shall meet at least once every year and the Audit Committee shall meet at least twice a year. Notices of not less than fourteen days are given for all regular Board meetings to provide all Directors with an opportunity to attend and include matters in the agenda for a regular meeting. For other Board and committee meetings, reasonable notice is generally given. The agenda and accompanying board papers are dispatched to the Directors or committee members at least three days before the intended date of the meeting to ensure that they have sufficient time to review the papers and be adequately prepared for the meeting. When Directors or committee members are unable to attend a meeting, they will be advised of the matters to be discussed and given an opportunity to make their views known to the chairman of the Board or the committee members prior to the meeting. Minutes of meetings are kept by the joint company secretaries with copies circulated to relevant Board or Board Committee for comments and records.

Minutes of the Board meetings and committee meetings are recorded in sufficient detail the matters considered by the Board and the committees and the decisions reached, including any concerns raised by the Board or committee members and dissenting views expressed. Draft minutes of each Board meeting and committee meeting are sent to the relevant Board or committee members for comments within a reasonable time after the date on which the meeting is held. The minutes of the Board meetings are open for inspection by Directors.

From the Listing Date and up to 31 December 2024, two Board meetings, five Audit Committee meetings and one Remuneration Committee meeting were held.

Corporate Governance Report

A summary of the attendance record of the Directors at Board meetings, committee meetings and general meetings during the period from the Listing Date to 31 December 2024 is set out in the following table below:

Name of director	Number of meeting(s) attended / number of meeting(s) held from the Listing Date and up to 31 December 2024				
	Board	Audit Committee	Remuneration Committee	Nomination Committee	General meeting
Executive Directors					
Dr. Wen Shuhao	2/2	N/A	N/A	N/A	1/1
Dr. Ma Jian	2/2	N/A	1/1	N/A	1/1
Dr. Lai Lipeng	2/2	N/A	N/A	N/A	0/1
Dr. Jiang Yide Alan	2/2	N/A	N/A	N/A	0/1
Non-executive director					
Dr. Gu Cuiping (<i>resigned with effect from 30 October 2024</i>)	1/1	N/A	N/A	N/A	N/A
Independent non-executive directors					
Mr. Law Cheuk Kin Stephen	2/2	5/5	1/1	N/A	0/1
Ms. Chan Wing Ki	2/2	5/5	N/A	N/A	1/1
Mr. Chow Ming Sang	2/2	5/5	1/1	N/A	0/1

Model Code for Securities Transactions

The Company has adopted the Model Code as its own code of conduct for dealings in the securities of the Company by the Directors since the Listing Date. Upon specific enquiry of all Directors, each of the Directors confirmed that they have complied with the Model Code during the period from the Listing Date to 31 December 2024.

Delegation by the Board

The Board reserves for its decision on all major matters of the Company, including: approval and monitoring of all policy matters, overall strategies and budgets, internal control and risk management systems, material transactions (in particular those that may involve conflict of interests), financial information, appointment of Directors and other significant financial and operational matters. All Directors are encouraged to openly share their views on the Company's affairs and issues and they are entitled to have access to the management who will respond to queries raised by the Directors as promptly and fully as possible. Directors could have recourse to seek independent professional advice in performing their duties at the Company's expense for ensuring that board procedures and all applicable rules and regulations are followed.

The daily management, administration and operation of the Group are delegated to the senior management. The delegated functions and responsibilities are periodically reviewed by the Board to ensure that they remain appropriate to the Company's needs. Approval has to be obtained from the Board prior to any significant transactions entered into by the management on the Company's behalf.

Corporate Governance Function

The Board recognizes that corporate governance should be the collective responsibility of Directors and has delegated the corporate governance duties to the Audit Committee which include:

- (a) to develop and review the Group's policies and practices on corporate governance and make recommendations to the Board;
- (b) to review and monitor the training and continuous professional development of Directors and senior management of the Group;
- (c) to review and monitor the Group's policies and practices on compliance with legal and regulatory requirements;
- (d) to develop, review and monitor the code of conduct and compliance manual (if any) applicable to employees and Directors of the Group; and
- (e) to review the Group's compliance with the Corporate Governance Code from time to time adopted by the Group and the disclosure in the Corporate Governance Report to be contained in the Company's annual reports.

BOARD COMMITTEES

Nomination Committee

We established a Nomination Committee on 28 May 2024 with its written terms of reference in compliance with the Listing Rules. As of the date of this annual report, the Nomination Committee currently comprises three members which include one executive Director, Dr. Wen Shuhao, and two independent non-executive Directors, Mr. Law Cheuk Kin Stephen and Ms. Chan Wing Ki. Dr. Wen Shuhao is the chairman of the Nomination Committee.

The primary duties of the Nomination Committee are to review the composition of the Board, monitor and make recommendations to the Board on the appointment and re-appointment of Directors and succession planning of Directors, in particular the chairman of the Board and the chief executive officer. The written terms of reference of the Nomination Committee are available on the respective websites of the Stock Exchange and the Company. The details of the policies in assessing the candidates or incumbent will be set out in the section headed "Nomination Policy" below.

As the Company was listed on 13 June 2024, no meeting of the Nomination Committee was held during the year ended 31 December 2024.

The Nomination Committee held one meeting on 28 March 2025, during which all the members of the Nomination Committee met and assessed the independence of the independent non-executive Directors, considered the re-election of retiring Directors, and reviewed the structure, size and composition of the Board.

Nomination Policy

The Company has adopted a director nomination policy which sets out the objective selection criteria, process, in relation to the nomination and appointment of Directors. The director nomination policy aims to ensure that the Board has a balance of skills, experience, and a diverse range of perspectives that align with Company's business needs.

The Nomination Committee shall identify, consider and recommend to the Board appropriate candidates to serve as Directors and to make recommendations to the Shareholders. The ultimate responsibility for selection and appointment of Directors rests with the entire Board.

Corporate Governance Report

The Nomination Committee will recommend to the Board for the nomination, appointment of new Directors in accordance with the following procedures and process: (a) the Nomination Committee shall first review and assess factors relating to the diversity of the Board, including but not limited to professional experience, skill, knowledge and length of service, gender, age, cultural and education background, and give consideration to the candidate's willingness to devote adequate time to the Board and independence of each independent non-executive Director based on the requirements of the Listing Rules as amended from time to time; and (b) the Nomination Committee shall then nominate suitable candidates to the Board based on the then-current and anticipated future leadership needs of the Company, with a view to achieving a sustainable and balanced development of the Company.

For the re-election of Directors at the general meeting, the Nomination Committee shall review the overall contribution and services to the Company of the retiring Directors, including its attendance at Board meetings, Board committee meetings and general meetings (if applicable), and his/her level of participation and performance on the Board. The Nomination Committee will consider the latest biographical information provided each of the retiring Directors who, being eligible, offers himself/herself for re-election; and will review and determine whether such retiring Director still meets the criteria for Director selection. The Nomination Committee shall then make recommendations to the Board on the re-election of Directors.

The Nomination Committee shall also monitor and review the implementation of the nomination policy, as appropriate from time to time, and will report to the Board annually.

Remuneration Committee

We established a Remuneration Committee on 28 May 2024 with its written terms of reference in compliance with the Listing Rules. As of the date of this annual report, the Remuneration Committee currently comprises three members, including one executive Director, Dr. Ma Jian, and two independent non-executive Directors, Mr. Law Cheuk Kin Stephen and Mr. Chow Ming Sang. Mr. Law Cheuk Kin Stephen is the chairman of the Remuneration Committee. The Remuneration Committee confirms that sufficient resources are available to perform its duties.

The primary duties of the Remuneration Committee are to determine a policy and structure for the Directors' and senior management's remunerations, establish a formal and transparent procedure for formulating related remuneration policies, evaluate the performance of Directors and senior management, approve the terms of Directors' service contracts and review and/or approve matters relating to share schemes, including but not limited to compliance of Chapter 17 of the Listing Rules, and recommend the remuneration packages for all Directors and senior management. The written terms of reference of the Remuneration Committee are available on the respective websites of the Stock Exchange and the Company.

The Remuneration Committee reviews and approves management's compensation proposals in response to the Company's overall operating performance indicators and the respective annual performance goals of senior management approved by the Board of Directors to be effective. The Remuneration Committee will make recommendations to the Board on the remuneration of executive Directors, non-executive Directors and senior management. In doing so, the Remuneration Committee will consult the chairman and/or chief executive about their remuneration proposals for other executive Directors, consider the remuneration paid by similar companies, the time commitment and responsibilities required and the conditions of employment of other positions within the Group, and ensure that no Director or any of his/her associates is involved in deciding his or her own remuneration.

The Remuneration Committee reviews and approves the compensations payable to executive Directors and senior management for loss or termination of their office or appointment to ensure that it is consistent with contractual terms and is otherwise fair and reasonable and not excessive; reviews and approves compensation arrangements relating to dismissal or removal of Directors for misconduct to ensure that they are consistent with contractual terms and are otherwise reasonable and appropriate. During the year ended 31 December 2024, there was no compensation arising from the above matters.

Corporate Governance Report

During the period from the Listing Date to 31 December 2024, one meeting of the Remuneration Committee was held to review and made recommendations to the Board on the grant of RSUs under the Post-IPO RSU Scheme.

As part of the Company's remuneration policy, the Board granted awards in the form of RSUs to the independent non-executive Directors under the Post-IPO RSU Scheme. The purpose of the Post-IPO RSU Scheme is to enable the Company to grant awards to eligible participants as incentives or rewards to recognize and acknowledge their contributions or potential contributions to the Group. Retaining and motivating the independent non-executive Directors ensure that they continue to provide their opinion and judgment to the Board in building the strategy and long-term development of the Company and in maintaining and further promoting the success of the Group's business. Thus, the Remuneration Committee considered that additional performance targets were not necessary, and the grant of the RSUs to the independent non-executive Directors was consistent with the Company's remuneration policy and aligns with the purpose of the Post-IPO RSU Scheme.

Details of the Directors' remuneration for the year ended 31 December 2024 are set out in Note 13 to the consolidated financial statements. Remuneration (including share based compensation) by band of the senior management of the Group for the year ended 31 December 2024 is set out below:

Remuneration band (HK\$)	Number of senior management
HK\$3,000,001 to HK\$3,500,000	1
HK\$5,500,001 to HK\$6,000,000	1

Audit Committee

We established an Audit Committee on 28 May 2024 with its written terms of reference in compliance with the Listing Rules. As of the date of this annual report, the Audit Committee currently comprises three members and all are independent non-executive Directors, which include Mr. Law Cheuk Kin Stephen, Ms. Chan Wing Ki and Mr. Chow Ming Sang. Mr. Law Cheuk Kin Stephen is the chairman of the Audit Committee.

The primary duties of the Audit Committee are to assist the Board by providing an independent view of the effectiveness of the financial reporting process, risk management and internal control system of the Group, maintaining an appropriate relationship with the auditors and monitoring the relationship between the Group and the auditors, overseeing the audit process and performing other duties and responsibilities as assigned by the Board. The written terms of reference of the Audit Committee are available on the respective websites of the Stock Exchange and the Company.

Five meeting(s) of the Audit Committee was/were held during the year ended 31 December 2024. The following is a summary of work performed by the Audit Committee:

- (a) reviewed the annual and interim results and reports, the Group's financial and accounting policies and practices and the scope of audit and appointment of auditors;
- (b) reviewed the risk management, internal control and compliance systems and the effectiveness of internal audit function and discussed with the management and internal audit on their findings;
- (c) discussed matters with respect to the accounting policies and practices adopted by the Company and internal control with senior management members of the Company;
- (d) reviewed the ESG report of the Company; and
- (e) performed corporate governance related duties such as reporting to the Board on the matters in the Corporate Governance Code.

Corporate Governance Report

The Company has proper arrangements for employees, in confidence, to raise concerns about possible improprieties in financial reporting, internal control and other matters.

DIRECTORS' RESPONSIBILITIES FOR FINANCIAL REPORTING IN RESPECT OF FINANCIAL STATEMENTS

The Directors acknowledge their responsibility for preparing the consolidated financial statements of the Company for the year ended 31 December 2024 which give a true and fair view of the affairs of the Company and the Group and of the Group's results and cash flows.

The management of the Company has provided to the Board such explanation and information as are necessary to enable the Board to carry out an informed assessment of the Company's financial statements, which are put to the Board for approval. The Company provides all members of the Board with monthly updates on Company's performance, positions and prospects.

The Directors were not aware of any material uncertainties relating to events or conditions which may cast significant doubt upon the Group's ability to continue as a going concern.

The statement by the external auditor of the Company regarding their reporting responsibilities on the consolidated financial statements of the Company is set out in the Independent Auditor's Report to this annual report.

RISK MANAGEMENT AND INTERNAL CONTROL

The Board acknowledges its responsibility for the Company's risk management and internal control systems and reviewing their effectiveness. The risk management and internal control measures are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss.

The Group has established the risk control and audit department to be responsible for identifying and supervising the Group's risk and internal control issues to ensure that the Group's business continues to meet the requirements of the Group's system and external supervision. The risk control and audit department serves as the Group's internal audit function and reports to the Audit Committee periodically.

The Group has set up the risk management policy, which clarifies the division of responsibility and authority of risk management and standardizes the basic process of risk management. The Group has set up a three-level risk management framework consisting of the Board, the Audit Committee, and various departments to ensure the efficient implementation of risk management work from top to bottom. During the Reporting Period, the Group invited a third-party professional institution to assist in improving the Group's risk management system, including sorting out the risk list, establishing risk assessment criteria, and conducting risk assessment surveys. Through risk identification, risks are divided into five major categories: strategy, market, operation, finance and compliance. Based on the results of the risk assessment, the Group's risk map is drawn to intuitively display the priorities and distribution of various risks, helping the management to allocate resources rationally and prioritize the prevention and response to important risk points.

The Group has instituted a series of internal control policies, measures and procedures which are designed to provide reasonable assurance for achieving objectives, including effective and efficient operations, reliable financial reporting and compliance with applicable laws and regulations:

- (a) The Group has formulated detailed policies and procedures for aspects such as research and development, sales, procurement, finance and investment, intellectual property protection, information security, environmental protection, and occupational health and safety and regularly provided relevant training to staff. The risk control and audit department will continuously monitor the implementation of these policies and procedures.

- (b) The Group regularly reviews and continuously optimizes its internal control system. The risk control and audit department will dynamically revise and improve the internal control matrix and manual in line with actual operating conditions. During the Reporting Period, the Group invited a third-party professional institution to conduct a comprehensive internal control evaluation to ensure that all departments properly complied with internal control and relevant compliance requirements. The institution has put forward corrective suggestions for the findings of the internal control evaluation, which have now been properly rectified.
- (c) The Group has set out in writing the prohibition of bribery, fraud and corruption in the anti-bribery and anti-corruption management policy. The risk control and audit department will supervise the behaviors of all employees, investigate violations and make recommendations on discipline in accordance with this policy.
- (d) The Group has clearly defined the reporting channels and the investigation and handling mechanism in the anti-fraud management policy. The reporting channels, including e-mail and telephone, are available on the Group's official website, in the sunshine cooperation code of conduct signed with suppliers, and provided to the employees during the new employee orientation training, allowing stakeholders to report any inappropriate matters that may be related to the Company securely, anonymously and confidentially.
- (e) The Group has ESG guidelines in place to mitigate the potential impact of ESG-related risks on its operations and other stakeholders in society, and meanwhile effectively controls potential ESG-related risks through scientific and comprehensive policies and management systems to ensure compliance with the relevant laws and regulations in all materials respects.

For the handling and dissemination of inside information, the Group has formulated an information disclosure management system to clarify the relevant obligations of insiders, reporting procedures and information disclosure responsibilities of relevant personnel, and arrange self-inspection in a timely manner. The Group monitors possible inside information and organizes intermediary agencies to determine whether the information is inside information or whether need to be disclosed.

The Group reviews its risk management and internal control systems annually. For the period from the Listing Date to 31 December 2024, management of the Group has confirmed to the Board and the Audit Committee the effectiveness of the risk management and internal control systems. The Board has reviewed and believes that the risk management and internal control systems of the Group for the period from the Listing Date to 31 December 2024 are complete, adequate and are fully and effectively operated in all material controls, including financial, operational and compliance controls, which are sufficient to protect the interests of all stakeholders of the Group. The Board also considers that the relevant resources, staff qualifications and experience are sufficient, and necessary training projects and budgets have been provided.

AUDITOR'S REMUNERATION

The Company appointed PricewaterhouseCoopers as the external auditor for the year ended 31 December 2024. The amount of audit service fee also included statutory audits of certain subsidiaries. The non-audit services mainly include corporate governance and risk assessment advisory services.

Services rendered for the Company	Total fees paid and payable (RMB'000)
Audit and audit-related services	3,750
Non-audit services	347

Corporate Governance Report

JOINT COMPANY SECRETARIES

During the Reporting Period, Ms. Chan Sau Ling had confirmed that she had taken no less than 15 hours of relevant professional training in compliance with Rule 3.29 of the Listing Rules. Ms. Liu Shimei was appointed as a joint company secretary of the Company with effect from 20 December 2024 and Ms. Liu will receive relevant professional training during the year ending 31 December 2025 to ensure compliance with the requirements under Rule 3.29 of the Listing Rules. All members of the Board can have access to the joint company secretaries' advice and services. The appointment and removal of the company secretary will be subject to Board's approval.

GENERAL MEETING

The Company was listed on 13 June 2024. No general meeting was held after the Listing, except for the extraordinary general meeting of the Company held on 8 November 2024 to approve the change of company name of the Company.

COMMUNICATION WITH SHAREHOLDERS AND INVESTOR RELATIONS

The Company considers that effective communication with Shareholders is essential for enhancing investor relations and understanding of the Shareholders and potential investors on the Group's business, performance and strategies. The Company also recognizes the importance of timely and non-selective disclosure of information, which will enable Shareholders and investors to make the informed investment decisions.

The general meetings provide opportunity for Shareholders to communicate directly with the Directors. The chairman of the Board will attend, and invite the chairmen of the Board committees, or, in their absence, another member of the committee to attend, the general meetings of the Company to answer Shareholders' questions. The external auditors of the Company will also attend the annual general meeting to answer questions about the conduct of the audit, the preparation and content of the auditor's report and auditor independence.

To promote effective communication, the Company adopts a Shareholders' communication policy which aims at establishing a two-way relationship and established a range of communication channels between the Company, its Shareholders, investors and other stakeholders. These include (i) the publication of interim and annual reports and/or dispatching circulars, notices, and other announcements; (ii) the annual general meeting or extraordinary general meeting providing a forum for Shareholders to raise comments and exchanging views with the Board; (iii) updated and key information of the Group available on the Company's website and the Stock Exchange's website; (iv) the Company's website offering communication channel between the Company and its stakeholders; (v) the Company's share registrar in Hong Kong serving the Shareholders in respect of all share registration matters; and (vi) convening investor meeting and/or analyst briefings, which are led by our management members and investor relations team with existing and potential investors.

Having considered the multiple channels of communication and shareholders engagement in the extraordinary general meeting held during the Reporting Period, the Board is satisfied that the shareholders communication policy has been properly implemented during the period from the Listing Date to 31 December 2024 and is effective.

SHAREHOLDERS' RIGHTS

To safeguard Shareholders' interests and rights, a separate resolution will be proposed by the chairman of that meeting for each substantially separate issue at Shareholder meetings, including nomination and election of individual Directors.

All resolutions put forward at Shareholder meetings will be voted on by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company and the Stock Exchange in a timely manner after each Shareholder meeting in accordance with the Listing Rules.

(1) Procedures for Shareholders to convene an extraordinary general meeting

In accordance with Article 17.3 of the Articles of Association, the Board may convene an extraordinary general meeting. Extraordinary general meetings shall also be convened on the written requisition of any one or more members holding together, as of the date of deposit of the requisition, shares representing not less than one-tenth of the paid-up capital of the Company which carry the right of voting at general meetings of the Company. The written requisition shall be deposited at the principal office of the Company in Hong Kong or, in the event the Company ceases to have such a principal office, the registered office of the Company, specifying the objects of the meeting and signed by the requisitionist(s). If the Board does not within 21 days from the date of deposit of the requisition proceed duly to convene the meeting to be held within a further 21 days, the requisitionist(s) themselves or any of them representing more than one-half of the total voting rights of all of them, may convene the general meeting in the same manner, as nearly as possible, as that in which meetings may be convened by the Board provided that any meeting so convened shall not be held after the expiration of three months from the date of deposit of the requisition.

(2) Procedures for putting forward proposals at general meeting

There are no provisions allowing Shareholders to propose new resolutions at the general meetings under the Companies Act of the Cayman Islands. However, Shareholders who wish to propose resolutions may follow Articles 17.3 to 17.7 of the Articles of Association for requisitioning an extraordinary general meeting and including a resolution at such meeting. The requirements and procedures are set out above.

(3) Inquiries to the Board

Shareholders and investors may send written inquiries or requests to the Company as follows:

Address: 3/F, Second Phase of the International Biomedical Industrial Park, No. 2 Hongliu Road, Futian District, Shenzhen, PRC
Email: ir@xtalpi.com

DIVIDEND POLICY

The Company is a company incorporated under the laws of the Cayman Islands, and the payment and amount of any future dividends will be subject to our constitutional documents and the Cayman Companies Act, pursuant to which a company may declare and pay a dividend out of either profits or share premium account. Any dividends we pay will be determined at the recommendation of our Board at its absolute discretion, taking into account factors including our actual and expected results of operations, cash flow and financial position, general business conditions and business strategies, expected working capital requirements and future expansion plans, legal, regulatory and other contractual restrictions, and other factors that our Board deems to be appropriate. Our Shareholders may approve, in a general meeting, any declaration of dividends, which must not exceed the amount recommended by our Board. No dividend has ever been proposed, paid or declared by our Company.

As we are a holding company, our ability to declare and pay dividends will also depend on the availability of dividends received from our PRC subsidiaries. PRC laws require that dividends be paid only out of the net profit calculated according to the PRC accounting principles, which differ in many aspects from generally accepted accounting principles in other jurisdictions, including IFRS. PRC laws also require foreign invested enterprises to set aside part of their net profit as statutory reserves, which are not available for distribution as cash dividends. Distributions from our subsidiaries may also be restricted if they incur debt or losses or in accordance with any restrictive covenants in bank credit facilities or other agreements that we or our subsidiaries may enter into in the future.

CONSTITUTIONAL DOCUMENTS

The Articles of Association have been amended and restated with effect from the Listing Date, and are available on the respective websites of the Stock Exchange and the Company.

Save as disclosed above, there is no other change in the constitutional documents of the Company from the Listing Date to 31 December 2024.

Report of Directors

The Board is pleased to present this Report of Directors together with the consolidated financial statements of the Group for the year ended 31 December 2024.

BOARD OF DIRECTORS

The Board currently comprises four executive Directors and three independent non-executive Directors.

The Directors during the year ended 31 December 2024 and up to the date of this annual report were:

Executive Directors

Dr. Wen Shuhao (*Chairman*)

Dr. Ma Jian

Dr. Lai Lipeng

Dr. Jiang Yide Alan

Non-executive Director

Dr. Gu Cuiping (*resigned with effect from 30 October 2024*)

Independent Non-executive Directors

Mr. Law Cheuk Kin Stephen

Ms. Chan Wing Ki

Mr. Chow Ming Sang

GENERAL INFORMATION

The Company was incorporated in the Cayman Islands on 28 April 2017 as an exempted limited liability company under the laws of the Cayman Islands. The Company's Shares were listed on the Main Board of the Stock Exchange on 13 June 2024.

PRINCIPAL ACTIVITIES

The Company is an innovative research platform company powered by artificial intelligent (AI) and robotics and is driving intelligent and digital transformation in the life sciences and material sciences sectors. The Group combines quantum physics, AI, cloud computing, and large-scale robotics to provide R&D solutions, services, and products for pharmaceuticals, biotechnology, renewable energy, and advanced materials industries globally. The Group, a pioneer in AI and robotics for life science and new materials R&D, has collaborated with over 300 global enterprises and research institutions, leading the way with an extensive successful track record in AI for science commercialization.

BUSINESS REVIEW

A review of the business of the Group during the year as required by Schedule 5 to the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), including a discussion and analysis on the Group's future business development and the financial and operational key performance indicators employed by the Directors in measuring the performance of the Group's business is set out in "Chairman's Statement" on pages 7 to 13 and "Management Discussion and Analysis" on pages 14 to 19 of this annual report. These discussions form part of this Report of Directors. Events affecting the Company that have occurred since the end of the financial year are set out in "Subsequent Events" in this Report of Directors on pages 63 to 64 of this annual report.

PRINCIPAL RISKS AND UNCERTAINTIES

The following list is a summary of certain principal risks and uncertainties faced by the Group, some of which are beyond its control:

- Our commercial success depends on our closed-loop integrated technology platform and technological capabilities, and their acceptance by our customers and collaborators. Failure to maintain our technological advantages or gain market acceptance of our platform or technology may have a material and adverse impact on our commercial success.
- The industries that we operate in are characterized by constant changes. If we are not able to upgrade, enhance or innovate our technologies and solutions, our business could be adversely affected.
- We intend to continue investing significantly in R&D, which may adversely impact our profitability and operating cash flow in the short-term and may not generate the results we expect to achieve.
- We may not be able to identify or discover new product candidates, and may allocate our limited resources to pursue a particular product candidate and fail to capitalize on product candidates that may later prove to be more profitable, or for which there is a greater likelihood of success.
- If our current research collaborators or key R&D employees terminate their relationships with us or develop relationships with a competitor or delay their delivery of adequate research results, our ability to conduct R&D, the progress of our R&D programs, and our ability to protect our IP could be adversely affected.
- The data and information that we gather in our R&D process could be inaccurate or incomplete, which could harm our business, reputation, financial condition and results of operations.

ENVIRONMENTAL POLICIES AND PERFORMANCE

The Company has established a structure of ESG governance led by the Board, with clearly defined roles and responsibilities at each level. The Group has developed and implemented the ESG working group charter, ensuring collaboration across all levels to efficiently execute ESG initiatives. Details of the Group's environmental policies and performance for the Reporting Period are set out in the Company's ESG report, which forms part of this annual report, will be published on the websites of the Stock Exchange and the Company on the same date as the publication of this annual report.

COMPLIANCE WITH RELEVANT LAWS AND REGULATIONS

As far as the Board and management are aware, the Group has complied in all material aspects with the relevant laws and regulations that have a significant impact on the business and operation of the Group. During the year ended 31 December 2024, there was no material breach of, or non-compliance with, applicable laws and regulations by the Group.

EMPLOYEES AND REMUNERATION POLICIES

A review of the employees and remuneration policies of the Group for the Reporting Period are set out in "Management Discussion and Analysis" on page 19 of this annual report.

Report of Directors

RETIREMENT BENEFITS SCHEME

The Group participates in the Mandatory Provident Fund for its employees in Hong Kong under which the contributions are made based on a percentage of the employees' salaries. Full-time employees of the Group in the PRC are covered by various government-sponsored defined contribution pension plans under which the employees are entitled to a monthly pension based on certain formulas. The relevant government agencies are responsible for the pension liability to these retired employees. The Group contributes on a monthly basis to these pension plans. During the Reporting Period, there were no forfeited contributions under the Group's retirement benefits scheme or pension plans, and there were no forfeited contributions that may be used by the Group to reduce the existing level of contribution. Details of the pension contributions of the Company are set out in Notes 2.2.12(b), 12 and 13 to the Consolidated Financial Statements in this annual report.

MAJOR CUSTOMERS AND SUPPLIERS

For the year ended 31 December 2024, the five largest customers of the Group accounted for approximately 33.4% (2023: 36.3%) of the Group's total revenues while the largest customer of the Group accounted for approximately 13.6% (2023: 12.1%) of the Group's total revenues. In addition, for the year ended 31 December 2024, the five largest suppliers of the Group accounted for approximately 30.7% (2023: 27.1%) of the Group's total purchase amounts while the largest supplier for the year ended 31 December 2024 accounted for approximately 9.5% (2023: 12.8%) of our total purchase amount.

None of the Directors, their respective close associates, or any Shareholder of the Company who, to the knowledge of the Directors, owns more than 5% of the Company's issued capital, has any interest in any of the Group's five largest customers and suppliers during the Reporting Period.

KEY RELATIONSHIP WITH STAKEHOLDERS

The Group recognizes that various stakeholders including suppliers, employees, Shareholders and other business associates are key to Group's success. The Group strives to achieve corporate sustainability through engaging, collaborating, and cultivating strong relationship with them.

Relationship with Our Employees

We endeavor to cultivate talented and qualified employees by treating our employees with dignity, respect and fairness. We provide executive coaching, employee surveys or engagement, training and development, compensation and rewards. We enter into employment contracts with our employees to cover matters such as salaries, bonuses, employee benefits, workplace safety, confidentiality obligations, work product assignment clause and grounds for termination.

The remuneration package of our employees usually includes competitive salaries, bonuses and incentive schemes, which are generally determined by their qualifications, industry experience, position and performance. We make contributions to social security schemes, including pension, medical insurance, work-related injury insurance, unemployment insurance, maternity insurance and housing funds, as required by the PRC laws and regulations.

Relationship with Our Shareholders

We recognize the importance of protecting the interests of the Shareholders and of having effective communication with them. We believe communication with the Shareholders is a two-way process and have thrived to ensure the quality and effectiveness of information disclosure, maintain regular dialog with the Shareholders and listen carefully to the views and feedback from the Shareholders. This is done through general meetings, corporate communications, annual and interim reports and results announcements.

BIOGRAPHIES OF THE DIRECTORS AND SENIOR MANAGEMENT

The biographical details of the Directors and the senior management of the Company as of the date of this annual report are set out in “Profiles of Directors and Senior Management” on pages 20 to 24 of this annual report.

DIRECTORS’ RIGHTS TO ACQUIRE SHARES OR DEBENTURES

Save as disclosed in this annual report, at no time during the year ended 31 December 2024 was the Company or any of its subsidiaries a party to any arrangements to enable the Directors to acquire benefits by means of the acquisition of Shares in, or debentures of, the Company or any other body corporate.

REMUNERATION OF THE DIRECTORS AND FIVE HIGHEST PAID INDIVIDUALS

In compliance with Rule 3.25 of the Listing Rules and the Corporate Governance Code, the Company has established the Remuneration Committee to formulate remuneration policies. The remuneration is determined and recommended based on each Director’s and senior management personnel’s qualification, position and seniority. As for the independent non-executive Directors, their remuneration is determined by the Board upon recommendation from the Remuneration Committee. The Directors and the senior management personnel are eligible participants of the Pre-IPO ESOP, Post-IPO Share Option Scheme, and/or the Post-IPO RSU Scheme.

Details of the remuneration of the Directors, chief executive officer and the five highest paid individuals for the Reporting Period are set out in Notes 12 and 13 to the consolidated financial statements. During the Reporting Period, there was no emoluments paid by the Group to any of the Directors, chief executive officer or the five highest paid individuals as an inducement to join, or upon joining the Group, or as compensation for loss of office.

As of 31 December 2024, none of the Directors had waived or agreed to waive any remuneration.

DIRECTORS’ INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACT OF SIGNIFICANCE

Save as disclosed in this annual report, none of the Directors nor any entity connected with the Directors had a material interest, either directly or indirectly, in any transaction, arrangement or contract of significance, whether for the provision of services or otherwise, to the Group to which the Company, its holding company, or any of its subsidiaries or fellow subsidiaries was a party subsisting during or at the end of the year ended 31 December 2024.

DIRECTORS’ INTERESTS IN COMPETING BUSINESS

Save for the Directors’ respective interests in the Group, none of the Directors was interested in any business which competes or is likely to compete, directly or indirectly, with the businesses of the Group for the year ended 31 December 2024.

MANAGEMENT CONTRACTS

No contract concerning the management and administration of the whole or any substantial part of the business of the Company was entered or existed during the year ended 31 December 2024.

RELATED PARTY TRANSACTIONS AND CONNECTED TRANSACTION

Details on related party transactions for the year ended 31 December 2024 are set out in Note 39 to the consolidated financial statements.

Save for the procurement of cloud computing services which constitutes fully exempt continuing connected transactions for the Company, (i) none of the related party transactions constitute a connected transaction or continuing connected transaction which is subject to the Shareholders’ approval, annual review and all disclosure requirements under Chapter 14A of the Listing Rules; and (ii) there was no connected transaction nor continuing connected transaction of the Group which has to be disclosed in accordance with Chapter 14A of the Listing Rules during the Reporting Period.

Report of Directors

INTERESTS AND SHORT POSITIONS OF THE DIRECTORS AND CHIEF EXECUTIVE OF THE COMPANY IN THE SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY AND ITS ASSOCIATED CORPORATIONS

As of 31 December 2024, the interests and short positions of the Directors and chief executive of the Company in any of the Shares, underlying Shares or debentures of the Company or any of its associated corporation (within the meaning of Part XV of the SFO) which were notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of SFO (including interests and short positions in which they are taken or deemed to have under such provisions of the SFO), or which were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or otherwise required to be notified to the Company and the Stock Exchange pursuant to the Model Code, were as follows:

Interests in Shares and underlying Shares

Name of Director	Capacity/nature of interest	Number of Shares/ underlying Shares ⁽¹⁾	Percentage of shareholding in the Company ⁽²⁾
Dr. Wen Shuhao	Beneficial owner ⁽³⁾	81,093,362 (L)	2.38%
	Founder of trust ⁽⁴⁾	222,126,400 (L)	6.51%
	Interest in controlled corporation ⁽⁵⁾⁽⁶⁾	506,718,783 (L)	14.84%
Dr. Ma Jian	Beneficial owner ⁽⁷⁾	45,230,342 (L)	1.33%
	Founder of trust ⁽⁸⁾	122,908,500 (L)	3.60%
	Interest in controlled corporation ⁽⁹⁾	59,103,125 (L)	1.73%
Dr. Lai Lipeng	Beneficial owner ⁽¹⁰⁾	32,315,661 (L)	0.95%
	Founder of trust ⁽¹¹⁾	87,814,140 (L)	2.57%
Dr. Jiang Yide Alan	Founder of trust ⁽¹²⁾	3,800,000 (L)	0.11%
	Beneficiary of trust ⁽¹³⁾	3,800,000 (L)	0.11%
	Interest in controlled corporation ⁽¹⁴⁾	2,400,000 (L)	0.07%
Mr. Law Cheuk Kin Stephen	Beneficiary of trust ⁽¹⁵⁾	900,000 (L)	0.03%
Ms. Chan Wing Ki	Beneficiary of trust ⁽¹⁶⁾	450,000 (L)	0.01%
Mr. Chow Ming Sang	Beneficiary of trust ⁽¹⁷⁾	450,000 (L)	0.01%

Notes:

(1) The letter "L" denotes long positions.

(2) Calculated based on 3,413,523,761 Shares in issue as of 31 December 2024.

(3) Representing 81,093,362 Shares underlying the options granted to Dr. Wen Shuhao under the Pre-IPO ESOP.

(4) QuantumPharm Holdings is held as to 99% by WSH Family Holdings, which is the holding vehicle of TMF (Cayman) Ltd.. TMF (Cayman) Ltd. is the trustee of the WSH Family Trust, a discretionary trust established by Dr. Wen Shuhao as settlor. Under the SFO, Dr. Wen Shuhao is deemed to have a long position in 222,126,400 Shares.

- (5) QuantumPharm Roc, the shareholding platform for the Pre-IPO ESOP which holds the Shares underlying the options granted thereunder for the benefit of the grantees, is wholly owned by QuantumPharm Holdings. Under the SFO, Dr. Wen Shuhao is deemed to be interested in the 295,996,143 Shares in which QuantumPharm Roc is interested.
- (6) Pursuant to the powers of attorney executed by (i) Dr. Ma Jian and Crete Helix; and (ii) Dr. Lai Lipeng and SevensingBAlpha in favor of Dr. Wen Shuhao and QuantumPharm Holdings, QuantumPharm Holdings is authorized to exercise all the voting rights attached to the Shares held by Crete Helix and SevensingBAlpha. Under the SFO, Dr. Wen Shuhao is deemed to be interested in the 122,908,500 Shares in which Crete Helix is interested and the 87,814,140 Shares in which SevensingBAlpha is interested.
- (7) Representing 45,230,342 Shares underlying the options granted to Dr. Ma Jian under the Pre-IPO ESOP.
- (8) Crete Helix is held as to 99% by MH International Holdings, which is the holding vehicle of TMF (Cayman) Ltd.. TMF (Cayman) Ltd. is the trustee of the MH Fund Trust, a discretionary trust established by Dr. Ma Jian as settlor. Under the SFO, Dr. Ma Jian is deemed to be interested in the 122,908,500 Shares in which Crete Helix is interested.
- (9) Representing 59,103,125 Shares underlying the options granted under the Pre-IPO ESOP held by QuantumPharm Employee Holdings, a holding vehicle wholly owned by the trustee of the QuantumPharm Employee Benefit Trust for the benefit of 13 employees and ex-employees of the Group. In accordance with the terms of the trust deed of the QuantumPharm Employee Benefit Trust dated 28 June 2021, Dr. Ma Jian, being the sole member of the advisory committee established by the Company, has the sole power to make all decisions relating to the exercise of any voting and other rights of the properties held under the trust and to give instructions and directions to the trustee for the execution of such decisions.
- (10) Representing 32,315,661 Shares underlying the options granted to Dr. Lai Lipeng under the Pre-IPO ESOP.
- (11) SevensingBAlpha is held as to 99% by LPHappy Holding, which is the holding vehicle of TMF (Cayman) Ltd.. TMF (Cayman) Ltd. is the trustee of the LPHappy Family Trust, a discretionary trust established by Dr. Lai Lipeng as settlor. Under the SFO, Dr. Lai Lipeng is deemed to be interested in the 87,814,140 Shares in which SevensingBAlpha is interested.
- (12) Representing 3,800,000 Shares underlying the options granted under the Pre-IPO ESOP which are held by a spousal lifetime access trust established by Dr. Jiang Yide Alan for the benefit of his spouse. Under the SFO, Dr. Jiang Yide Alan is deemed to be interested in the Shares in which the aforesaid trust is interested.
- (13) Representing 3,800,000 Shares underlying the options granted under the Pre-IPO ESOP which are held by a spousal lifetime access trust established by the spouse of Dr. Jiang Yide Alan for the benefit of Dr. Jiang Yide Alan. Under the SFO, Dr. Jiang Yide Alan is deemed to be interested in the Shares in which the aforesaid trust is interested.
- (14) Representing 2,400,000 Shares underlying the options granted under the Pre-IPO ESOP which are held by ASJX Envision LLC. ASJX Envision LLC is held as to 40% by a revocable trust established by Dr. Jiang Yide Alan, 40% by a revocable trust established by the spouse of Dr. Jiang Yide Alan and 20% by a family trust established by them. Under the SFO, Dr. Jiang Yide Alan is deemed to be interested in the Shares in which ASJX Envision LLC is interested.
- (15) Representing 900,000 Shares underlying the RSUs granted to Mr. Law Cheuk Kin Stephen under the Post-IPO RSU Scheme.
- (16) Representing 450,000 Shares underlying the RSUs granted to Ms. Chan Wing Ki under the Post-IPO RSU Scheme.
- (17) Representing 450,000 Shares underlying the RSUs granted to Mr. Chow Ming Sang under the Post-IPO RSU Scheme.

Save as disclosed above, as of 31 December 2024, to the best knowledge of the Directors and chief executive of the Company, none of the Directors and chief executive of the Company had any interests or short positions in the Shares, underlying Shares or debentures of the Company or any of its associated corporation (within the meaning of Part XV of the SFO) which were notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of SFO (including interests and short positions in which they are taken or deemed to have under such provisions of the SFO), or which were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or otherwise required to be notified to the Company and the Stock Exchange pursuant to the Model Code.

Report of Directors

INTERESTS OF THE SUBSTANTIAL SHAREHOLDERS IN THE SHARES AND UNDERLYING SHARES

As of 31 December 2024, so far as the Directors were aware, the following persons (not being a Director or chief executive of the Company) had or were deemed or taken to have interests or short positions in the Shares or the underlying Shares which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or which were required, pursuant to section 362 of the SFO, to be entered in the register referred to therein:

Interests in the Shares

Name of Shareholder	Nature of interest	Number of Shares ⁽¹⁾	Percentage of shareholding in the Company ⁽²⁾
WSH Family Holdings Limited	Interest in controlled corporation ⁽³⁾	728,845,183 (L)	21.35%
TMF (Cayman) Ltd.	Trustee of trusts ⁽³⁾	728,845,183 (L)	21.35%
QuantumPharm Holdings Limited	Beneficial owner	222,126,400 (L)	6.51%
	Interest in controlled corporation ⁽⁴⁾⁽⁵⁾	506,718,783 (L)	14.84%
QuantumPharm Roc Holdings Limited	Beneficial owner	295,996,143 (L)	8.67%
Tencent Holdings Limited	Interest in controlled corporation ⁽⁶⁾	439,866,580 (L)	12.89%
Image Frame Investment (HK) Limited	Beneficial owner	439,866,580 (L)	12.89%
HSG Venture VI Holdco, Ltd.	Beneficial owner	203,444,338 (L)	5.96%
HongShan Capital Venture Fund VI, L.P.	Interest in controlled corporation ⁽⁷⁾	203,444,338 (L)	5.96%
HSG Venture VI Management, L.P.	Interest in controlled corporation ⁽⁷⁾	203,444,338 (L)	5.96%
HSG Holding Limited	Interest in controlled corporation ⁽⁷⁾⁽⁸⁾	265,823,991 (L)	7.79%
SNP China Enterprises Limited	Interest in controlled corporation ⁽⁷⁾⁽⁸⁾	265,823,991 (L)	7.79%
Shen Nan Peng	Interest in controlled corporation ⁽⁷⁾⁽⁸⁾⁽⁹⁾	282,182,729 (L)	8.27%
China Life Chengda (Shanghai) Healthcare Equity Investment Center (Limited Partnership)	Beneficial owner	235,552,877 (L)	6.90%
China Life Chengda (Shanghai) Healthcare Equity Investment Management Co., Ltd.	Interest in controlled corporation ⁽¹⁰⁾	235,552,877 (L)	6.90%
China Life Insurance (Group) Company	Interest in controlled corporation ⁽¹⁰⁾	235,552,877 (L)	6.90%
China Life Insurance Company Limited	Interest in controlled corporation ⁽¹⁰⁾	235,552,877 (L)	6.90%

Report of Directors

Name of Shareholder	Nature of interest	Number of Shares ⁽¹⁾	Percentage of shareholding in the Company ⁽²⁾
5Y Capital GP Limited	Interest in controlled corporation ⁽¹¹⁾	255,712,255 (L)	7.49%
Liu Qin	Interest in controlled corporation ⁽¹¹⁾	255,712,255 (L)	7.49%
Ni Yuanyuan	Interest of spouse ⁽¹²⁾	255,712,255 (L)	7.49%
Shi Jianming	Interest in controlled corporation ⁽¹¹⁾	255,712,255 (L)	7.49%
Lou Yiting	Interest of spouse ⁽¹³⁾	255,712,255 (L)	7.49%

Notes:

- (1) The letter "L" denotes long positions.
- (2) Calculated based on 3,413,523,761 Shares in issue as of 31 December 2024.
- (3) QuantumPharm Holdings is held as to 99% by WSH Family Holdings, which is the holding vehicle of TMF (Cayman) Ltd.. TMF (Cayman) Ltd., being the trustee of the WSH Family Trust, a discretionary trust established by Dr. Wen Shuhao as settlor. Under the SFO, each of WSH Family Holdings and TMF (Cayman) Ltd. is deemed to be interested in the Shares in which QuantumPharm Holdings is interested.
- (4) QuantumPharm Roc, being the shareholding platform for the Pre-IPO ESOP which holds the Shares underlying the options granted thereunder for the benefit of the grantees, is wholly owned by QuantumPharm Holdings. Under the SFO, QuantumPharm Holdings is deemed to be interested in the 295,996,143 Shares in which QuantumPharm Roc is interested.
- (5) Pursuant to the powers of attorney executed by (i) Dr. Ma Jian and Crete Helix; and (ii) Dr. Lai Lipeng and SevensingBAAlpha in favor of Dr. Wen Shuhao and QuantumPharm Holdings, QuantumPharm Holdings is authorized to exercise all the voting rights attached to the Shares held by Crete Helix and SevensingBAAlpha. Under the SFO, QuantumPharm Holdings is deemed to be interested in the 122,908,500 Shares in which Crete Helix is interested and the 87,814,140 Shares in which SevensingBAAlpha is interested.
- (6) Tencent Holdings Limited is the sole member of Image Frame Investment (HK) Limited. Under the SFO, Tencent Holdings Limited is deemed to be interested in the Shares in which Image Frame Investment (HK) Limited is interested.
- (7) HSG Venture VI Holdco, Ltd. is wholly owned by HongShan Capital Venture Fund VI, L.P., whose general partner is HSG Venture VI Management, L.P.. The general partner of HSG Venture VI Management, L.P. is HSG Holding Limited, a wholly-owned subsidiary of SNP China Enterprises Limited. Shen Nan Peng is the sole shareholder of SNP China Enterprises Limited. Under the SFO, each of HongShan Capital Venture Fund VI, L.P., HSG Venture VI Management, L.P., HSG Holding Limited, SNP China Enterprises Limited and Shen Nan Peng is deemed to be interested in the 203,444,338 Shares in which HSG Venture VI Holdco, Ltd. is interested.
- (8) HSG Venture VIII Holdco, Ltd. is wholly owned by HongShan Capital Venture Fund VIII, L.P., whose general partner is HSG Venture VIII Management, L.P. HSG Growth VI Holdco E, Ltd. is wholly owned by HongShan Capital Growth Fund VI, L.P., whose general partner is HSG Growth VI Management, L.P.. The general partner of each of HSG Venture VIII Management, L.P. and HSG Growth VI Management, L.P. is HSG Holding Limited, a wholly-owned subsidiary of SNP China Enterprises Limited. Shen Nan Peng is the sole shareholder of SNP China Enterprises Limited. Under the SFO, each of HSG Holding Limited, SNP China Enterprises Limited and Shen Nan Peng is deemed to be interested in the 13,303,439 Shares in which HSG Venture VIII Holdco, Ltd. is interested and the 16,358,738 Shares in which HSG Growth VI Holdco E, Ltd. is interested.
- (9) HCHP Holdco, Ltd. is wholly owned by HCHP Master Fund, which is managed by HCHP Management Limited as investment manager, which is in turn wholly owned by HCHP Management Holding Limited. The majority voting rights of HCHP Management Holding Limited are indirectly held by its non-executive director, Shen Nan Peng. Under the SFO, Shen Nan Peng is deemed to be interested in the 16,358,738 Shares in which HCHP Holdco, Ltd. is interested.

Report of Directors

- (10) The general partner of China Life Chengda (Shanghai) Healthcare Equity Investment Center (Limited Partnership) (“**China Life Chengda**”) is China Life Chengda (Shanghai) Healthcare Equity Investment Management Co., Ltd., a limited liability company indirectly owned by China Life Insurance (Group) Company. The ultimate limited partners of China Life Chengda are China Life Insurance Company Limited, a company listed on the Stock Exchange (stock code: 2628) and the Shanghai Stock Exchange (stock code: 601628), being its largest limited partner of with 74.94% partnership interest, and the Ministry of Finance of the PRC. Under the SFO, each of China Life Chengda (Shanghai) Healthcare Equity Investment Management Co., Ltd., China Life Insurance (Group) Company, China Life Insurance Company Limited is deemed to be interested in the Shares in which China Life Chengda is interested.
- (11) Evolution Fund I, L.P., Evolution Special Opportunity Fund I, L.P. and Evolution Fund I Co-investment, L.P., are exempted limited partnerships established under the laws of the Cayman Islands and are controlled by 5Y Capital GP Limited, as their general partner. Each of Liu Qin and Shi Jianming is entitled to exercise or control the exercise of one-half of the voting power of all issued shares in 5Y Capital GP Limited at its general meeting. Under the SFO, each of 5Y Capital GP Limited, Liu Qin and Shi Jianming is deemed to be interested in the Shares in which Evolution Fund I, L.P., Evolution Special Opportunity Fund I, L.P. and Evolution Fund I Co-investment, L.P. are interested.
- (12) Ni Yuanyuan is the spouse of Liu Qin. Under the SFO, Ni Yuanyuan is deemed to be interested in the Shares in which Liu Qin is interested.
- (13) Lou Yiting is the spouse of Shi Jianming. Under the SFO, Lou Yiting is deemed to be interested in the Shares in which Liu Qin is interested.

Save as disclosed above, as of 31 December 2024, the Directors were not aware of any other person (not being a Director or chief executive of the Company) who had an interest or short position in the Shares or the underlying Shares which would fall to be disclosed to the Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or which were required, pursuant to section 362 of the SFO, to be entered in the register referred to therein.

LOCK-UP

Based on information that is publicly available to the Company or otherwise within the knowledge of the Directors, the following Shares are subject to disposal restrictions pursuant to Rule 18C.14 of the Listing Rules as of the latest practicable date prior to the issue of this annual report:

Key Persons (as defined under Rule 18C.14 of the Listing Rules)

Name	Number of Shares held in the Company subject to lock-up undertakings upon Listing	Percentage of shareholding in the Company subject to lock-up undertakings upon Listing ⁽¹⁾	Last day subject to the lock-up undertakings
Dr. Wen Shuhao ⁽²⁾	222,126,400 ⁽³⁾	5.53%	12 June 2025 ⁽¹¹⁾
	81,093,362 ⁽⁴⁾	2.02%	12 June 2025 ⁽¹¹⁾
	22,000,000 ⁽⁵⁾	0.55%	12 June 2025 ⁽¹¹⁾
Dr. Ma Jian ⁽²⁾	122,908,500 ⁽⁶⁾	3.06%	12 June 2025 ⁽¹¹⁾
	45,230,342 ⁽⁷⁾	1.13%	12 June 2025 ⁽¹¹⁾
	59,103,125 ⁽⁸⁾	1.47%	12 June 2025 ⁽¹¹⁾
Dr. Lai Lipeng ⁽²⁾	87,814,140 ⁽⁹⁾	2.18%	12 June 2025 ⁽¹¹⁾
	32,315,661 ⁽¹⁰⁾	0.80%	12 June 2025 ⁽¹¹⁾
Subtotal	672,591,530	16.73%	

Notes:

- (1) Calculated based on 4,019,811,761 Shares in issue as of 6 April 2025, being the latest practicable date prior to the issue of this annual report.
- (2) Each of Dr. Wen Shuhao, Dr. Ma Jian and Dr. Lai Lipeng is a co-founder of the Company and an executive Director.
- (3) Representing the Shares held by QuantumPharm Holdings. QuantumPharm Holdings is held as to 99% by WSH Family Holdings, which is the holding vehicle of TMF (Cayman) Ltd.. TMF (Cayman) Ltd. is the trustee of the WSH Family Trust, a discretionary trust established by Dr. Wen Shuhao as settlor.
- (4) Representing the Shares held by QuantumPharm Roc underlying outstanding options held by Dr. Wen Shuhao. Such Shares will be transferred by QuantumPharm Roc to Dr. Wen Shuhao upon the exercise of the options and continue to be subject to the disposal restrictions. For further details, please refer to the sections headed "History, Development and Corporate Structure" and "Underwriting" in the Prospectus.
- (5) Representing the Shares held by QuantumPharm Roc underlying outstanding options held by Dr. Jiang Yide Alan (and his close associates) and Mr. Tam Man Hong. Such Shares will be transferred by QuantumPharm Roc to them upon the exercise of the options and continue to be subject to the disposal restrictions. Pursuant to the powers of attorney granted by Mr. Tam Man Hong and Dr. Jiang Yide Alan in favor of Dr. Wen Shuhao on 28 May 2024, respectively, Dr. Wen Shuhao is unconditionally, indefinitely and irrevocably authorized and appointed to exercise all the voting rights attached to: (i) the Shares underlying the vested outstanding options owned by them; and (ii) the Shares transferred or issued to them upon the exercise of the vested outstanding options, except for any matter the outcome of the vote on which will disproportionately, materially and adversely affect the grantors, as compared to Dr. Wen Shuhao or any other Shareholder. The powers of attorney shall be valid from the Listing Date for an indefinite term. Each of Mr. Tam Man Hong and Dr. Jiang Yide Alan, being the key persons of the Company, have provided undertakings to each of the Stock Exchange and the Company regarding the disposal of securities pursuant to Rule 18C.14(1) of the Listing Rules. For further details, please refer to the sections headed "History, Development and Corporate Structure" and "Underwriting" in the Prospectus.
- (6) Representing the Shares held by Crete Helix. Crete Helix is held as to 99% by MH International Holdings, which is the holding vehicle of TMF (Cayman) Ltd.. TMF (Cayman) Ltd. is the trustee of the MH Fund Trust, a discretionary trust established by Dr. Ma Jian as settlor.
- (7) Representing the Shares held by QuantumPharm Roc underlying outstanding options held by Dr. Ma Jian. Such Shares will be transferred by QuantumPharm Roc to Dr. Ma Jian upon the exercise of the options and continue to be subject to the disposal restrictions. For further details, please refer to the sections headed "History, Development and Corporate Structure" and "Underwriting" in the Prospectus.
- (8) Representing the Shares held by QuantumPharm Roc underlying options held by QuantumPharm Employee Holdings, a holding vehicle wholly owned by TMF Trust (HK) Limited as trustee of the QuantumPharm Employee Benefit Trust, a discretionary trust established for the purposes of managing and administering the outstanding options granted to Dr. Zhang Peiyu, a member of senior management, and 12 other employees and ex-employees of the Group. Such options have been irrevocably settled into the QuantumPharm Employee Benefit Trust under the terms of its trust deed dated 28 June 2021. Under the terms of the trust deed, Dr. Ma Jian, being the sole member of the advisory committee established by the Company, has the sole power to make all decisions relating to the exercise of any voting and other rights of the properties (including the exercise of the options) held under the trust and to give instructions and directions to the trustee for the execution of such decisions without the need to seek for consent from the beneficiaries, and the beneficiaries have no right to sell, bequeath or transfer any trust property. Upon exercise of the relevant options by the trustee based on Dr. Ma Jian's instructions, the underlying Shares will be transferred by QuantumPharm Roc to QuantumPharm Employee Holdings (but not to the beneficiaries) and become part of the trust property of the QuantumPharm Employee Benefit Trust. Dividends paid to QuantumPharm Employee Holdings as a Shareholder will also form part of the trust property of the QuantumPharm Employee Benefit Trust. Under the terms of the trust deed, Dr. Ma Jian also has the power to direct the trustee to make distributions of the trust property to the beneficiaries, but no beneficiaries can unilaterally withdraw from the trust any trust property, including options, Shares or dividends held thereunder.

Dr. Ma Jian has provided a lock-up undertaking to the Company and the Stock Exchange with respect to the Shares to be transferred to the QuantumPharm Employee Benefit Trust upon the exercise of vested options held by it which Dr. Ma Jian has the power to provide voting instructions under Rule 18C.14 of the Listing Rules and that he will, and will procure the QuantumPharm Employee Benefit Trust to, continue to comply with the relevant disposal restrictions throughout the lock-up period.
- (9) Representing the Shares held by SeveningBAlpha. SeveningBAlpha is held as to 99% by LPHappy Holding, which is the holding vehicle of TMF (Cayman) Ltd.. TMF (Cayman) Ltd. is the trustee of the LPHappy Family Trust, a discretionary trust established by Dr. Lai Lipeng as settlor.

Report of Directors

(10) Representing the Shares held by QuantumPharm Roc underlying outstanding options held by Dr. Lai Lipeng. Such Shares will be transferred by QuantumPharm Roc to Dr. Lai Lipeng upon the exercise of the options and continue to be subject to the disposal restrictions. Dr. Lai Lipeng has provided a lock-up undertaking to the Company and the Stock Exchange with respect to the Shares underlying the options granted to him as well as any Shares to be transferred to him upon the exercise of his vested options under Rule 18C.14 of the Listing Rules and that he will continue to comply with the relevant disposal restrictions throughout the lock-up period.

(11) Being the date which is 12 months from the Listing Date.

Undertaking Providers

Name	Number of Shares held in the Company subject to lock-up undertakings upon Listing	Percentage of shareholding in the Company subject to lock-up undertakings upon Listing ⁽¹⁾	Last day subject to the lock-up undertakings
Image Frame Investment (HK) Limited	439,866,580	10.94%	6 May 2025 ⁽³⁾
HSG Venture VI Holdco, Ltd.	203,444,338	5.06%	6 May 2025 ⁽³⁾
HSG Growth VI Holdco E, Ltd.	49,076,214	1.22%	6 May 2025 ⁽³⁾
HCHP Holdco, Ltd. ⁽²⁾	16,358,738	0.41%	6 May 2025 ⁽³⁾
HSG Venture VIII Holdco, Ltd.	13,303,439	0.33%	6 May 2025 ⁽³⁾
Evolution Fund I, L.P.	137,008,547	3.41%	6 May 2025 ⁽³⁾
Evolution Special Opportunity Fund I, L.P.	85,349,937	2.12%	6 May 2025 ⁽³⁾
Evolution Fund I Co-investment, L.P.	33,353,771	0.83%	6 May 2025 ⁽³⁾
China Life Chengda (Shanghai) Healthcare Industry Equity Investment Center (Limited Partnership)	235,552,877	5.86%	6 May 2025 ⁽³⁾
Beijing PICC Health & Pension Industry Investment Fund (Limited Partnership)	119,730,945	2.98%	6 May 2025 ⁽³⁾
Subtotal	1,333,045,386	33.16%	

Notes:

- (1) Calculated based on 4,019,811,761 Shares in issue as of 6 April 2025, being the latest practicable date prior to the issue of this annual report.
- (2) Save for HCHP Holdco, Ltd., which is a close associate of a Pathfinder SII, the other undertaking providers are Pathfinder SIIs of the Company.
- (3) The date falling on the 30th day after 6 April 2025, being the date of the Company's announcement on the removal of designation as a Pre-Commercial Company as required under Rule 18C.24 of the Listing Rules.

SHARE INCENTIVE SCHEMES

During the year ended 31 December 2024 and up to the date of this annual report, we have three share schemes in effect.

1. Pre-IPO ESOP

The following is a summary of the principal terms of the Pre-IPO ESOP as adopted by the Shareholders on 24 July 2021 and amended on 5 August 2021. No further awards was or will be granted under the Pre-IPO ESOP after the Listing. The terms of the Pre-IPO ESOP are not subject to the provisions of Chapter 17 of the Listing Rules.

(a) Purpose

The purpose of the Pre-IPO ESOP is to motivate and reward employees and other individuals to perform at the highest level and contribute significantly to the success of our Group, thereby furthering the best interests of our Company and the Shareholders.

(b) Participants

Any individuals (including officers) employed on a full-time basis by our Group, any non-employee directors of our Company and our subsidiaries, any individuals (including advisors) who are providing services to our Group, or any individuals who devote substantially all of their time and efforts to the business, management and operation of our Group are participants eligible to receive awards under the Pre-IPO ESOP, to the extent that an offer or receipt of an award is permitted by applicable law, stock market or exchange rules and regulations or accounting or tax rules and regulations.

Holders of equity compensation awards granted by a company that is acquired by our Group (or whose business is acquired by our Group) or with which our Group combines are also eligible for grants of awards under the Pre-IPO ESOP in assumption of, or in substitution for, an outstanding award previously granted by that company or business.

A participant who is a non-employee director of our Company or our subsidiary may not receive compensation for any calendar year in excess of US\$750,000 in the aggregate, including cash payments and awards under the Pre-IPO ESOP.

(c) Administration

The Pre-IPO ESOP is administered by the a committee authorized by the Board (the “**Committee**”), which has the full discretion and authority to, among others, select the participants and determine the types of awards that they are to receive, and determine the number of Shares that are to be subject to the awards and the terms and conditions of the awards, including the price (if any) to be paid for the awards and the vesting conditions (if applicable) of such awards, and prescribe the form of each award agreement.

(d) Number of shares available for awards

The maximum number of the Shares available for grant under the Pre-IPO ESOP shall not exceed in the aggregate 318,392,443 Shares, representing approximately 7.92% of the total number of issued Shares (excluding any Treasury Shares) as of the date of this annual report.

Prior to the Listing, a total of 318,392,443 options had been granted to eligible participants under the Pre-IPO ESOP. None of the grantees were required to pay any consideration for the grant of the awards. All the Shares underlying the outstanding options (including those vested and unvested) have been issued by the Company, the last of which took place in August 2021, and are held by QuantumPharm Roc. No further awards will be granted pursuant to the Pre-IPO ESOP.

Report of Directors

(e) Time and conditions of exercise

The term of each option shall be fixed by the Committee but shall not exceed 10 years from the date of grant of such option. The Committee shall determine the time or times at which an option becomes vested and exercisable in whole or in part.

(f) Exercise price

The exercise price per Share under an option shall be determined by the Committee at the time of grant.

Subject to the terms of the Pre-IPO ESOP and applicable law, the Committee, from time to time and in its sole discretion, may provide for (1) the amendment of any outstanding option to adjust the exercise price of the option, (2) the cancellation, exchange, or surrender of an outstanding option in exchange for cash or other types of awards (for the purpose of repricing the option or otherwise), or (3) the cancellation, exchange, or surrender of an outstanding option in exchange for an option with an exercise price that is less than the exercise price of the original option.

(g) Term

The Pre-IPO ESOP will expire on the 10-year anniversary of the effective date, being 14 July 2031. Any awards that are outstanding on the 10-year anniversary of the effective date shall remain in force according to the terms of the Pre-IPO ESOP and the applicable award agreement.

As at the date of this annual report, the remaining life of the Pre-IPO ESOP is approximately 5 years and 9 months.

Movements in the options under the Pre-IPO ESOP

Details of the outstanding options granted under the Pre-IPO ESOP as of 31 December 2024 are set out below:

Name of grantee	Date of grant	Exercise price (US\$ per share)	Vesting status	Exercise period	Number of Shares underlying options outstanding as of the Prospectus date	Number of options exercised during the period from the Prospectus date up to 31 December 2024	Number of options cancelled/ forfeited during the period from the Prospectus date up to 31 December 2024	Number of Shares underlying the options outstanding as of 31 December 2024
Directors								
Dr. Wen Shuhao	15 April 2021	0.18792135	Fully vested	15 April 2021–14 April 2031	38,183,588	–	–	38,183,588
	24 November 2023	0.2467842	50% will be vested after 24 months commencing from the Listing Date, 25% will be vested after 36 months commencing from the Listing Date and 25% will be vested after 48 months commencing from the Listing Date	24 November 2023–23 November 2033	42,909,774	–	–	42,909,774

Report of Directors

Name of grantee	Date of grant	Exercise price (US\$ per share)	Vesting status	Exercise period	Number of Shares underlying options as of the Prospectus date	Number of options exercised during the period from the Prospectus date up to 31 December 2024	Number of options cancelled/ forfeited during the period from the Prospectus date up to 31 December 2024	Number of Shares underlying the options as of 31 December 2024
Dr. Ma Jian	15 April 2021	0.18792135	Fully vested	15 April 2021–14 April 2031	21,436,379	–	–	21,436,379
	24 November 2023	0.2467842	50% will be vested after 24 months commencing from the Listing Date, 25% will be vested after 36 months commencing from the Listing Date and 25% will be vested after 48 months commencing from the Listing Date	24 November 2023–23 November 2033	23,793,963	–	–	23,793,963
Dr. Lai Lipeng	15 April 2021	0.18792135	Fully vested	15 April 2021–14 April 2031	15,315,639	–	–	15,315,639
	24 November 2023	0.2467842	50% will be vested after 24 months commencing from the Listing Date, 25% will be vested after 36 months commencing from the Listing Date and 25% will be vested after 48 months commencing from the Listing Date	24 November 2023–23 November 2033	17,000,022	–	–	17,000,022
Dr. Jiang Yide Alan	1 October 2015	0.0008	Fully vested	1 October 2015–14 July 2031	10,000,000 ⁽¹⁾	–	–	10,000,000
Consultants								
2 grantees ⁽²⁾	3 September 2019	0.26309	Fully vested	3 September 2019–2 September 2029	53,215	–	–	53,215
	3 September 2019	0.26309	Fully vested	3 September 2019–2 September 2029	478,934	–	–	478,934

Report of Directors

Name of grantee	Date of grant	Exercise price (US\$ per share)	Vesting status	Exercise period	Number of Shares underlying options as of the Prospectus date	Number of options exercised during the period from the Prospectus date up to 31 December 2024	Number of options cancelled/ forfeited during the period from the Prospectus date up to 31 December 2024	Number of Shares underlying the options as of 31 December 2024
Five highest paid individuals during 2024								
2 grantees ⁽⁷⁾ (range of 1,000,000 to 4,999,999 Shares underlying the options granted)	16 September 2017	0.00283995	A ⁽⁴⁾	16 September 2017–15 September 2027	1,000,000 ⁽²⁾	–	–	1,000,000
	15 April 2021	0.00283995	B ⁽⁴⁾	15 April 2021–14 April 2031	1,849,443 ⁽²⁾	–	–	1,849,443
	30 September 2023	0.18792135	A ⁽⁴⁾	30 September 2023–29 September 2033	632,500	375,000	–	257,500
			C ⁽⁴⁾	30 September 2023–29 September 2033	1,575,000	160,000	–	1,415,000
	1 March 2024	0.18792135	A ⁽⁴⁾	1 March 2024–28 February 2034	360,000	–	–	360,000
Ex-employees and other employees (who are not Directors, consultants or five highest paid individuals during 2024)								
167 grantees (range of 1 to 499,999 Shares underlying the options granted)	26 November 2015 to 1 March 2024	0.00032458 to 0.527	A, B, C, D ⁽⁴⁾	Within 10 years from the date of grant	22,852,004	3,721,500	1,187,500	17,943,004
19 grantees (range of 500,000 to 999,999 Shares underlying the options granted)	1 February 2017 to 1 March 2024	0.00283995 to 0.462	A, B, C ⁽⁴⁾	Within 10 years from the date of grant	7,400,000	1,018,000	–	6,382,000

Report of Directors

Name of grantee	Date of grant	Exercise price (US\$ per share)	Vesting status	Exercise period	Number of Shares underlying options as of the Prospectus date	Number of options exercised during the period from the Prospectus date up to 31 December 2024	Number of options cancelled/ forfeited during the period from the Prospectus date up to 31 December 2024	Number of Shares underlying the options as of 31 December 2024
9 grantees (range of 1,000,000 to 4,999,999 Shares underlying the options granted)	26 November 2015 to 1 March 2024	0.00032458 to 0.527	A, B, C ⁽¹⁾	Within 10 years from the date of grant	38,363,482	2,512,500	1,050,000	34,800,982
3 grantees (range of 5,000,000 Shares or more underlying the options granted)	1 March 2016	0.00150	Fully vested	1 March 2016–28 February 2026	8,000,000 ⁽²⁾	–	–	8,000,000
	1 February 2017	0.00150	Fully vested	1 February 2017–31 January 2027	7,000,000 ⁽²⁾	–	–	7,000,000
	1 March 2017	0.00150	Fully vested	1 March 2017–28 February 2027	5,000,000 ⁽²⁾	–	–	5,000,000
2 grantees (senior management)	1 October 2015	0.00001	Fully vested	1 October 2015–30 September 2025	22,837,200 ⁽²⁾	–	–	22,837,200
	1 January 2021	0.18792135	Fully vested	1 January 2021–31 December 2030	12,000,000 ⁽¹⁾	–	–	12,000,000
Total					298,041,143	7,787,000⁽⁵⁾	2,237,500	288,016,643

Notes:

- (1) Pursuant to the powers of attorney granted by Mr. Tam Man Hong and Dr. Jiang Yide Alan in favor of Dr. Wen Shuhao on 28 May 2024, respectively, Dr. Wen Shuhao is unconditionally, indefinitely and irrevocably authorized and appointed to exercise all the voting rights attached to: (i) the Shares underlying the vested outstanding options owned by them; and (ii) the Shares transferred or issued to them upon the exercise of the vested outstanding options, except for any matter the outcome of the vote on which will disproportionately, materially and adversely affect the grantors, as compared to Dr. Wen Shuhao or any other Shareholder. The powers of attorney shall be valid from the Listing Date for an indefinite term. Accordingly, the voting rights of the Shares underlying the vested outstanding options will be entrusted to Dr. Wen Shuhao upon the Listing.

Report of Directors

- (2) Representing the Shares held by QuantumPharm Roc underlying options held by QuantumPharm Employee Holdings, a holding vehicle wholly owned by TMF Trust (HK) Limited as trustee of the QuantumPharm Employee Benefit Trust for the benefit of 13 employees of the Group. In accordance with the terms of the trust deed of the QuantumPharm Employee Benefit Trust dated 28 June 2021, Dr. Ma Jian, being the sole member of the advisory committee established by the Company, has the sole power to make all decisions relating to the exercise of any voting and other rights of the properties held under the trust and to give instructions and directions to the trustee for the execution of such decisions.
- (3) The two consultants were one of the advisory board members of XtalPi Inc., a direct wholly-owned subsidiary of the Company. They were responsible for providing professional advice, opinion and guidance to our technology developments and applications in the pharmaceutical and materials design industry and market, making recommendations and referrals on scientific researchers and industry leaders and promoting our scientific exchanges and collaborations in pharmaceutical innovation within China and the United States.
- (4) Please refer to the different categories of vesting schedules below:

Category	Vesting schedule
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A	Four equal tranches with the vesting date on the first, second, third and fourth anniversary date of the grant date.
B	50% will be vested at the second anniversary of the grant date, 25% will be vested at the third anniversary of the grant date, and 25% will be vested at the fourth anniversary of the grant date.
C	25% is vested immediately on the grant date, and the remaining 75% will be vested in three equal tranches with the vesting date on the first, second and third anniversary date of the grant date.
D	50% is vested immediately on the grant date, and the remaining 50% will be vested in two equal tranches with vesting date on the first and second anniversary date of the grant date.

- (5) The weighted average closing price of the Shares immediately before the dates on which the options were exercised was HK\$4.78.
- (6) There were no lapse of options during the period from the Listing Date up to 31 December 2024.
- (7) For the Reporting Period, the five highest paid individuals included 3 executive Directors, whose interests in the options granted under the Pre-IPO ESOP have been separately disclosed under “Directors” in the table above and not aggregated to the “Five highest paid individuals during 2024”.

2. Post-IPO Share Option Scheme

The following is a summary of the principal terms of the Post-IPO Share Option Scheme adopted by the Company pursuant to the resolutions of the Shareholders passed on 28 May 2024.

(a) Purposes of the Post-IPO Share Option Scheme

The Post-IPO Share Option Scheme is a share incentive scheme prepared in accordance with Chapter 17 of the Listing Rules and is established to recognize and acknowledge the contributions that the eligible participants of the Post-IPO Share Option Scheme had or may have made to our Group.

The Post-IPO Share Option Scheme will provide the eligible participants an opportunity to have a personal stake in our Company with the view to achieving the objectives of (i) motivating the eligible participants to optimize their performance efficiency for the benefit of our Group, and (ii) attracting and retaining or otherwise maintaining an on-going business relationship with the eligible participants whose contributions are or will be beneficial to the long-term growth of our Group.

(b) Eligible participants of the Post-IPO Share Option Scheme

The eligible participants under the Post-IPO Share Option Scheme include any director and employee of our Company or any of our subsidiaries (including persons who are granted options under the Post-IPO Share Option Scheme as an inducement to enter into employment contracts with our Company and/or any of our subsidiaries but excluding Dr. Wen Shuhao, Dr. Ma Jian and Dr. Lai Lipeng).

(c) Acceptance of an offer of options

An option shall be deemed to have been granted and accepted by the grantee and to have taken effect when the duplicate offer document constituting acceptance of the option duly signed by the grantee, together with a remittance in favor of our Company of HK\$1.00 by way of consideration for the grant thereof, is received by our Company on or before the relevant acceptance date.

(d) Number of Shares available for grant

The maximum number of Shares in respect of which options and awards may be granted under the Post-IPO Share Option Scheme and any other share schemes of our Company must not in aggregate exceed 6% of the total number of Shares in issue immediately following the completion of the Global Offering (without taking into account the Shares issued upon the exercise of the over-allotment option), being 204,406,365 Shares, representing approximately 7.92% of the total number of issued Shares (excluding any Treasury Shares) as of the date of this annual report.

Our Company may either issue new Shares or transfer Treasury Shares to the relevant grantee to satisfy the awards upon exercise of the options granted under the Post-IPO Share Option Scheme.

(e) Maximum number of options to any one individual

Any grant of options under the Post-IPO Share Option Scheme to an eligible participant which, when aggregated with any Shares issued or to be issued in respect of all options or awards granted to that person (excluding any options or awards lapsed in accordance with the terms of the relevant schemes) under the Post-IPO Share Option Scheme and the other share schemes of our Company in any 12-month period up to and including the date of such offer, exceeds 1% of the number of Shares in issue (excluding any Treasury Shares) on the offer date, shall be subject to Shareholders' approval in general meeting and such other requirements prescribed under the Listing Rules from time to time.

Any grant of options to a director, chief executive or substantial shareholder of our Company or any of their respective associates is required to be approved by the independent non-executive Directors (excluding any independent non-executive Director who is the grantee of the options). If any such grant will result in the number of Shares issued and to be issued in respect of all options and awards granted to such person under the Post-IPO Share Option Scheme or other share schemes of our Company (excluding any options and awards lapsed in accordance with the terms of such schemes) in the 12-month period up to and including the date on which the grant is made representing in aggregate over 0.1%, or such other percentage as may be from time to time provided under the Listing Rules, of our Shares in issue (excluding any Treasury Shares) on such date on which the grant is made, such further grant of options will be subject to, in addition to the abovementioned approval of the independent non-executive Directors, the approval of our Shareholders in general meeting and such other requirements prescribed under the Listing Rules from time to time.

Report of Directors

(f) Subscription price

Subject to certain adjustments under the rules of the Post-IPO Share Option Scheme, the subscription price of a Share in respect of any particular option granted under the Post-IPO Share Option Scheme shall be such price as our Board in its absolute discretion shall determine, save that such price must be at least the higher of: (i) the closing price of our Shares as stated in the Stock Exchange's daily quotations sheet on the date of grant, which must be a business day; and (ii) the average closing price of our Shares as stated in the Stock Exchange's daily quotations sheets for the five business days immediately preceding the date on which the grant of options is made.

(g) Vesting period

The vesting period of any options shall not be less than 12 months. Options may be subject to a shorter vesting period under any of the following circumstances:

- (1) where the options are granted in assumption of, or in substitution or exchange for, an award previously granted, or the right or obligation to make a future award, in all cases by a company acquired by our Company or any of our subsidiary or with which our Company or any of our subsidiary combines;
- (2) where the Shares to be issued upon the exercise of such options are subject to a minimum holding period of not less than 12 months and are delivered to an eligible participant under his/her compensation arrangements with our Company, including Shares delivered to a non-employee director in respect of such non-employee director's annual retainer;
- (3) where the options are sign-on or make-whole grants to new eligible participants;
- (4) where the options are subject to performance-based vesting conditions;
- (5) where the options are granted in batches for administrative or compliance reasons;
- (6) where the options shall vest evenly over a period of 12 months or more;
- (7) where the options are subject to a total vesting and holding period of more than 12 months; or
- (8) in cases of retirement, separation, retention arrangements, death, disability or a change in control of our Company, our Board may accelerate the vesting of the options at its sole discretion.

(h) Time of exercise of option

An option may be exercised in accordance with the terms of the Post-IPO Share Option Scheme at any time after the date upon which the option is deemed to be granted and accepted and prior to the expiry of five years from that date. The period during which an option may be exercised will be determined by our Board in its absolute discretion, save that no option may be exercised more than five years after it has been granted.

(i) Duration of the Post-IPO Share Option Scheme

No option may be granted more than five years after the Listing Date. Subject to earlier termination by our Company in general meeting or by our Board, the Post-IPO Share Option Scheme shall be valid and effective for a period of five years from the Listing Date, with the expiry date being 13 June 2029.

As at the date of this annual report, the remaining life of the Post-IPO Share Option Scheme is approximately 4 years and 2 months.

Movements in the options under the Post-IPO Share Option Scheme

As of 31 December 2024, no option had been granted or agreed to be granted under the Post-IPO Share Option Scheme.

3. Post-IPO RSU Scheme

The following is a summary of the principal terms of the Post-IPO RSU Scheme adopted by our Company pursuant to the resolutions of our then Shareholders passed on 28 May 2024.

(a) Purpose of the Post-IPO RSU Scheme

The Post-IPO RSU Scheme is a share incentive scheme prepared in accordance with Chapter 17 of the Listing Rules and is established to recognize and acknowledge their contributions or potential contributions to our Group.

The Post-IPO RSU Scheme will provide the eligible participants an opportunity to have a personal stake in our Company with the view to achieving the following objectives: (i) motivate the eligible participants to optimize their performance efficiency for the benefit of our Group; and (ii) attract and retain or otherwise maintain an on-going business relationship with the eligible participants whose contributions are or will be beneficial to the long-term growth of our Group.

(b) Eligible participants of the Post-IPO RSU Scheme

The eligible participants under the Post-IPO RSU Scheme includes any director and employee of our Company or any of our subsidiaries (including persons who are granted awards under the Post-IPO RSU Scheme as an inducement to enter into employment contracts with our Company or any of our subsidiaries but excluding Dr. Wen Shuhao, Dr. Ma Jian and Dr. Lai Lipeng).

(c) Acceptance of a grant of awards

Award shall remain open for acceptance by the participant for a period to be determined by our Board, provided that no such grant shall be open for acceptance after the lapse of the Post-IPO RSU Scheme Period (as defined below) or after the Post-IPO RSU Scheme has been terminated in accordance with the provisions thereof. The Post-IPO RSU Scheme does not specify any amount payable on application or acceptance of the award.

(d) Number of Shares available for grant

No award shall be granted pursuant to the Post-IPO RSU Scheme if as a result of such grant (assumed accepted), the aggregate number of Shares (being in a board lot or an integral multiple thereof) underlying all grants made pursuant to the Post-IPO RSU Scheme and any other share schemes of our Company (excluding the awards and the awards that have lapsed or been canceled in accordance with the rules of the Post-IPO RSU Scheme and other share schemes of our Company) will exceed 6% of the total number of Shares in issue immediately following the completion of the Global Offering (without taking into account the Shares issued upon the exercise of the over-allotment option), being 204,406,365 Shares, representing approximately 7.92% of the total number of issued Shares (excluding any Treasury Shares) as of the date of this annual report.

Our Company may (i) issue Shares or transfer Treasury Shares to the trustee of the Post-IPO RSU Scheme (the “**RSU Trustee**”) which will be used to satisfy the awards upon exercise and/or (ii) direct and procure the RSU Trustee to receive existing Shares from any Shareholder or purchase existing Shares (through on-market transactions on Stock Exchange in accordance with the Listing Rules and any other applicable laws and regulations) at the prevailing market price to satisfy the awards upon exercise.

Report of Directors

(e) Maximum number of options to any one individual

Any grant of awards under the Post-IPO RSU Scheme to an eligible participant which, when aggregated with any Shares issued or to be issued in respect of all options or awards granted to that person (excluding any options or awards lapsed in accordance with the terms of the relevant schemes) under the Post-IPO RSU Scheme and the other share schemes of our Company in any 12-month period up to and including the date of grant, exceeds 1% of the number of Shares in issue (excluding any Treasury Shares) on the date of such grant, shall be subject to Shareholders' approval in general meeting and such other requirements prescribed under the Listing Rules from time to time.

Any grant of awards to a director, chief executive or substantial shareholder of our Company or any of their respective associates shall be subject to the approval by the independent non-executive Directors (and in the event that our Board offers to grant awards to an independent non-executive Director, the vote of such independent non-executive Director shall not be counted for the purposes of approving such grant).

If any grant of awards to a Director (other than an independent non-executive Director) or chief executive of the Company (or any of their respective associates) will result in the number of Shares issued and to be issued in respect of all awards granted to such person under the Post-IPO RSU Scheme and the other share schemes (excluding any awards lapsed in accordance with the terms of such schemes) in the 12-month period up to and including the date on which the grant is made representing in aggregate over 0.1%, or such other percentage as may be from time to time provided under the Listing Rules, of the Shares in issue (excluding any Treasury Shares) on the date on which the grant is made, such further grant shall be subject to, in addition to the abovementioned approval of the independent non-executive Directors, the approval of the Shareholders in general meeting and such other requirements prescribed under the Listing Rules from time to time.

If any grant of awards to a substantial Shareholder or an independent non-executive Director of our Company (or any of their respective associates) will result in the number of Shares issued and to be issued in respect of all options and awards granted to such person under the Post-IPO RSU Scheme and the other share schemes (excluding any options and awards lapsed in accordance with the terms of such schemes) in the 12-month period up to and including the date on which the grant is made representing in aggregate over 0.1%, or such other percentage as may be from time to time provided under the Listing Rules, of the Shares in issue (excluding any Treasury Shares) on the date on which the grant is made, such further grant shall be subject to, in addition to the approval of the independent non-executive Directors as abovementioned, the approval of the Shareholders in general meeting and such other requirements prescribed under the Listing Rules from time to time.

(f) Purchase price

Awards may be granted on such terms and conditions as our Board may determine, provided such terms and conditions shall not be inconsistent with any other terms and conditions of the Post-IPO RSU Scheme. For the avoidance of doubt, our Board may determine the purchase price to be nil.

(g) Vesting period

The vesting period for any awards shall not be less than 12 months. Awards may be subject to a shorter vesting period under any of the following circumstances:

- (1) where the awards are granted in assumption of, or in substitution or exchange for, an award previously granted, or the right or obligation to make a future award, in all cases by a company acquired by our Group or with which our Group combines;
- (2) where the Shares to be issued upon the vesting of such awards are subject to a minimum holding period of not less than 12 months and are delivered to an eligible participant under his/her compensation arrangements with our Company, including Shares delivered to a non-employee Director in respect of such non-employee Director's annual retainer;

- (3) where the awards are sign-on or make-whole grants to new eligible participants;
- (4) where the awards are subject to performance-based vesting conditions;
- (5) where the awards are granted in batches for administrative or compliance reasons;
- (6) where the awards shall vest evenly over a period of 12 months or more;
- (7) where the awards are subject to a total vesting and holding period of more than 12 months; or
- (8) in cases of retirement, separation, retention arrangements, death, disability or a change in control of our Company, our Board may accelerate the vesting of the awards at its sole discretion.

(h) Duration of the Post-IPO RSU Scheme

Subject to certain termination events, the Post-IPO RSU Scheme shall be valid and effective for the period of five (5) years commencing on the Listing Date (the “**Post-IPO RSU Scheme Period**”), after which period no further awards will be granted, but the provisions of the Post-IPO RSU Scheme shall in all other respects remain in full force and effect to the extent necessary to give effect to the awards granted prior thereto or otherwise as may be required in accordance with the provisions of the Post-IPO RSU Scheme and the awards that are granted during the Post-IPO RSU Scheme Period shall continue to be exercisable in accordance with the Post-IPO RSU Scheme.

As at the date of this annual report, the remaining life of the Post-IPO RSU Scheme is approximately 4 years and 2 months.

Movements in the RSUs under the Post-IPO RSU Scheme

Details of the outstanding RSUs granted under the Post-IPO RSU Scheme as of 31 December 2024 are set out below:

Name of grantee	Date of grant	Purchase price (HK\$ per share)	Number of unvested RSUs as of the adoption date of the Post-IPO RSU Scheme ⁽¹⁾	Number of RSUs granted during the year	Number of RSUs vested during the year	Number of RSUs cancelled during the year	Number of RSUs lapsed during the year	Number of unvested RSUs as of 31 December 2024
Directors								
Mr. Law Cheuk Kin Stephen	20 December 2024 ⁽²⁾	Nil	-	900,000	-	-	-	900,000
Ms. Chan Wing Ki	20 December 2024 ⁽²⁾	Nil	-	450,000	-	-	-	450,000
Mr. Chow Ming Sang	20 December 2024 ⁽²⁾	Nil	-	450,000	-	-	-	450,000
Total			-	1,800,000	-	-	-	1,800,000

Notes:

- (1) The Post-IPO RSU Scheme was adopted by the Company on 28 May 2024 and therefore the number of unvested RSUs as of 1 January 2024 was not applicable.

Report of Directors

- (2) Subject to the terms of the Post-IPO RSU Scheme, the vesting period of the RSUs granted is as follows: 25% of the RSUs granted shall vest on each of (i) 20 December 2025, (ii) 20 December 2026, (iii) 20 December 2027, and (iv) 20 December 2028. The vesting of the RSUs is not subject to any performance targets. The closing price of the shares immediately before the date on which the RSUs were granted was HK\$5.50.
- (3) For the Reporting Period, none of the five highest paid individuals were granted any award under the Post-IPO RSU Scheme.

Save as disclosed above, no RSU had been granted or agreed to be granted under the Post-IPO RSU Scheme from the Listing Date to 31 December 2024.

Details of the fair value of the RSUs at the date of grant, basis for fair value measurement and information on whether and how the features of the RSUs are incorporated into the measurement of fair value are set out in Notes 2.2.13 and 35 to the Consolidated Financial Statements in this annual report.

Number of Share Available for Future Grant

As the Post-IPO Share Option Scheme and the Post-IPO RSU Scheme were adopted by the Company on 28 May 2024, no options or awards were available for grant as of 1 January 2024. The number of options and awards available for grant under the Scheme Limit as of the Listing Date and the end of the Reporting Period are set out below:

	Scheme Limit^(Note)	
	As of the Listing Date	As of 31 December 2024
Number of options and awards available for grant	204,406,365	202,606,365
	underlying Shares	underlying Shares

Note: No service provider sublimit was set under the Scheme Limit.

For the purpose of Rule 17.07(3) of the Listing Rules, the number of shares that may be issued in respect of options and awards granted under all schemes of the Company during the Reporting Period divided by the weighted average number of shares of the relevant class in issue (excluding any Treasury Shares) for the Reporting Period is 0.09%.

EQUITY-LINKED AGREEMENTS

Shares Incentive Schemes

Details of the Pre-IPO ESOP, the Post-IPO Share Option Scheme, and the Post-IPO RSU Scheme are set out above in this section on pages 49 to 60 of this annual report.

Save as disclosed in this annual report, no equity-linked agreements that will or may result in the Company issuing Shares or that require the Company to enter into any agreements that will or may result in the Company issuing Shares were entered into by the Group, or existed during the year ended 31 December 2024.

MATERIAL LITIGATION

The Company was not involved in any material litigation or arbitration during the year ended 31 December 2024. The Directors are also not aware of any material litigation or claims that are pending or threatened against the Group during the year ended 31 December 2024.

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

The Shares of the Company were first listed on the Main Board of the Stock Exchange on the Listing Date. On 11 September 2024, 2,045,000 Shares had been cancelled due to the surrender of Shares by a member of the Company for no consideration pursuant to the written notice from such member. Save for the aforesaid, during the period from the Listing Date to 31 December 2024, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities (including sale of Treasury Shares). As of 31 December 2024, the Company did not hold any Treasury Shares.

SHARE CAPITAL AND SHARES ISSUED

Details of movements in the share capital of the Company for the year ended 31 December 2024 and details of the Shares issued during the year ended 31 December 2024 are set out in Note 33 to the consolidated financial statements.

DEBENTURES ISSUED

The Group did not issue any debenture during the year ended 31 December 2024. (2023: nil)

DIVIDENDS

The Board did not recommend the distribution of a final dividend for the year ended 31 December 2024 (2023: nil).

As of 31 December 2024, there was no arrangement under which a Shareholder had waived or agreed to waive any dividends.

PERMITTED INDEMNITY

Pursuant to the Articles of Association and subject to the applicable laws and regulations, every Director shall be indemnified and secured harmless out of the assets and profits of the Company against any liability, action, proceeding, claim, demand, costs, damages or expenses which they or any of them may incur as a result of any act or failure to act in carrying out their functions other than such liability (if any) that they may incur by reason of their own actual fraud or wilful default. Such permitted indemnity provision was in force throughout the year ended 31 December 2024 and as of the date of this annual report.

The Company has arranged appropriate liability insurance to indemnify the Directors and senior management of the Company for their liabilities arising out of corporate activities. The insurance coverage will be reviewed on an annual basis.

DISTRIBUTABLE RESERVES

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

As of 31 December 2024, the Company did not have any distributable reserves.

Details of movements in the reserves of the Group and the Company during the year ended 31 December 2024 are set out in the consolidated statement of changes in equity on page 148 and Notes 34 and 40(b) to the consolidated financial statements.

CHARITABLE DONATIONS

During the year ended 31 December 2024, the Group made charitable donations of approximately RMB649,000 (2023: RMB251,000).

Report of Directors

PROPERTY, PLANT AND EQUIPMENT

Details of the movements in the property, plant and equipment of the Group during the Reporting Period are set out in Note 15 to the consolidated financial statements.

USE OF PROCEEDS FROM LISTING

In connection with the Company's Global Offering, 187,373,000 ordinary shares with a nominal value of US\$0.00001 each were issued at HK\$5.28 per share on the Listing Date. On 10 July 2024, an additional of 8,796,000 ordinary shares with a nominal value of US\$0.00001 each were issued at HK\$5.28 per share pursuant to the partial exercise of the over-allotment option.

The net proceeds from the Global Offering (including net proceeds raised from the shares issued as a result of the partial exercise of the over-allotment option) were approximately HK\$915.18 million. As at 31 December 2024, details of the utilisation of such net proceeds were as follows:

Use of proceeds from Global Offering	Amount of net proceeds for planned applications (HK\$ million)	Percentage of total net proceeds	Utilized net proceeds during the year ended 31 December 2024 (HK\$ million)	Unutilized net proceeds as of 31 December 2024 (HK\$ million)	Expected timeline for utilizing the remaining balance of net proceeds
Enhancing R&D capabilities and solutions provision	686.39	75%	72.41	613.98	By 2029
(i) upgrading and optimizing the quantum physics- based closed-loop integrated technology platform:					
— recruit automation-related talents and compound talents	91.52	10%	1.58	89.94	
— build automated workstations, centrifuges and other ancillary equipment	91.52	10%	3.55	87.97	
— build an intelligent computing center and further upgrade and improve the intelligent computing resource allocation system	183.04	20%	14.51	168.53	
(ii) enhancing the ability to develop solutions in the biotechnology, pharmaceutical, materials science (including agritech, energy and new chemicals, and cosmetics):					
— recruit five professionals in the biotechnology and pharmaceutical sectors and build a team that can fully operate and support the R&D and delivery of materials	137.28	15%	3.64	133.64	
— purchase protein chromatography purifiers, cryo-EM accessories, flow cytometers, mass spectrometers, microplate readers and other instruments	109.82	12%	2.45	107.37	
(iii) lease of properties for and improvements of the R&D centers in Shanghai and Shenzhen	73.21	8%	46.68	26.53	

Report of Directors

Use of proceeds from Global Offering	Amount of net proceeds for planned applications (HK\$ million)	Percentage of total net proceeds	Utilized net proceeds during the year ended 31 December 2024 (HK\$ million)	Unutilized net proceeds as of 31 December 2024 (HK\$ million)	Expected timeline for utilizing the remaining balance of net proceeds
Improving commercialization capability in and beyond China	137.28	15%	20.44	116.84	By 2029
(i) expanding business development and marketing team with a focus on development of relationship with potential customers that are famous pharmaceutical companies/contract research organization/contract development and manufacturing organization companies in China and overseas countries or regions, especially in the United States	73.21	8%	2.72	70.49	
(ii) business development activities overseas in addition to the recruitment of business development and marketing staff as mentioned above	64.06	7%	17.72	46.34	
For working capital and general corporate purposes	91.52	10%	91.52	—	By 2029
Total	915.18	100%	184.37	730.81	

Notes:

- (1) The sum of the data may not add up to the total due to rounding.
- (2) The above expected time frame of unutilized amount is based on the Directors' best estimation barring unforeseen circumstances, and would be subject to change based on the future development of the Group and the market conditions.

As of 31 December 2024, the Directors were not aware of any material change in the planned use of the net proceeds. All the unused net proceeds have been deposited in short-term interest-bearing accounts at licensed commercial banks and/or other authorised financial institutions maintained by the Group.

SUBSIDIARIES

Particulars of the Company's subsidiaries are set out in Note 18 to the consolidated financial statements.

SUBSEQUENT EVENTS

On 24 January 2025, the Group successfully completed a placing of 264,000,000 new Shares at the price of HK\$4.28 per Share. The total gross proceeds from the placing are approximately HK\$1,130 million, and the net proceeds (after deducting all applicable costs and expenses, including commission and levies) arising from the placing amounted to approximately HK\$1,125 million.

Report of Directors

On 19 February 2025, the Group successfully completed a further placing of 342,288,000 new Shares at the price of HK\$6.10 per Share. The total gross proceeds from the placing are approximately HK\$2,088 million, and the net proceeds (after deducting all applicable costs and expenses, including commission and levies) arising from the placing amounted to approximately HK\$2,080 million.

Up to the report date, the Group has entered into several equity related investments with several entities with total consideration of approximately RMB69 million.

AGM AND CLOSURE OF REGISTER OF MEMBERS

The Company will arrange the time of convening the annual general meeting as soon as practicable and in accordance with the Listing Rules. A notice convening the annual general meeting will be published and disseminated to the Shareholders in the manner required by the Listing Rules and the Articles of Association in due course. Once the date of the annual general meeting is finalized, the Company will publish the period of closure of register of members of the Company in the notice of the annual general meeting.

CORPORATE GOVERNANCE

A report on the principal corporate governance practices adopted by the Company is set out in the Corporate Governance Report on pages 25 to 37 of this annual report.

SUFFICIENCY OF PUBLIC FLOAT

Based on information that is publicly available and within the knowledge of the Directors, the Company maintained the prescribed public float as required under the Listing Rules as of the date of this annual report.

TAX RELIEF AND EXEMPTION

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

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Articles of Association or the relevant laws of the Cayman Islands where the Company is incorporated which would oblige the Company to offer new Shares on a pro-rata basis to existing Shareholders.

AUDITORS

The Shares were listed on the Stock Exchange on 13 June 2024, and the Company has no change in auditors since the Listing Date. The consolidated financial statements for the year ended 31 December 2024 have been audited by PricewaterhouseCoopers, the auditor of the Company, who will retire at the conclusion of the forthcoming annual general meeting of the Company and being eligible, offer themselves for re-appointment. A resolution for the re-appointment of PricewaterhouseCoopers as auditor of the Company will be proposed thereat.

CONTINUING DISCLOSURE OBLIGATIONS PURSUANT TO THE LISTING RULES

The Company does not have any disclosure obligations under Rules 13.20, 13.21 and 13.22 of the Listing Rules.

All references above to other sections, reports or notes in this annual report form part of this annual report.

FORWARD-LOOKING STATEMENTS

This annual report contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical fact are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors, some of which are beyond the Company's control, that may cause the actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. The Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

APPRECIATION

The Board would like to express its sincere gratitude to our Shareholders, management team, employees, business partners and customers for their support and contribution to the Group.

By order of the Board

XtalPi Holdings Limited

Dr. Wen Shuhao

Chairman of the Board and Executive Director

Hong Kong, 28 March 2025

Environmental, Social and Governance Report

ABOUT THE REPORT

This Environmental, Social and Governance Report (the **“Report”**) is the first ESG Report issued by XtalPi Holdings Limited (the **“XtalPi”**, **“we”**, **“our”**, **“us”** and **“Company”**), which is designated to give an objective and true view of the Company’s strategies, policies, measures and achievements in terms of sustainable development, and focuses on the disclosure of the Company’s information in environmental, social and governance (**“ESG”**) aspects.

Basis of Preparation

The Report has been prepared pursuant to the Environmental, Social and Governance Reporting Code (the **“ESG Code”**) as set out in Appendix C2 to the Rules (the **“Listing Rules”**) Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the **“Hong Kong Stock Exchange”**).

Reporting Cycle

From January 1, 2024 to December 31, 2024 (the **“Reporting Period”** or the **“Year”**).

Reporting Scope

The reporting scope of the Report covers XtalPi Holdings Limited and its subsidiaries (the **“Group”**), which is in line with the 2024 annual report of the Company.

Source of Information and Guarantee for Reliability

Save as otherwise indicated, data contained herein are derived from the internal information, investigation and interview records and relevant documents of the Company. The Board of Directors of the Company undertakes that the Report does not contain any false information or misleading statement, and is responsible for its truthfulness, accuracy and completeness.

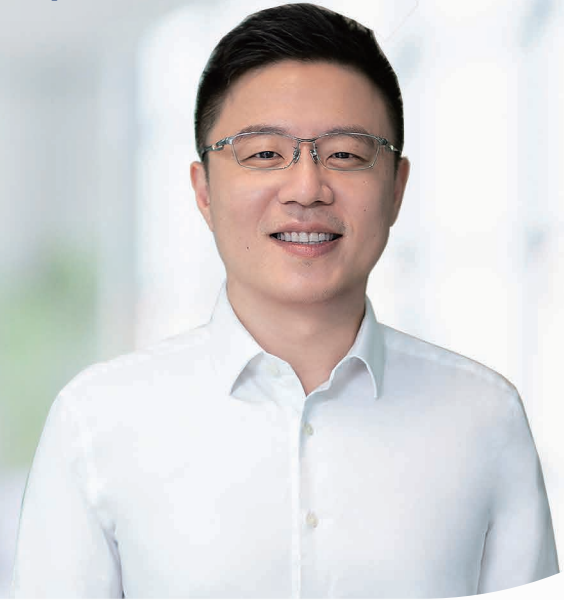
Confirmation and Approval

The Report has been approved by the Board of Directors on March 28, 2025 upon confirmation by the management.

Availability

The Report is incorporated in the 2024 annual report of the Company. Out of concern for environmental protection, we recommend you to read the electronic version is available on the website of the Stock Exchange (www.hkexnews.hk) and the official website of the Company (<https://ir.xtalpi.com/en/>).

Environmental, Social and Governance Report



Co-Founder and Chief Executive Officer
Dr. Ma Jian

A LETTER FROM CEO

The year 2024 marks a milestone in the development of XtalPi. As the first company listed as a “Specialist Technology Company” under Chapter 18C of the Listing Rules, we are officially traded on the Main Board of the Hong Kong Stock Exchange, ushering in a new chapter of our growth. As a quantum physics-based, AI-powered, and robotics-driven, innovative technology company, we always adhere to the philosophy that “benefiting others ultimately benefits ourselves”. By empowering the R&D and innovation endeavors of global clients, we have established long-term and stable partnerships with leading biotechnology, pharmaceutical and new materials companies worldwide, delivering satisfactory results to all our shareholders and investors.

In technological innovation, we remain at the forefront of cutting-edge technologies to drive iterative technological breakthroughs and industrial innovations and pioneer disruptive transformation from the ground up. In our close collaboration with Pfizer, we have successfully identified the optimal crystalline form of PAXLOVID in just six weeks and facilitated its approval as the world’s first U.S. Food & Drug Administration (FDA) authorized oral COVID-19 medication which ultimately saved hundreds of millions of COVID-19 patients. Based on several R&D centers in Shenzhen, Shanghai, Beijing and Boston, we focus on the intersection of life sciences and artificial intelligence. In order to address industry pain points and unmet clinical needs, we accelerate the R&D process through AI-empowered drug development and have successfully enabled both established pharmaceutical giants and innovative biotech companies at home and abroad to achieve pipeline breakthroughs, offering new treatment options to patients worldwide.

As a dedicated advocate of green technological innovation, we are always committed to promoting green production practices. Through our independently developed automated laboratory platforms, we have developed high-precision big data analysis and AI models for more intelligent and automated R&D paradigms. This approach not only accelerates the rapid development of green energy and new materials, but also optimizes resource utilization, energy conservation and emissions reduction. We also cooperate with leading agricultural technology companies and provide technical support for pesticide companies to develop next-generation eco-friendly agrochemical products, so as to reduce pesticide usage, mitigate its adverse environmental impact and enable green agricultural development. In the course of our ordinary operations, we have formulated scientific and traceable quantitative environmental goals and regularly reviewed our progress in achieving these goals to enhance our green operational performance. Through DIY activities such as old material renovation and eco-friendly recycling initiatives, we also encourage all employees to embrace green concepts and contribute to ecological civilization.

We firmly believe in the power of “AI for good” and are committed to achieving the dual improvement in both social value and commercial success. We provided essential medicines and supplies to Gansu Province in times of emergency, and donated computers to the Guangdong Provincial Education Foundation to support the development of education and enhance information-based learning infrastructure. In addition, we have also actively participated in public activities such as “Future Scientists” summer science camps and AI-empowered innovation workshops. Leveraging our laboratory resources and professional advantages of our scientist mentorship team, we are dedicated to popularizing scientific knowledge among primary and secondary students and fostering their creative thinking, thus making meaningful contributions to the cultivation of scientific and technological innovation talents in China.

This is our first Environmental, Social and Governance (ESG) report. In the Report, we reviewed our efforts in corporate governance, environmental protection and social responsibility throughout 2024, with a view to enhancing our communication with our clients, investors and various stakeholders as well as demonstrating our determination and actions to practice sustainable development. In recognition of our outstanding ESG performance in 2024, we were honored to receive a commendation for the Hong Kong Corporate Governance & ESG Excellence Award Committee, a testament to our highly recognized sustainability capabilities.

Looking ahead, we will continue to forge ahead with industry partners in technological innovation and exploration. By harnessing the power of new quality productive forces, we are dedicated to driving high-quality development of the industry and society and shaping a world of smarter science, better lives.

Environmental, Social and Governance Report

RESPONDING TO THE SDGS

The Group actively responds to the Sustainable Development Goals (UN SDGs) of the United Nations, contributing from the perspectives of its business operations and social impact. We integrate the creation of corporate value with the creation of social value, thereby promoting comprehensive and sustainable social development.

Sustainable Development Goals (UN SDGs) of the United Nations	XtalPi's Initiatives in Response to the SDGs in 2024
 <p>3 GOOD HEALTH AND WELL-BEING</p>	<ul style="list-style-type: none"> We continue to advance the application and innovation of artificial intelligence (AI) and automation technologies in the healthcare field, comprehensively accelerating the drug development process for our clients in the pharmaceutical industry We worked with Pfizer to successfully identify the optimal crystalline form of PAXLOVID in just six weeks and facilitated its approval as the first FDA-authorized oral COVID-19 medication which ultimately saved hundreds of millions of COVID-19 patients We care for our employees' well-being by providing safety training and conducting regular occupational health and safety audits to identify potential risks
 <p>4 QUALITY EDUCATION</p>	<ul style="list-style-type: none"> We provide a wide range of training resources for our employees tailored to the needs of different positions We offer internship opportunities to university students We conduct educational outreach and provide science education activities for young people
 <p>5 GENDER EQUALITY</p>	<ul style="list-style-type: none"> We uphold gender equality and equal pay for equal work among all employees We support the development of female employees by creating a programme "Her Power", focusing on their career growth We have established a maternity room and provide welfare leave and care for pregnant female employees
 <p>6 CLEAN WATER AND SANITATION</p>	<ul style="list-style-type: none"> We implement water-saving measures to reduce water consumption in both research and daily operations We post water-saving signage and conduct water-saving campaigns to enhance employees' awareness of water-saving practices
 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	<ul style="list-style-type: none"> Leveraging our automated laboratory platform, we accelerate the development process of new energy materials
 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<ul style="list-style-type: none"> We respect human rights and prohibit any form of child labor or forced labor We offer employees a diverse range of compensation and benefit packages, and talent development programs We provide a variety of employee activities to enhance employee well-being

Environmental, Social and Governance Report

Sustainable Development Goals (UN SDGs) of the United Nations	XtalPi's Initiatives in Response to the SDGs in 2024
	<ul style="list-style-type: none"> We are committed to independent innovation, driving the development and application of AI and automation technologies across various industries. By enhancing automation and intelligence, we improve resource efficiency and empower the sustainable transformation of traditional industries
	<ul style="list-style-type: none"> We implement the "Minor Protection Action" to assist exceptional children in integrating into society We strictly prohibit any form of workplace discrimination or harassment We protect the rights and interests of female employees, providing benefits and care for those who are pregnant or nursing
	<ul style="list-style-type: none"> We have obtained ISO 9001 Quality Management System Certification We enhance the application of automated laboratories to reduce resource consumption and pollutant emissions We strictly manage the entire lifecycle of hazardous waste, including its generation, storage, transportation, and disposal, and entrust qualified third-party agencies for hazardous waste treatment We have added a wastewater treatment station and optimized the waste gas disposal system to ensure compliant emissions of waste gas and wastewater
	<ul style="list-style-type: none"> We actively address climate change by identifying and responding to climate-related risks We promote green office practices to reduce carbon emissions from daily operations We evaluate suppliers' performance in energy conservation and consumption reduction, implementing green procurement practices
	<ul style="list-style-type: none"> All newcomers are required to sign the <i>Letter of Commitment of Anti-corruption and Self-discipline</i> and receive Anti-corruption and anti-bribery training upon onboarding All key suppliers are required to sign the <i>Supplier Code of Conduct for Anti-corruption Cooperation</i> and all employees in the procurement department are required to sign the <i>Letter of Commitment of Anti-corruption and Self-discipline</i>

Environmental, Social and Governance Report

1. ABOUT XTALPI

1.1 About Us

XtalPi Holdings Limited was established in 2015 by three physicists at Massachusetts Institute of Technology (MIT), and it is a quantum physics-based, AI-powered, and robotics-driven, innovative R&D platform. We adopt a combination of quantum physics-based first-principles calculation, AI, high performance cloud computing, and scalable and standardized robotic automation to provide drug and material science R&D solutions and services to global and domestic companies in the pharmaceutical and material science (including agritech, energy and new chemicals, and cosmetics) industries and beyond.

We have built R&D laboratories and operational sites in Shenzhen, Beijing, Shanghai, and Boston to strengthen our resource integration capability through globalization, and to provide services to global customers while continuing to promote cross-border collaboration in green technology innovation and sustainable development practices.

XtalPi's Keywords in 2024:

First Listed Company Under Chapter 18C of the Listing Rules

XtalPi was officially listed on the Main Board of the Hong Kong Stock Exchange as the first listed company under Chapter 18C of the Listing Rules

New Quality Productive Forces

January: We launched a new business brand "Ailux Biologics"

May: We introduced Xtalgazer®, a next-generation drug crystallization R&D platform that integrates cutting-edge AI algorithms and laboratory automation technology

July: We worked with the International Digital Economy Academy to successfully develop and launch PatSight, a patent data mining platform

October: We successfully delivered a catalyst synthesis workstation to Sinopec Shanghai Research Institute of Petrochemical Technology

December: We helped the Hengqin Laboratory build the world's first fully automated "Digital, Online, Intelligent and Green Platform" for traditional Chinese medicine (TCM), showcasing the in-depth integration with TCM R&D scenarios

AI for Science

We participated in premier global events such as WAIC, CPHI and IDEA to demonstrate our AI+ achievements to the world

The AI robot experimental workstation cluster has been recognized as a global collaboration model case in the pharmaceutical industry. The independently designed and developed chemical synthesis detection and analysis integrated machine has been selected for the innovation achievements exhibition of the development of industry

In collaboration with the MIT, we will jointly drive AI for Science through an AI+ Robot to establish a new paradigm in chemical and material science research and to co-build the MIT AI Future Laboratory

We championed independent innovation leveraging our cutting-edge technologies such as AI, quantum physics and robotic experiments, and won the first place in the Crystal Structure Prediction (CSP) Blind Test

Environmental, Social and Governance Report

AI + Infinite Possibilities

AI+ Drug R&D, AI+ Environmental Protection, AI+ Health Management..., by harnessing the power of AI, we are integrating it with both traditional and emerging industries to foster a new developmental ecosystem and expand the AI innovation ecosystem landscape

Future Industries

We have developed a crystallization strategy recommendation model for accurate prediction of crystallization conditions for small organic molecules

We published co-authored papers with Pfizer and Novartis to demonstrate real examples of efficient polymorph prediction and crystallization optimization through machine learning

We authorized our macromolecular drug discovery AI platform to Janssen Biotech to provide rapid and accurate structural information for macromolecular drug development

We became the Co-Chair of the Zhangjiang AI New Drug R&D Alliance, the first AI-driven new drug alliance in China

We have successfully delivered XmartChem®, an intelligent catalyst synthesis workstation (Glovebox Station)

We have successfully delivered a catalyst analysis and pre-treatment workstation

We maintained our partnership with world-renowned partners

AI for Good

We provided essential medicines and supplies to Gansu Province in times of emergency

We donated educational and research peripherals to support children in special education programs

We donated computers to the Guangdong Provincial Education Foundation to provide better conditions for schools to carry out information-based teaching

Since August, we have successively conducted "Future Scientist" science and technology popularization and research learning activities in Shenzhen and Shanghai

At the end of the year, we were honored with the "A Commendation for Environmental, Social, and Governance Excellence Award Committee Commendation"

Corporate IP:

XtalPi has created its proprietary corporate cultural IP "Genius". Derived from the prototype of a whale, Genius symbolizes medical miracles, super brains and supercomputing power in evolutionary biology, which is consistent with our philosophy of intelligent and automated R&D innovation. The character design of Genius combines elements from employee submissions, and the heart on its head is also an interpretation of "Let AI flow into every new drug".

Our corporate IP is a carrier to communicate company culture and foster emotional engagement among employees. By designing a series of Genius-themed emojis and cultural peripherals, we transform intangible corporate values into vivid and tangible experiences, enabling our employees to immerse themselves in our corporate culture and spirit and also create resonance and lasting memories.



Environmental, Social and Governance Report

1.2 Core Corporate Values



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1.3 Awards & Honors

Category	Award Information
Innovation and R&D	National high-tech enterprise the Super AI Leader (SAIL) Award Shenzhen Academician Expert Workstation Postdoctoral Innovation Practice Base Shenzhen Engineering Research Center for AI Drug Discovery Second Prize in the GBA Data Application Innovation
Brand Influence	“50 Smartest Companies of the Year” granted by MIT Technology Review Hurun China Top 50 AI Companies Hurun China Under 40s 2024 FinanceAsia's 2024 Achievement Awards BioCentury — BayHelix Annual Award PharmaDJ 2024 Annual IPO Award
Social Responsibility	Fortune China's “Most Socially Impactful Start-ups” A Commendation for the Hong Kong Corporate Governance & ESG Excellence Award Committee 2024

2. ESG GOVERNANCE

While we are deeply committed to advancing AI-driven empowerment and automation innovation to create economic value for society, we actively fulfill our social responsibilities by attentively listening to and addressing the expectations of our stakeholders. We integrate sustainable development principles into our corporate management and operations, striving to create long-term value for shareholders, employees, clients, partners and society, thereby driving mutual progress for both the company and society.

2.1 Structure of ESG Governance

ESG concepts

As a global corporation, we adhere to the philosophy of “remember compassion, aspire to lofty goals”. We not only continue to explore and deliver technological solutions to humanity's shared challenges but also actively practice corporate social responsibility, leveraging the resource advantages and innovative capabilities of a technology-driven enterprise. Grounded in innovative technologies such as quantum physics, AI, and robotics, we strive to scale new heights in technology while fulfilling our social responsibilities as a global corporate. We are committed to contributing the strength of a technology enterprise to build a greener, healthier, and more sustainable future.

Environmental, Social and Governance Report

Structure of ESG governance

To better implement our sustainability philosophy, the Company has established a structure of ESG governance led by the Board of Directors, with clearly defined roles and responsibilities at each level. We have developed and implemented the *Environmental, Social, and Governance (ESG) Working Group Charter*, ensuring collaboration across all levels to efficiently execute ESG initiatives. The ESG working group regularly reports progress on ESG efforts to the Board of Directors, providing a solid foundation for management's sustainability decision-making.

We conduct regular ESG-related training for employees at all levels and members of the Board of Directors to enhance their overall awareness of ESG initiatives. This ensures the scientific and systematic integration of ESG principles into all aspects of our business operations, continuously creating value for all stakeholders. During the Reporting Period, we provided specialized ESG training for all members of the Board of Directors and the management, strengthening the Board of Directors' decision-making capabilities regarding the Company's ESG matters.

Board of Directors



- **The Board of Directors, as the highest authority responsible for the management and public disclosure of the Company's ESG matters, assumes ultimate responsibility and primarily exercises the following functions:**

- Reviewing the materiality of risks and issues related to the Company's ESG matters;
- Reviewing and approving the Company's sustainability strategy and goals;
- Overseeing and reviewing the Company's policies, management, performance, and progress towards related goals in ESG matters; and
- Reviewing and approving the public disclosure of the Company's performance on ESG-related matters.

ESG Working Group



- **The ESG working group, composed of the Company's senior management and heads of various business and functional departments, serves as the primary supervisory and coordinating body. It exercises the following functions and provides support to the Board:**

- Allocating resources for the implementation of the Company's ESG strategy and the achievement of ESG goals;
- Formulating ESG policies and action plans that align with the Company's sustainability strategy and objectives;
- Managing ESG-related risks in the Company's day-to-day operations;
- Communicating with relevant departments and subsidiaries within the Company to coordinate and advance the implementation of ESG initiatives; and
- Reviewing the public disclosure of the Company's performance on ESG-related matters.

Related Businesses and Functional Departments



- **As the primary execution level, relevant personnel in each department primarily exercise the following functions and provide support to the ESG working group:**

- Implementing the Company's ESG strategy and executing the ESG action plan;
- Addressing ESG-related risks in the department's day-to-day operations; and
- Handling other ESG-related matters.

Environmental, Social and Governance Report

Statement of the Board of Directors

The Board of Directors, as the core governance body of the Company, assumes full responsibility for overseeing, guiding, and reviewing the Company's ESG-related initiatives. The Board of Directors is tasked with monitoring the implementation of the Company's overall ESG strategy and the effectiveness of ESG risk management, ensuring steady progress on the path to sustainable development. To efficiently advance ESG efforts, the Board of Directors has authorized the ESG working group to formulate ESG strategies, goals, and policies, and to oversee the progress of ESG-related matters. In the Company's daily operations, the Board of Directors regularly reviews the progress of various ESG objectives.

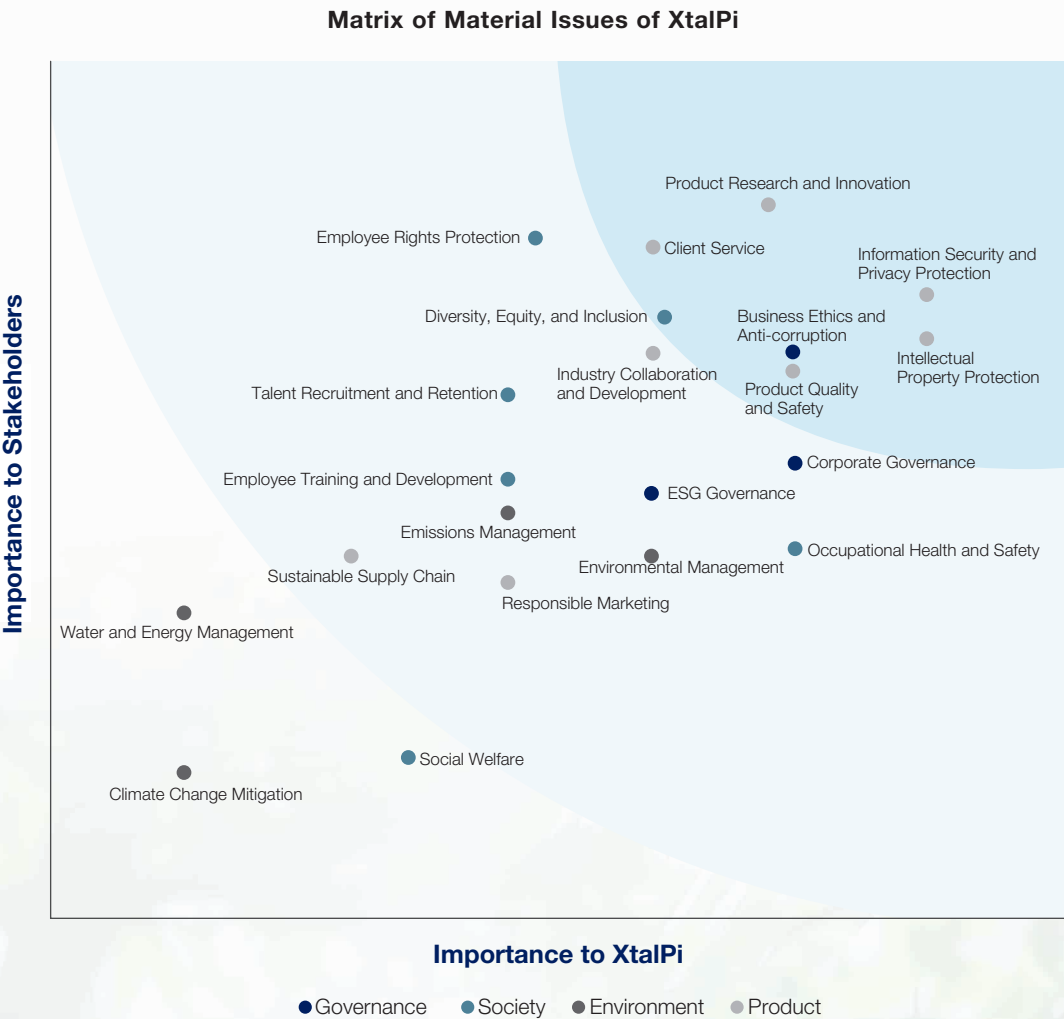
To effectively implement ESG agendas, the Company has established an ESG working group, composed of the Company's senior management and heads of various business and functional departments. The group is responsible for coordinating ESG communication efforts, driving the execution of the Company's ESG strategies and policies, and integrating ESG management principles into all aspects of daily operations, ensuring that sustainability goals are closely aligned with business development.

To effectively prevent and control internal and external risks, the Board of Directors oversees critical ESG issues, identifying potential risks and opportunities. The Board of Directors is responsible for reviewing and approving risks to be disclosed, proactively developing response measures to better manage ESG risks and mitigate their potential negative impact on the Company's operations.

Environmental, Social and Governance Report

2.2 Materiality Issue Analysis

To thoroughly identify ESG issues that have a significant impact on the Company, we employed methods such as external benchmarking, internal interviews, and questionnaire surveys. Through this process, we ultimately identified and assessed 21 material issues. The identification and evaluation of these issues adhered to the requirements of the Hong Kong Stock Exchange's *ESG Code*. By integrating the survey results, we prioritized the importance of each issue and ultimately mapped out XtalPi's materiality matrix.



Among the 21 material issues identified, 7 issues have been assessed as highly material. These issues are considered to have significant impacts for the Company and its stakeholders. Therefore, in this Report, we will focus on disclosing information related to these 7 highly material issues to address the concerns of all stakeholders.

Environmental, Social and Governance Report

Index of Material Issues

Issues of high importance	Catalog Index
Product development and innovation	4.1 Innovation-driven
Client service	4.3 Client Service
Information security and privacy protection	4.3 Client Service — Information Security and Privacy Protection
Diversity, equality and inclusion	6.1 Compliant Employment — Employee Employment
Business ethics and anti-corruption	3.2 Business Ethics and Anti-corruption
Intellectual property protection	4.1 Innovation-driven — Intellectual Property Protection
Product quality and safety	4.2 Quality Assurance

2.3 Stakeholder Communication

We place great emphasis on communication with our stakeholders and are committed to establishing open and diverse channels of communication. We regularly and proactively engage in dialogue with them to ensure that corporate information is fully conveyed and to gain a deep understanding of their requirements and expectations. This two-way communication mechanism not only enhances transparency but also helps us better address stakeholder concerns and advance the achievement of our sustainable development goals.

Stakeholders	Key Concerns	Communication Channels
Clients	Client service Product quality and safety Product R&D and innovation	Client service hotline Online client service platform Regular client satisfaction surveys Product feedback channels
Investors/Shareholders	ESG governance Business ethics and anti-corruption Corporate governance Product R&D and innovation	Regular investor meetings Annual reports Investor relations website Shareholders' general meetings
Government & Regulatory Authorities	Environmental management Emissions management Water and energy management Business ethics and anti-corruption ESG governance	Regular policy communication meeting Compliance report submissions Government website announcements Direct communication with regulatory authorities
Suppliers	Sustainable supply chain Product quality and safety Responsible marketing	Supplier conferences Regular supplier assessments and feedback Supply chain management system Contract terms and agreements
Employees	Employee training and development Employee rights protection Occupational health and safety Diversity, equity and inclusion	Internal communication channels Employee satisfaction surveys Employee training and development programs

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Stakeholders	Key Concerns	Communication Channels
Media	Social welfare Environmental management Business ethics and anti-corruption	Press conferences Media briefings Company website news section Social media platforms
Local Community	Social welfare Environmental management Emissions management Water and energy management	Community roundtable discussions Community engagement activities Community feedback channels

3. OPERATING WITH INTEGRITY

We consistently uphold the principles of compliant operations and steady development, viewing risk management as a critical cornerstone of sustainable growth. We are committed to identifying, assessing, and addressing operational risks through systematic risk management approaches, ensuring the stability of our business development. We continuously foster a culture of business ethics within the Company, encouraging employees to lead by example and drive growth ethically and responsibly.

3.1 Risk Management

To enhance risk prevention and response capabilities, we have developed the *Measures for Risk Management*, which comprehensively standardize each step of the risk management process, clarify operational procedures, and ensure the effective implementation of risk control measures.

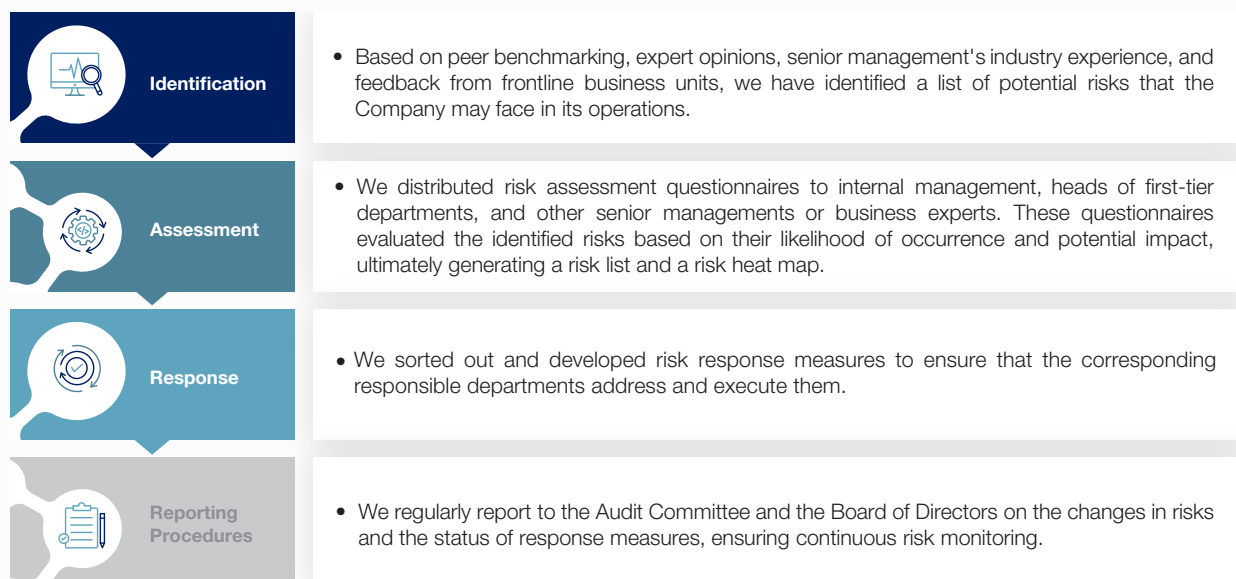
We have established a three-tier risk management framework to ensure efficient top-down execution of risk management practices.

- Board of Directors: As the highest level of risk management, responsible for setting overall risk control strategies and objectives.
- Audit Committee: Serving as the critical intermediate level, overseeing the implementation of risk management measures, ensuring their effective execution.
- Departments: As the execution level, carrying out risk control measures, ensuring that risk management is integrated into daily operations.

Each level collaborates closely and communicates actively, forming an efficient risk management loop. This enables effective risk management practices, ensuring the sustainable development of the enterprise.

Environmental, Social and Governance Report

Risk Management Process



During the Reporting Period, we engaged third-party professional firms to assist in enhancing our Company's risk management system. This included refining the risk list, establishing risk evaluation criteria, and conducting risk assessment surveys. We have carried out a comprehensive risk identification exercise, categorizing risks into five major types: strategic, market, operational, financial, and compliance. These risks are further divided into three levels, laying a solid foundation for annual risk identification efforts. Based on the internally assessed risk scores, we have developed the XtalPi risk map, which visually presents the priority and distribution of various risks. This tool enables the management team to allocate resources rationally, focusing on the prevention and mitigation of significant risk points.

During the Reporting Period, we conducted risk management training for senior management and heads of first-tier departments, achieving a 100% participation rate. Additionally, we provided internal control management training for all employees, achieving a 94% participation rate among departments. Through these systematic training programs, the Company has not only enhanced the risk management capabilities of its management team but also strengthened the risk awareness of all employees, thereby establishing a solid foundation for a comprehensive risk management culture.

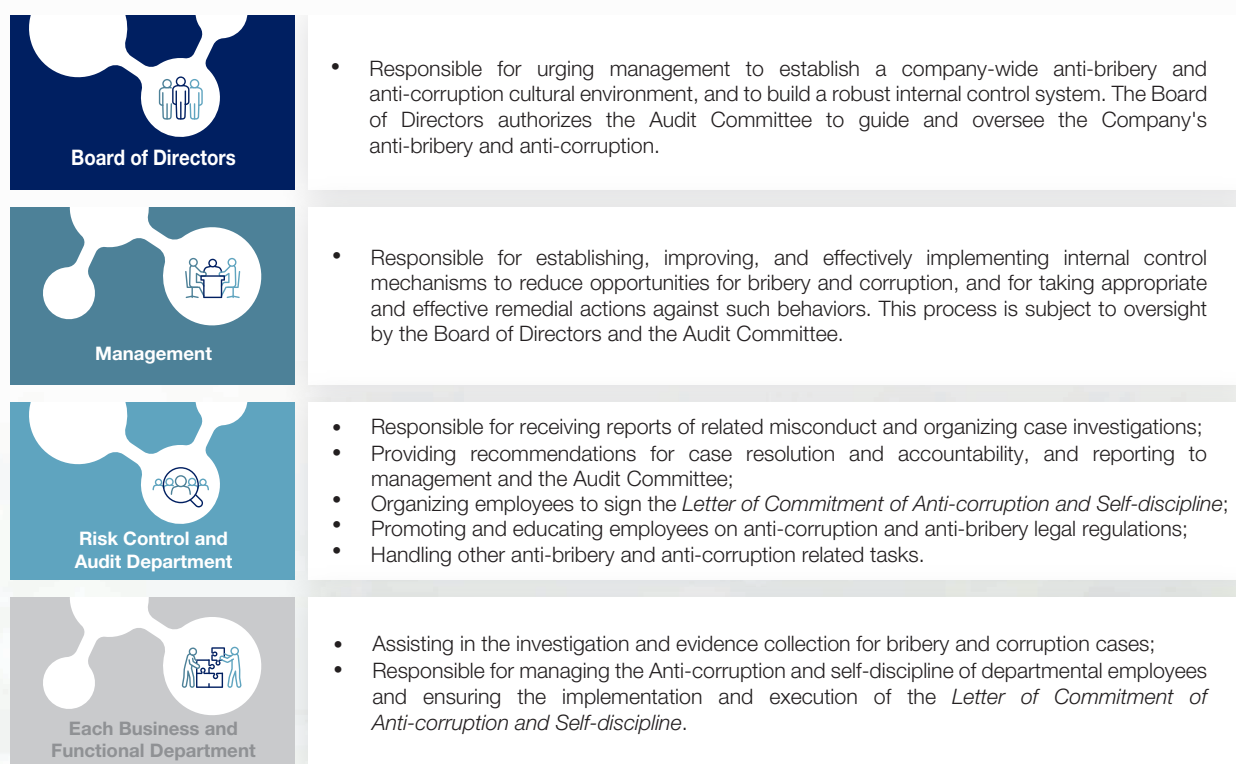
Environmental, Social and Governance Report

3.2 Business Ethics and Anti-corruption

The Company strictly adheres to relevant laws and regulations in all operational regions, including the *Anti-Unfair Competition Law of the People's Republic of China* (《中華人民共和國反不正當競爭法》) and the *Anti-monopoly Law of the People's Republic of China* (《中華人民共和國反壟斷法》). We have established the *Anti-bribery and Anti-corruption Management System* and the *Anti-fraud Management System*, which clearly outline the requirements for business ethics and anti-corruption practices applicable for all employees.

We have implemented a business ethics management system led by the Board of Directors, defining management responsibilities at each level to ensure the effective operation of the Company's compliance and business ethics management.

Business Ethics and Anti-corruption Management Framework of XtalPi



We conduct business ethics management through initiatives such as risk assessments and promoting a culture of integrity, driving the Company's compliance efforts and preventing actions that could harm the Company and its shareholders' interests.

During the Reporting Period, we carried out assessments of business ethics and anti-corruption risks, evaluating dimensions such as anti-bribery and anti-corruption compliance risks and complaint channel management risks.

Environmental, Social and Governance Report

To ensure employees fully understand and adhere to XtalPi's business ethics principles and anti-corruption requirements, we require all newcomers to sign the *Letter of Commitment of Anti-corruption and Self-discipline* and undergo anti-corruption and anti-bribery training upon joining. This ensures that a sense of anti-corruption is instilled from the beginning of their employment. Additionally, we conduct regular company-wide business ethics training and provide specialized training for employees in high-risk roles. During the Reporting Period, we conducted specialized anti-corruption training for all employees in the procurement department, enhancing their awareness of risk prevention and integrity.

The Company fosters a corporate culture rooted in integrity and honesty. We have established a whistleblowing and investigation mechanism and provided transparent channels for reporting violations, through which all employees and business partners can report acts of corruption, bribery, or any other violations of XtalPi's business ethics through either named or anonymous means.

Reporting and Complaint Channels of XtalPi



We strictly maintain the confidentiality of all whistleblower information and adopt a "zero-tolerance" stance toward any interference or retaliation. All cases are investigated after anonymizing sensitive information. For verified violations, the Company will impose disciplinary actions on the involved employees in accordance with the *Employee Disciplinary Action Management System*. For severe cases, the matter will be referred to judicial authorities for legal handling.

We place great emphasis on the prevention and improvement of misconduct. After an incident occurs, we take timely remedial measures and convene heads of relevant department to review the case, promptly optimizing the policies and workflows of the Company to actively prevent similar incidents from recurring. We also expect business partners to strictly adhere to business ethics requirements. For suppliers, contractors, and distributors that violate these standards, the Company will enforce penalties in line with the *Supplier Code of Conduct for Anti-corruption Cooperation*, ensuring the integrity and transparency of all partnerships.

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4. SUPPORTING OUR CLIENTS

We have always adhered to the principle of "Market-oriented and Client-centric". By leveraging AI and robotics as our core drivers, we deeply empower industrial innovation, actively promote the integration of interdisciplinary technologies and business model transformation, and provide high-quality and reliable solutions to clients across various industries.

4.1 Innovation-Driven

Since our inception, we have embedded innovation into our philosophy and actions. We continuously enhance our R&D capabilities to provide clients with safe, efficient, and reliable products and solutions, accelerating our partners' journey toward a more precise and intelligent future. By collaborating with industry peers, we expand the frontiers of innovation, bringing cutting-edge technological achievements and insights to the industry, and driving the development and application of AI and automation technologies in the new era.

4.1.1 Innovative R&D

We have a number of core technology patents and an excellent research and development team. In 2024, our R&D expenses amounted to RMB418.2 million. Leveraging our strong talent team and scientific research capabilities, we provide clients with quantum physics-based, AI-powered, and robotics-driven, innovative solutions. By building a leading innovative technology platform utilizing first-principles calculation, AI, high performance cloud computing, and scalable and standardized robotic automation, our Company offers R&D solutions, services and products for the global pharmaceutical, biotechnology, renewable energy and advanced materials industries, aiming to enhance R&D efficiency, reduce R&D costs and empower our clients to stand out in the fierce market competition. We have met the Stock Exchange's revenue threshold requirement (HK\$250 million) for commercialized companies ahead of schedule. This is because we firmly believe that the true value of R&D investment can only be realized through commercial success, which not only drives technological advancements in the industry but also fosters new sustainable development momentum for the society.

Building Innovation Ecosystem

Leveraging our profound expertise in quantum physics, artificial intelligence, and robotics, XtalPi integrates both capital and technological empowerment and has established close collaborations with leading companies and renowned academic institutions across various sectors. We are working with them to build a dynamic ecosystem featuring collaborative innovation and continuously driving innovation and breakthroughs in the forefronts of AI+. As of the end of the Reporting Period, XtalPi has incubated several start-ups.

Environmental, Social and Governance Report

R&D capability development

We place great emphasis on cultivating and enhancing R&D innovation capabilities. Through systematic training, knowledge sharing, and industry exchanges, we continuously drive the advancement of our team's professional expertise and technical proficiency. Our specific practices in R&D capability development include the following during the Reporting Period:

- *Systematic training*

The Company regularly organizes R&D-related training, academic conferences, and internal and external seminars to improve the team's innovation capabilities. Key initiatives include:

We successfully hosted 14 sessions of the "X-MAB Lecture", covering topics such as advancements in antibody drug technologies, intellectual property protection strategies. These trainings have significantly enhanced the team's professional expertise and business capabilities, laying a solid foundation for the Company's technological innovation in the biopharmaceutical field.

We held the Genius Lecture every month with a focus on cutting-edge and trending technological domains. These lectures also incorporate internal experience sharing and technical discussions within the department, offering our employees opportunities for continuous learning and growth.

We organized 6 R&D innovation sharing sessions, focusing on cutting-edge technologies in AI and biopharmaceutical technologies to promote the integration of knowledge across different fields. We have also shared over 100 live-streaming sessions from external industry and academic conferences, encouraging our employees to stay abreast of industry trends, learn from the latest technologies, and grasp market insights, ensuring that our team remains at the forefront of industry development.

- *Regular Communication*

We regularly organize sharing sessions on various topics, covering cutting-edge technology developments in automation and robotics, hands-on experience exchanges and improvement of tool efficiency, to facilitate technical exchanges and experience inheritance and jointly explore innovative pathways to enhance R&D efficiency.

In the drug discovery business segment, the Company organizes special seminars on a regular basis, where we pool together R&D leaders and executives to explore how the team's R&D orientation coincides with the industry frontiers. In addition to fostering internal knowledge sharing, this system also serves as a robust backup for the Company's strategic decision-making.

The "Future Chemistry" R&D team has established a weekly R&D meeting system, which promotes in-depth exchanges of R&D progress and ideas among the team, the system of which effectively enhances team collaborative efficiency and drives the successful implementation of R&D projects.

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Innovative R&D achievements

Innovation is the core momentum for the Company's sustainable development. By adhering to self-reliant innovation and promoting an in-depth integration between technology and business and coupling this with the eyes on cutting-edge technology and industry needs, we have achieved numerous significant research results across various business segments. Not only does this enhance the Company's core strength, it also introduces smarter and more efficient "new quality productivity" to different industries. Below are some cases of our innovative R&D achievements.

Small Molecule Drug Discovery Segment — XMolGen™&XFEP® AI Small Molecule Drug Discovery Smart Computation Platform

The self-reliant XMolGen™ AI molecular generation platform developed by XtalPi, by anchoring on drug molecule design, overcoming the drawbacks of traditional molecular design such as low efficiency, limited diversity, and strong dependence on chemical knowledge, provides clients with a new approach to molecular design that is efficient, low-cost, and offers a broad chemical space. Its rich built-in AI molecular generation models address the pain points in traditional drug affinity evaluation, including insufficient accuracy, high cost, high technical barriers, and low efficiency. By equipping the platform with parallel computing and cloud computing dispatch systems, such platform is able to significantly improve computational efficiency and provide a solid guarantee for calculation accuracy.



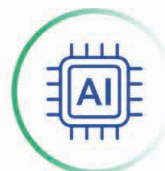
Availability for Multi-Scenario Applications

XMolGen supports ligand-based R-unit substitution and molecular generation methods based on receptor binding pocket.



Extensive Validation of In-house Live Projects

The XtalPi team, in its in-house live drug R&D projects, explores a vast chemical spectrum based on the XMolGen platform, with a high degree of novel/reasonable molecular structure and synthesizability.



Matured AI Models

XMolGen integrates various algorithms, such as inverse synthesis, fragment splicing, isostere replacement, and AI family algorithms.



Expended Medicinal Chemistry Expert Thinking

XMolGen empowers medicinal chemists to explore unknown chemical spectrum and supports the de novo generated brand-new molecules (De NoVo).



User-Friendly Interface

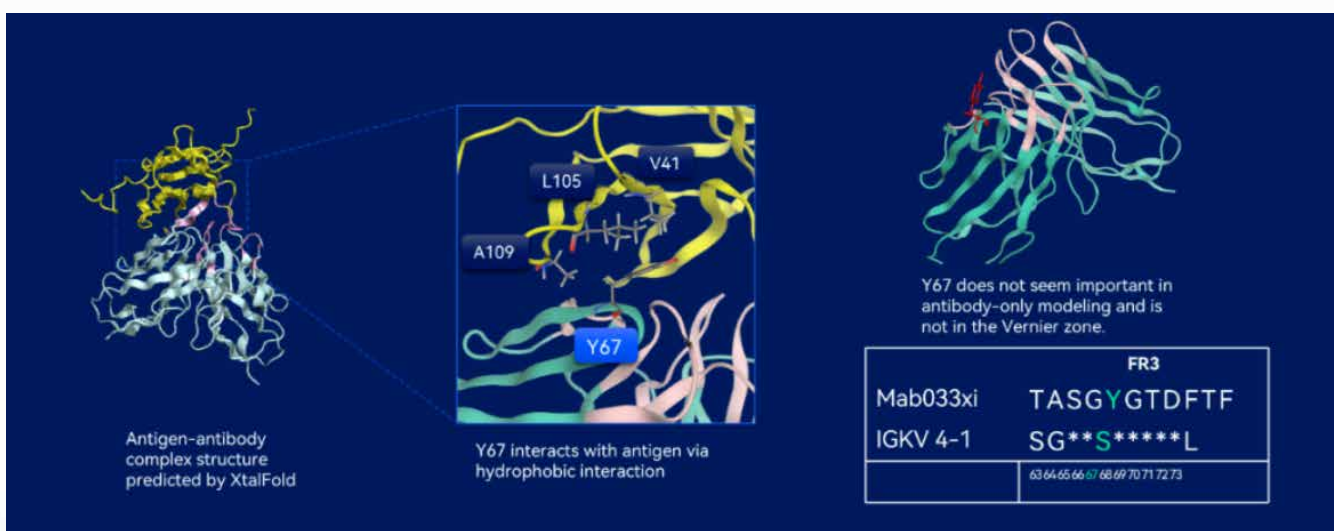
The XMolGen's interface layout is concise and clear, with an straightforward and easy-to-understand operation process, greatly reducing the user's learning curve.

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Macromolecular Drug Discovery Segment — XtalFold® Antibody-Antigen Complex Structure Prediction Platform

In 2024, XtalPi launched the XtalFold® antibody-antigen complex structure prediction platform, an innovative deep learning and machine learning algorithms. Compared to traditional technologies, it is able to predict the antibody-antigen complex structure with high success rates and high accuracy. Since its launch, XtalFold® has been licensed to several global pharmaceutical enterprises and has played a key role in various R&D projects, including antigen design, epitope identification, affinity maturation, pH sensitivity modification, and bispecific antibody design.

XtalFold® Predicts the Antibody-Antigen Complex Structure and Identifies Key Interaction Sites



Automated Chemical Synthesis Services Segment — “Future Chemistry” R&D Project

In 2024, XtalPi’s “Future Chemistry” R&D project made significant progress in the field of chemical big data. We utilized an automated platform to accumulate over 200,000 high-quality reaction process data per month, covering 7 reaction types commonly used in pharmaceutical chemistry and more than 40 reaction conditions, with comprehensive and structured data that far surpasses the quality of open-source data. Based on this data, we trained AI chemical reaction models, achieving higher accuracy and confidence.

Meanwhile, we have developed various in-house AI prediction models, including reactivity/experimental condition prediction models, UV spectrum prediction methods, and LCMS-based spectrum yield prediction models and others, with accuracy exceeding 80%, even surpassing the identification capabilities of synthetic personnel in some aspects. Leveraging the “Future Chemistry” R&D project, XtalPi is committed to transforming the traditional methods of chemical R&D and creating a new paradigm for the industry.

A Rapid and efficient collection of experimental result data facilitates the construction and continuous optimization of AI models

200+	30,000+	200,000+
Work stations	Reaction yield data per month	Process data per month

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Solid State R&D Segment — Xtalgazer®, a New Generation Drug Crystallization R&D Platform

In 2024, XtalPi launched a new generation of drug crystallization R&D platform, Xtalgazer®, which utilizes XtalPi's self-developed crystal structure prediction technology, crystallization strategy recommendation technology and automated experimental technology, and can accurately predict the physicochemical properties, crystal structure, and stability relationship of compound molecules based on hundreds of thousands of crystallization data accumulated by physical models combined with AI algorithms. With the rich experience of industry experts, it provides high-quality solid state R&D services through the “experiment + calculation” R&D model. Our aim is to break through the limitations of long-term reliance on manual trial-and-error in the field of solid-state R&D, transforming the “empirical design” in the traditional R&D model into a more scientific and accurate “rational design”, improving the efficiency and quality of solid-state research, and promoting the entire industry to a new level.



Intelligent Robotics Solutions Segment — AI+Robotics Laboratory Intelligent Automation Solutions

XtalPi's automated and intelligent laboratory adopts the human-machine combination model to remotely control the automated workstations and AGV trolleys through the intelligent scheduling system, realizing a high degree of automation and intelligence in the experimental process, and enhancing the efficiency of experiments and material transportation.

Up to now, XtalPi's intelligent laboratory automation solutions have been widely applied to clients in petrochemical, new energy, new materials, biomedical and other industries. Through one-stop construction services for smart laboratories, robot workstations and other automation products and services, XtalPi has built smart laboratories for its clients in the fields of drug R&D, catalyst research, inorganic material research, and electrolyte formulation research, etc., promoting the application and paradigm upgrading of AI in the intelligent R&D of the petrochemical, new energy and new materials fields, and injecting inexhaustible power for the development of the industry.



Intelligent Robotics Solutions Segment — XtalPi Builds An Intelligent and Automated Integrated Innovation Platform for the New Traditional Chinese Medicines

XtalPi has built an intelligent and automated integrated innovation platform for the new traditional Chinese medicines, which is China's first fully automated platform for isolating and analyzing active ingredients in traditional Chinese medicines. By deeply integrating traditional Chinese medicines with next-generation AI, automation, and robotics technologies, the platform provides a one-stop solution for the entire experimental process, including traditional Chinese medicines ingredient extraction, structural characterization, and bioactivity measurement. Through digital management and AI algorithms, it establishes a panoramic dataset of traditional Chinese medicines active ingredients, offering an intelligent R&D platform for both compound traditional Chinese medicines formulation and novel single-agent drug discovery. This injects new productivity into traditional Chinese medicines development and drives high-quality growth in the traditional Chinese medicines industry.

An Intelligent and Automated Integrated Innovation Platform for the New Chinese Medicines



External collaborative innovation

We actively collaborate with external innovation forces and engage in in-depth cooperation with top global teams to jointly explore and develop cutting-edge technologies. By leveraging the expertise and technological advantages of these outstanding partners, we are able to fully unleash our Company's scientific research potential, and achieve complementary strengths, contributing to the continuous innovation of the biopharmaceutical and new materials industry.

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XtalPi and Merck Collaborate to Expand New Approaches for Drug Crystal Habit Regulation

In April 2023, XtalPi and Merck KGaA, Darmstadt, Germany collaborated to investigate the effect of polymer additives on the crystal habit of metformin hydrochloride, combining Merck's experimental capabilities with XtalPi's crystal prediction technology to develop a comprehensive crystal habit engineering screening method. Through molecular dynamics simulation and the calibration of the adsorption energy model, the crystal habit of metformin hydrochloride in different crystallization environments was successfully predicted, which is highly compatible with the experimental results. This collaboration combines experiments with calculations, providing new ideas for drug formulation research and API production process development, helping to reduce costs and increase efficiency, and accelerating crystallization process development. The results have been published in *Small Methods*, a high-impact journal in the first quartile.

PatSight Drug Patent Data Mining Platform

In July 2024, XtalPi, in collaboration with the International Digital Economy Academy, jointly launched the PatSight drug patent data mining platform. The platform is dedicated to revolutionizing the way of obtaining patent data in the field of drug research and development, enabling data acquisition simply by uploading PDF files. Breaking away from the inefficient traditional manual data acquisition method, AI-empowered PatSight can quickly and accurately extract the structural and activity parameters from patents. Its parallel working mode allows it to process dozens of patents simultaneously, and 90% of patents can be extracted within one hour. With XtalPi's self-developed large model, the data accuracy rate is up to 95% or more.

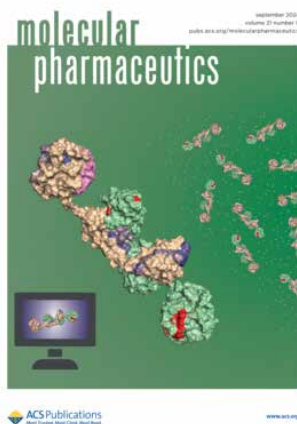


XtalPi and Novartis Jointly Explore Innovative Applications of Template Crystallization Method

The solid-state R&D team of XtalPi has carried out in-depth cooperation with the team of scientists from Novartis to jointly explore the innovative application of template crystallization method to overcome the difficult-to-regulate problems in the crystallization process of drugs. Through the ingenious combination of computational simulation and machine learning technologies, both parties have provided a new path for predicting and optimizing the crystallization process.

This method can not only efficiently screen out templates suitable for specific drug molecules, significantly shortening the drug development cycle and reducing costs, but also deepen the understanding of the polymer template-regulated crystallization mechanism, achieving more scientific and precise control of the drug crystallization process. The relevant research results have been published in the journal *Molecule Pharmaceutics* in August 2024, marking an important advancement in the field of solid-state drug R&D.

Journal *Molecule Pharmaceutics*



XtalPi's AI Prediction Algorithm Accelerates Crystal Form Confirmation of Pfizer's COVID-19 Drug

In Pfizer's small molecule drug R&D project, XtalPi was deeply involved and used an AI prediction algorithm combined with experimental verification to confirm the advantageous crystal form of Nirmatrelvir, the active ingredient in the COVID-19 drug PAXLOVID in just six weeks, significantly shortening the traditional R&D cycle that would take several months or more. This efficient model of "intelligent computational prediction + experimental verification" not only accelerates the drug development process, enabling the drug to enter clinical trials earlier, but also improves the quality of R&D and increases the success rate. The important results have been published in the journal *Molecule Pharmaceutics* in September 2024.

Journal *Molecule Pharmaceutics*



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XtalPi and LynCloud Co-build a New Platform for Neurological Drug R&D

In December 2024, XtalPi and LynCloud collaborated to co-build a new platform for neurological drug R&D, combining AI algorithms with EEG BioMarker recognition models to establish a drug screening platform based on cell platforms and digital brain models. This platform aims to address the challenges of difficult drug screening for neurological diseases and the low success rate of clinical trials, providing precise patient screening solutions for drug R&D. The in-depth cooperation between the two parties will jointly promote innovation and breakthroughs in the field of neurological disease drug R&D.

XtalPi Participates in the Substance Structure Prediction Competition

In December 2024, the results of the CSP Blind Test (a globally renowned substance structure prediction competition founded in 1999 and having been held seven times) held by the Cambridge Crystallographic Data Centre were announced. XtalPi stood out from 28 teams worldwide and became one of the two most outstanding teams. In the competition, XtalPi accurately predicted the stable crystal structures of seven molecules (including three drug-like organic small molecules) released by the organizer and evaluated the relative stability of each structure, demonstrating that the existing technology can effectively evaluate the phenomenon of multiple crystal structures and reduce the risk of similar events to the ritonavir incident. XtalPi also demonstrated its strong strength in extended CSP (Crystal Structure Prediction) scenarios, and its crystal structure prediction technology has already ranked among the top in the world.

XtalPi's AI-based Peptide R&D Platform Establishes New Drug R&D Collaboration with Renowned Singaporean Research Institutions

In December 2024, XtalPi entered into an AI-based new drug discovery collaboration with National Cancer Centre Singapore (NCCS) and Duke-NUS Medical School, where it will use a peptide research and design platform driven by XtalPi's AI and automated experiment to discover and design clinical drug candidates for new targets of clear cell renal cell carcinoma (ccRCC) selected by NCCS. XtalPi will leverage its experience in the R&D of macromolecular drugs, combining AI generation algorithms with high-throughput experimental screening methods to rapidly achieve intelligent design and efficient screening of peptide drugs, optimizing peptide drug candidates with advantages and bringing more abundant medication options to the ccRCC field. This cooperation integrates the advantageous resources of the three parties and is expected to accelerate the provision of better treatment options for patients and promote the drug R&D process.

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4.1.2 Intellectual property protection

We strictly comply with relevant laws and regulations at home and abroad, such as the *Patent Law of the People's Republic of China* (《中華人民共和國專利法》) and the *Trademark Law of the People's Republic of China* (《中華人民共和國商標法》), in all our operating regions. We have formulated corporate regulatory documents, including the *Intellectual Property Management System* and the *Intellectual Property Incentive Measures*, to comprehensively guide the effective implementation of the Company's intellectual property protection work. Thanks to the Company's sound intellectual property management system, we have successfully passed the certification of the GB/T 29490 Enterprise Intellectual Property Management System.

Certificate of Enterprise Intellectual Property Management System Certification



We are deeply aware of the importance of intellectual property management and protection for the Company's innovative research and development, and we actively carry out upstream and downstream intellectual property risk monitoring. By utilizing tools such as patent databases and trademark databases, we regularly monitor potential third parties' infringement of XtalPi's intellectual property information, and at the same time, identify the risks that the Company may infringe on the intellectual property rights of third parties. Once potential risks are identified, the intellectual property team will closely collaborate with professional teams such as R&D and branding teams to formulate response strategies to avoid incidents of infringing external intellectual property rights, thus safeguarding the smooth progress of the Company's business and the achievement of its strategic goals. As of the end of the Reporting Period, we have been granted 67 new patents, with a total of 281 trademarks, 71 copyrights, and 225 patents.

We have incorporated intellectual property training into our regular work and regularly carried out various training activities, including training courses, quizzes with prizes, and Intellectual Property Week, to continuously strengthen employees' awareness and professional capabilities in intellectual property protection. Through these activities, we have created a favorable atmosphere in which all employees value intellectual property rights, making the concept of intellectual property protection deeply rooted in everyone's heart.

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Delegation from the World Intellectual Property Organization (WIPO) Visits XtalPi

In March 2024, a delegation from the World Intellectual Property Organization (WIPO) visited XtalPi. Daren Tang, the Director General of WIPO, had in-depth communication with us regarding the Company's intellectual property strategy. Director General Daren Tang highly commended our efforts in intellectual property protection and emphasized the significance of comprehensive intellectual property for the development of XtalPi. This visit not only deepened our understanding of the international trends in intellectual property protection but also provided valuable guidance for our future intellectual property strategy.

Daren Tang, Director General of WIPO, and Tam Man Hong, Chief Financial Officer of XtalPi



4.2 Quality Assurance

We regard quality as the lifeline of the enterprise's development, strictly adhering to world-class quality standards, continuously improving the quality management system, and actively carrying out the construction of quality culture to provide strong support for our global partners.

4.2.1 Construction of quality management system

We strictly comply with the national safety standard for electrical equipment GB 4793¹ and the requirements of the ISO 9001 quality and safety management system, and carry out the construction of the quality management system in an orderly manner. For the relevant business segments involved in our drug discovery solutions and intelligent robotics solutions, a complete quality management system has been established. Taking the *Quality Manual* as the guiding principle, detailed quality management procedure documents and operation instruction manuals are listed separately, providing clear standards and guidance for the implementation of quality control in business operations.

¹ GB 4793 Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use

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We have established a sound quality management structure, clarifying the quality management responsibilities at all levels to ensure the orderly progress of quality management work. We have appointed qualified internal auditors in relevant business departments to supervise these departments in maintaining a high standard of product and service delivery quality.

Quality Management Structure of XtalPi



During the Reporting Period, the Company's business lines of drug solid state R&D services and automated equipment R&D and assembly underwent an external review for ISO 9001 quality management system certification and successfully obtained the certification.

XtalPi ISO 9001 Quality Management System Certification



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4.2.2 Quality management measures

We strictly adhere to quality management standards and conduct regular internal and external quality audits, aiming to ensure that all aspects of the Company's business comply with international regulations and industry norms, and continuously promote the improvement and perfection of the Company's quality management system. During the Reporting Period, we have successfully completed the internal audit, management review of the Company's quality management system, as well as the external system certification audit. As a crucial part of quality management, we attach great importance to the quality management of suppliers. During the Reporting Period, we visited suppliers a total of 26 times to evaluate their quality management. For suppliers with potential risks, we will increase the frequency of quality inspections and supervise their rectification to avoid situations that do not meet the requirements in the future. Through these measures, we have effectively reduced supply chain risks and ensured the stability of the quality of our products and services.

Through the in-depth implementation of internal and external quality audits, we have systematically investigated the existing problems in quality management, actively explored the room for improvement in the operation of the system, and conducted in-depth discussions on the management principles and objectives of the quality management system. In response to the problems discovered in the quality audits, we took immediate action and launched rectification measures. At the same time, we organized internal review meetings to trace the root causes of the problems and actively optimized relevant management systems and processes to ensure that similar problems will not occur again.

4.2.3 Quality culture construction

We continue to promote the construction of the quality culture within the Company and regularly carry out various quality training programs. During the Reporting Period, we conducted 3 quality-related trainings, covering professional training for quality management internal auditors and comprehensive courses for improving quality management skills. The training covered employees in quality-related positions in the business departments, effectively enhancing their quality management capabilities and professional qualities.

4.3 Client Service

We have established a comprehensive client management system, accurately aligning with the customized needs of our clients, and are committed to providing a high-quality service experience. Our goal is to assist clients in accelerating their research and development processes and achieving efficient experimentation. In terms of client information security and privacy protection, we have established a stringent control system to safeguard the security and confidentiality of client information. We adhere strictly to laws and regulations to ensure that marketing activities are conducted in compliance, thereby maintaining client trust and the Company's reputation.

4.3.1 High quality service

We always prioritize client experience above all else. We have compiled the *Business Management System*, establishing a clearly defined client service guarantee framework. This ensures that our representatives can respond to client needs swiftly and efficiently, providing comprehensive protection for the client experience throughout the service process.

Client satisfaction survey

We have established a client satisfaction management mechanism, which involves conducting regular client satisfaction surveys to comprehensively gather client feedback and identify areas for improvement in our service processes. For projects that have been fulfilled, as well as those that are ongoing but have been fulfilled for six months or more, we distribute satisfaction questionnaires and actively follow up on client responses. Additionally, we collect client opinions and suggestions through communication with business departments and public channels, and perform statistical analysis on client satisfaction data from all sources. Client opinions and suggestions are compiled and relayed to the relevant service teams and business departments, enabling them to formulate appropriate action plans as needed. During the Reporting Period, we did not receive any major complaints from clients, and our annual client satisfaction rate reached 95%. This achievement fully demonstrates our strong commitment to addressing client needs and our continuous improvement in service quality. Moving forward, we will further refine our client satisfaction management mechanism, optimize service processes, and provide even higher-quality and more efficient service experiences to our clients. This will help solidify client trust and foster mutual growth for both the Company and our clients.

Client Satisfaction Collection Channels

Satisfaction survey
questionnaires



Business
development/marketing
operations and
promotions/client
referrals/internal and external
recommendations



Multiple public client
complaints channels of the
Company



Internal rating systems within
business departments



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4.3.2 Responsible marketing

We strictly adhere to the relevant laws and regulations in the places where we operate globally, such as the *Advertising Law of the People's Republic of China* (《中華人民共和國廣告法》). To ensure the legality and compliance of all external promotional materials, we have implemented a rigorous review process. All materials must undergo professional review by the Company's public affairs and legal teams, effectively eliminating false advertising, marketing infringement, and other illegal or non-compliant activities. During the Reporting Period, we did not encounter any litigation incidents arising from marketing activities, which fully demonstrates the effectiveness of our marketing compliance management.

We have established the XtalPi Brand Marketing Think Tank by creating a resource library and defining the usage standards for brand visual elements. This initiative not only enhances the standardization and consistency of brand promotion but also effectively reduces the risk of infringement during promotional activities, ensuring that all brand communications are lawful and compliant.

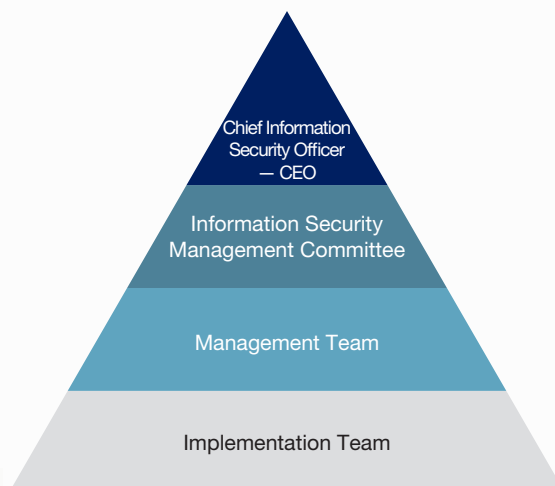
At the same time, we actively strengthen professional training for our marketing team by regularly organizing responsible marketing training activities. This comprehensively enhances employees' awareness and capabilities in responsible marketing. For every new employee joining XtalPi, we require them to complete relevant training courses on responsible marketing, ensuring that they fully understand and strictly adhere to the Company's marketing regulations. This embeds the principle of responsible marketing into their daily work. Through these measures, we reduce the risk of violations at the source, ensure the compliant execution of marketing activities, and collectively uphold the Company's positive image and reputation.

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4.3.3 Information security and privacy protection

We strictly comply with the information security-related laws and regulations in the places where we operate, such as the *Cybersecurity Law of the People's Republic of China* (《中華人民共和國網絡安全法》) and the *Data Security Law of the People's Republic of China* (《中華人民共和國數據安全法》). We have established a series of information security management systems, such as the *Information Asset Management Measures*, *Terminal Security Management System*, and *Data Backup and Recovery Management System*. We have built a comprehensive information security management framework and established an Information Security Management Committee, with the CEO serving as the highest authority overseeing the Group's information security efforts. During the Reporting Period, we successfully passed the ISO 27001 Information Security Management System audit and obtained certification.

XtalPi Information Security Management Structure



XtalPi ISO 27001 Information Security Management System Certification



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We place a high priority on cybersecurity and actively take measures to enhance emergency response capabilities and the resilience of our IT systems. In February 2024, we planned and executed a network outage emergency drill, covering data centers and network nodes across all sites of the Company. The drill simulated real-world network failure scenarios, aiming to improve employees' emergency response capabilities and cross-departmental collaboration efficiency. Through this exercise, the Company identified and rectified a potential weakness in the network architecture, significantly enhancing the overall resilience of the network system. The average time from fault detection to initial recovery was controlled within 15 minutes, providing effective assurance for business continuity.

Additionally, to ensure the data security of our business systems, we conducted a data backup and recovery drill for the ERP system. The drill included data recovery in a test environment, followed by rigorous testing and validation of the recovered data to ensure its availability and integrity. These measures further strengthened the Company's data security management system, providing a solid foundation for the stable operation of the Company's business.

XtalPi Information Security Management Enhancement Initiatives

Enhanced Terminal Antivirus Capabilities and Improved the Detection Rate for Malicious Software	Deployment of Firewall Alert Function to Increase the Efficiency of Handling High-Risk Incidents
<ul style="list-style-type: none">Upgrading its terminal antivirus software: By installing more secure tools such as Sangfor EDR and Microsoft MDE, and further optimizing security policies, the response time to malicious software has been reduced to an average of within one hour.	<ul style="list-style-type: none">High-risk alert functionality has successfully deployed in the firewalls at its various office sites. When a high-risk event occurs, the system will send alerts via email to local administrators, significantly increasing the efficiency of handling high-risk incidents, with the average response time improving by 100%.
Classified Protection Level 3 Certification	Development of Host Protection Capability to Enhance Security and Ensure Business Continuity
<ul style="list-style-type: none">We successfully passed the annual classified protection level 3 assessment for its cloud-based ID4Inno system conducted by an evaluation agency, once again securing the classified protection level 3 certification.	<ul style="list-style-type: none">By conducting testing of host protection tools and selecting a host protection product suitable for our Company. This protection will cover all critical servers/containers, both on the cloud and on-premises. It will proactively identify risks and facilitate timely remediation, preventing risks such as server breaches, Trojan implants, and security incidents. This enhances server security and ensures business continuity.

In order to enhance the information security awareness of all employees and improve the Company's ability to prevent and respond to information security incidents, we have actively carried out a series of information security promotion and education activities, including information security training for new employees, monthly dissemination of information security articles and case studies to all staff, as well as phishing email drills and training. By spreading knowledge of information security, we aim to improve employees' ability to identify and handle information security threats, thereby ensuring the safety of the Company's assets and client data.

5. ECOLOGICAL CONSTRUCTION OF THE INDUSTRY

We firmly believe that sustainable development for enterprises relies on cooperation and mutual benefits among all parties in the industry. We not only focus on enhancing our own business but also actively promote the mutual development of suppliers, clients, and industry partners. Together, we aim to build a responsible, innovative and green industrial ecosystem, achieving a win-win situation.

5.1 Responsible Procurement

We are committed to building a transparent, efficient, and socially responsible supply chain management system, ensuring that ESG principles are followed throughout the procurement process. We continuously optimize supplier management processes, strengthen communication with suppliers, and advocate for high ethical standards and business norms, conducting procurement activities in a responsible manner.

5.1.1 Supplier full-lifecycle management

The Company has established a comprehensive supplier management system that sets standardized requirements for various aspects, including supplier classification, supplier onboarding, supplier exit, supplier performance evaluation, and supplier risk management. We strictly implement the Company's core management policies such as the *Procurement Management System*, the *Sourcing and Bidding System*, the *Supplier Management Measures*, and the *Engineering Procurement Management Measures*, which comprehensively cover all stages of the procurement process and standardize the management of the entire supplier lifecycle.

Supplier onboarding

When selecting suppliers, we conduct a comprehensive and multi-dimensional assessment of suppliers, including quality, delivery capability, service standards and ESG performance, to ensure that suppliers meet our high standards for quality, efficiency and sustainable development. In addition, we review potential suppliers through on-site inspections and qualification reviews to ensure supply chain sustainability and compliance from the outset.

Supplier risk management

We comprehensively manage supplier operational risks to ensure the stability and sustainability of the supply chain. We strictly follow the *Supplier Management Measures* to conduct risk assessments on suppliers, promptly identifying potential risks, and developing corresponding risk response plans.

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Supply Chain Risk Control Measures

Diversified Supplier Management	Supplier Risk Assessment and Early Warning Mechanism	Supplier Contracts and Agreement Safeguards
<ul style="list-style-type: none">• We adopt a dual-source or multi-source supplier strategy.• For technical or market monopoly suppliers, appropriate decentralized supply source strategies are adopted to reduce risks.	<ul style="list-style-type: none">• For high-risk suppliers, we implement stricter monitoring measures and establishes a risk early warning mechanism to ensure timely action can be taken when changes occur in the supply chain.	<ul style="list-style-type: none">• We enter into contracts with stringent terms with high-risk suppliers to ensure timely remediation in case of issues.
Irregular Reviews and On-site Audits		Backup Suppliers and Order Adjustments
<ul style="list-style-type: none">• For high-risk suppliers, we conduct regular on-site audits and comprehensive evaluations to monitor their production and operational status, and adjust supply chain strategies promptly.		<ul style="list-style-type: none">• For suppliers posing significant risks, we proactively seek backup suppliers and adjust order proportions and supply plans in a timely manner to ensure uninterrupted production.

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Supplier performance evaluation

We have established a rigorous supplier performance management system to ensure that suppliers consistently meet the Company's requirements in product quality, service capabilities, delivery times and other aspects. We conduct annual assessments of suppliers based on the QCDSTAPE standards (Quality, Cost, Delivery, Service, Technology, Assets, Process and ESG). Each supplier is quantitatively scored in these areas and categorized as excellent, qualified, pending and unqualified based on the results. We will recognize and reward outstanding suppliers, and propose improvement plans for underperforming suppliers with follow-up assessments and reevaluations.

Supplier Communication

To ensure the stability and efficiency of our supply chain, we have established a multi-tiered supplier communication mechanism that encompasses both formal and informal channels. We conduct regular supplier audits to systematically identify potential issues related to quality, delivery and compliance. By engaging in timely discussions with suppliers, we jointly develop improvement plans. In addition, we empower suppliers to enhance their capabilities in technological innovation and management through technical seminars and structured training programs.



5.1.2 Sustainable supply chain

We consistently adhere to the principle of sustainable development and are committed to establishing long-term, stable, and responsible partnerships with suppliers. To promote the construction of a sustainable supply chain and reduce environmental and social risks, we require all key suppliers to sign the *Supplier Code of Conduct for Anti-corruption Cooperation* and to develop and implement supplier management standards and plans. Integrating the standards of green supply chain management and lean management, we explicitly require suppliers to meet high standards in environmental protection, social responsibility, and corporate governance. This ensures the green transformation and sustainable development of the entire supply chain.

When selecting suppliers, we prioritize their performance on environmental and social responsibility. In terms of environmental protection, suppliers are required to obtain certifications such as ISO 14001. In terms of social responsibility, we assess various factors including market reputation, labor rights protection and workforce stability. At the same time, we continue to reinforce transparency and integrity in supply chain management. All employees of the Procurement Department are required to sign the *Integrity and Self-Discipline Commitment* to eliminate corruption, and we conduct regular anti-corruption training to enhance compliance awareness and enforcement of our employees.

5.2 Industry Collaboration

We uphold the philosophy of open cooperation and actively engage in technical collaborations with various partners to promote the mutual development of the industrial ecosystem. We strive to be a trustworthy partner, an innovative enabler, and a contributor to the industry. Through participating in technology research and development, hosting public forums, engaging in industry events, and fostering international collaborations, we drive industry progress and jointly build a sustainable future.

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Industry exchange activities

We actively organize and participate in industry forums and technology exhibitions, engaging with industrial partners, research institutions, and experts in the field to jointly explore the innovative applications of cutting-edge technologies in specific industries. In line with our commitment to driving industrial transformation through innovation, we strategically position ourselves for future industries and deeply explore new opportunities for AI in emerging fields and markets. The following sets forth some cases of representative industry events we organized or participated in:

The 13th CCTV Finance Hong Kong Forum to Discuss How Technological Innovation Empowers High-quality Economic Development

At the end of 2023, the 13th CCTV Finance Hong Kong Forum was held in Hong Kong under the theme of “Scientific and Technological Innovation: Activating New Driving Forces for Economic Development”. John Lee Ka-chiu, chief executive of Hong Kong SAR, Li Dahong, CPPCC member, and Peng Jianming from China Media Group attended the event and delivered speeches. Dr. Wen Shuhao, Co-founder and Chairman of XtalPi, participated in the discussion, emphasizing that AI and automation are the core driving forces of the technological revolution. Dr. Wen said that XtalPi will continue to increase its R&D investment, and deepen its industry-university-research cooperation with Hong Kong universities and enterprises to accelerate the commercial application of technology. Leveraging Hong Kong's global connectivity, we will contribute to the development of an international innovation and technology hub, showcasing China's scientific and technological strength to the world. Riding on the inevitable trend for AI to empower all walks of life, XtalPi remains dedicated to advancing technological innovation and industrial applications, thus injecting new momentum into high-quality economic growth.

On-site Photos of Wen Shuhao, the Chairman of XtalPi, Attending the Forum and Delivering a Speech



XtalPi delivered a speech at the Discovery US Conference in Boston

In June 2024, XtalPi was invited to attend the Discovery US Conference in Boston, where it delivered a keynote speech entitled “The Reality of AI Drug Discovery: Revolution or Pandora's Box”. The speech explored in depth the practical application of artificial intelligence in drug discovery and analyzed the revolutionary opportunities and potential challenges it brings.

On-site Photos at Discovery US Conference



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CPHI & PMEC Shenzhen High-Quality Pharmaceutical Development Conference

From September 9 to 11, 2024, XtalPi made an appearance at the 26th China International High-Tech Fair (CPHI Shenzhen Exhibition). This event brought together innovative resources in the fields of biopharmaceuticals, active pharmaceutical ingredients (APIs), equipment, and formulation technologies. Dr. Ma Jian, Co-founder and CEO of XtalPi, delivered a speech titled "Empowering API Development with Automation and Intelligence" on September 9, sharing our latest applications and advancements in automation and intelligent technologies within the API development field.

On-site Photos of the Shenzhen High-Quality Pharmaceutical Development Conference



Dr. Lai Lipeng, the Co-founder, executive Director and Chief Innovation Officer of XtalPi, was invited to participate in the third BIONNOVA Beijing Innovation Forum

On September 26, 2024, Dr. Lai Lipeng, the Co-founder, executive Director and Chief Innovation Officer of XtalPi, was invited to participate in the third BIONNOVA Beijing Innovation Forum and delivered a keynote speech on "AI-driven Drug R&D and Innovation". In his speech, Dr. Lai deeply discussed the cutting-edge application of artificial intelligence in the field of drug R&D, shared the achievements of XtalPi under the "three-in-one" R&D model combining intelligent computing, automated experiments and expert experience. He emphasized that integrating AI technology into the drug R&D process can not only significantly improve R&D efficiency and shorten the new drug development cycle, but also promote the sustainable innovation in the pharmaceutical industry, demonstrating XtalPi's positive practice in promoting the sustainable development of the pharmaceutical industry.

On-site Exchange Photo of the Third BIONNOVA Beijing Innovation Forum

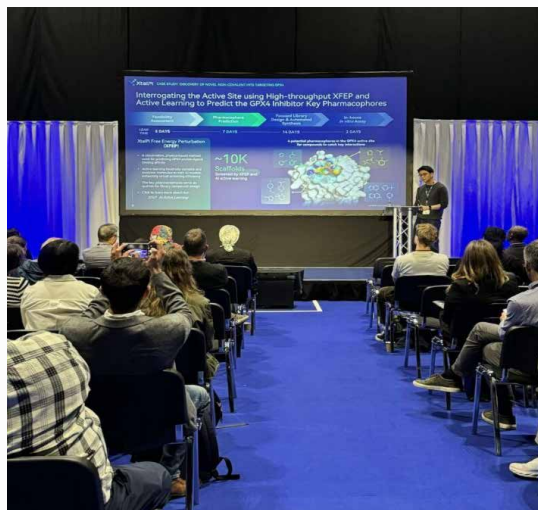


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XtalPi delivered a speech at the Formulation & Development Europe Conference in London

On October 3, 2024, XtalPi was invited to attend the Formulation & Development Europe Conference in London, where it delivered a speech entitled “Transforming Solid Form Selection From Art To A Predictable Science”. The speech shared our latest progress in solid-state drug development and showcased how the selection of solid forms is transformed from a traditional, experience-based approach into a predictable scientific process.

Sharing at the Formulation & Development Europe Conference



XtalPi is working with MIT to lead AI for Science and build the MIT AI future laboratory

Prof. Troy Van Voorhis, the head of the Department of Chemistry at the Massachusetts Institute of Technology (MIT), and Corrie Lefebvre, the director of Commercialization Collaborations, visited XtalPi's Shenzhen headquarters in October 2024 to have in-depth communication with the Company's senior management and scientific research team, discuss how the AI + Robot platform can promote AI For Science and build a new research paradigm in chemistry and materials science. Dr. Wen Shuhao, Co-founder and Chairman of XtalPi, introduced the Company's breakthroughs in the field of AI automated chemistry laboratory, especially in the application of research and development of new materials. Prof. Van Voorhis spoke highly of XtalPi's innovations and achievements in the research and development of new materials such as perovskites, and expressed his willingness to deepen the cooperation, and promote the deep integration of AI and automation.

On-site Photo of Signing Ceremony for MIT and XtalPi Joint Lab



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Dr. Zhang Peiyu, the Chief Scientific Officer of XtalPi, was invited to participate in the 2024 World Congress on Biomedicine and Artificial Intelligence

On October 26, 2024, Dr. Zhang Peiyu, the Chief Scientific Officer of XtalPi, was invited to participate in the World Congress on Biomedicine and Artificial Intelligence and delivered a keynote speech at the conference. Dr. Zhang had an in-depth discussion on the application of artificial intelligence in new drug research and development, and shared XtalPi's innovative practices in the fields of drug discovery and crystal form research. The speech emphasized that the combination of artificial intelligence and high-precision physical models can effectively shorten the new drug research and development cycle, reduce costs, and improve the success rate. Dr. Zhang's speech attracted wide attention from the participants, demonstrating XtalPi's technical strength and industry influence in the field of biomedicine and artificial intelligence.

On-site Photo of World Congress on Biomedicine and Artificial Intelligence



The 26th China International Hi-Tech Fair

From November 14 to 16, 2024, XtalPi participated in the 26th China International Hi-Tech Fair (CHTF) held at Shenzhen World Exhibition & Convention Center in Bao'an District. With the curatorial concept of "Special Topics, Special Exhibitions and Specialization (專題專展專業化)", this CHTF focused on displaying new products and technologies in cutting-edge fields such as artificial intelligence, green energy and life sciences, and gathered scientific and technological innovation achievements at home and abroad. As an important platform to showcase China's high-tech strength, the CHTF provides an opportunity for XtalPi to demonstrate its innovative technologies and industry leadership, further consolidating our technological advantages in the fields of life sciences and green energy.

On-site Photos of International Hi-Tech Fair



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AI New Drug R&D Alliance Expansion Meeting

As the co-chairman unit of Zhangjiang AI New Drug R&D Alliance, the first AI new drug alliance in China, XtalPi and Zhangjiang Group, the chairman unit, have organized a number of different types of activities to attract more new members to join in the alliance, with the aim of promoting the application and deepening of cutting-edge technologies in strategic emerging industries such as artificial intelligence and biomedicine with new tools, new fields and new models, and contributing to the cultivation and expansion of new quality productivity and the promotion of high-quality development of biomedicine.

On December 24, 2024, XtalPi actively participated in the first AI New Drug R&D Alliance Expansion Meeting in China. During the meeting, Yuan Tao (袁濤), the chairman of the alliance, pointed out that AI technology is promoting the transformation of the pharmaceutical industry to "Intelligent Drug R&D (智藥)", and the alliance plays an important role in promoting cross-border integration, technology iteration and data sharing. As an industry pioneer, XtalPi will continue to promote the deep integration of AI and the pharmaceutical industry, and help build an innovative ecosystem for intelligent drug R&D.

On-site Photo of AI New Drug R&D Alliance Expansion Meeting



6. PEOPLE-ORIENTED

As a high-tech enterprise, we always adhere to the concept of a people-oriented approach, and recognize that talent is the driving force for enterprise innovation and development. We regard talent as our most valuable asset, and by creating a compliant, equal, diverse, inclusive and safe workplace environment, we provide every employee with broad development space and rich growth opportunities to help them realize their career aspirations and personal values. Meanwhile, we continue to improve the well-being of our employees, continue to enhance employee communication, and work together with employees to create a better tomorrow.

6.1 Compliance Employment

We take compliance employment as the bottom line and do our best to protect the legitimate rights and interests of our employees. On this basis, we pay great attention to the well-being of our employees and provide them with a comprehensive and reasonable compensation and welfare system, with a view to achieving a win-win situation of personal value and company development.

6.1.1 Employee employment

Protection of employees' rights & interests

We strictly comply with the requirements of laws and regulations such as the *Labor Law of the People's Republic of China* (《中華人民共和國勞動法》) and the *Labor Contract Law of the People's Republic of China* (《中華人民共和國勞動合同法》), and have formulated the *Recruitment Management System* as the basis for internal employment management, and carry out recruitment activities in accordance with laws and regulations.

We adhere to the principle of equal employment and strictly prohibit any form of child labor and forced labor. The *Workplace Equality and Respect Management System* regulates the behavior of employees and prohibits any discrimination and harassment on the basis of gender, age, marital status, race and other factors in the process of employee employment. Meanwhile, we have set up smooth employee communication channels and established procedures for reporting, investigating and imposing penalties, so that employees can report any improper treatment they have suffered in the workplace. If the report is true, once investigated, the Company will deal with it seriously without any tolerance.

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As of the end of the Reporting Period, the total number of employees² at XtalPi globally was 809. The following table provides a breakdown of the employment of our employees:

Indicators ³	Unit	2024
The following breakdown of employees by gender, age and region is based on full-time employees.		
Employment of employees by type of employment		
Full-time employees	Person	753
Part-time employees	Person	56
Employment of employees by gender		
Male	Person	432
Female	Person	321
Employment of employees by age		
< 30	Person	267
30–50	Person	480
> 50	Person	6
Employment of employees by region		
Number of employees in mainland China	Person	714
Number of employees in Hong Kong, Macau and Taiwan	Person	7
Number of employees outside China	Person	32

Diversity, equality and inclusion

We are committed to fostering a diverse, equitable and inclusive workplace, and have formulated the *Workplace Equality and Respect Management System* to communicate our dedication to diversity. In our daily work, we continuously communicate the concept of diversity and equality to our employees through internal emails, cultural publicity platforms, and both online and offline community events to ensure that every employee can feel the care and support of the Company.

We strongly support the development of female employees, and are committed to enabling every outstanding woman to demonstrate her talents and thrive in the workplace.

² Total Number of Employees: The statistical criteria for employee data remain consistent with the financial reports.

³ The following breakdown of employees by gender, age and region is based on full-time employees.

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We have set up mother and baby rooms in our Shenzhen, Shanghai and Beijing workplaces to meet the needs of employees in the lactating period. In addition, during International Women's Day every year, we provide all female employees with a half-day welfare leave and a well-prepared welfare gift box. We hope that these initiatives will make every female employee feel the care and respect of the Company and contribute to the promotion of gender equality.

XtalPi's Mother and Baby Room



Women's Leadership: Witnessing Her Power

On the occasion of International Women's Day on March 8, XtalPi invited 3 female employees from all over the world who are outstanding leaders and role models in their respective fields, shining with their passions and dreams. XtalPi shared their perception of women's power by creating a boutique column called "Her Power", achieving a great resonance beyond time and space, and further strengthening the integration of international culture.

"Her Power" Poster of XtalPi



We not only emphasize gender equality, but also actively promote mutual respect and cooperation among employees with different backgrounds, cultures and experiences. To enhance cross-cultural communication, we provide work and life guidance and cultural support for Boston-based employees visiting our China workplaces, as well as for China-based employees visiting our Boston workplace.

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Employee recruitment

We uphold the principle of fair recruitment and continue to attract talents through multiple channels. According to the *Recruitment Management System*, the Company has clarified various principles in the recruitment process and built a transparent recruitment process to enhance the fairness and transparency of recruitment. To enhance the candidate experience, we have implemented an *Interviewer Management System*, whereby new interviewers are required to complete the interviewer assessment and certification before participating in the interview process. Meanwhile, we have established an interviewer enhancement station to provide interviewers with a platform for the training, sharing and exchange of relevant interview skills, so as to help improve the interviewers' abilities and ensure the selection of outstanding talents in line with XtalPi's talent concept.

We insist on using consistent interview evaluation standards to ensure that all candidates are evaluated under the same evaluation system and avoid unfairness caused by subjective factors. In addition, we have established a mechanism for candidates to evaluate the interview process. Through the "moka" interview system, candidates can appeal against any unfair behavior during the interview process, thus further protecting the legitimate rights and interests of candidates, and upholding the fairness of the recruitment process.




XtalPi's Employee Recruitment Channels

1	Overseas recruitment: launching the overseas recruitment system and establishing the global talent pool
2	Campus recruitment: school-enterprise cooperation, seminars and job fairs
3	Employee internal recommendation: setting up a reward mechanism and providing internal referral channels
4	Social media recruitment: posting jobs on social media
5	Talent mapping matching: establishing a good partnership with external high-level candidates

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On the basis of broadening recruitment channels, we continue to improve the quality of recruitment through a series of measures, which not only enhances the Company's employer brand image, but also provides a solid guarantee for the Company's sustainable development.

XtalPi's Recruitment Highlight Initiatives

 Interviewer Training	 Internship Positions	 Topic Sharing Sessions
<ul style="list-style-type: none">• We conduct training sessions on <i>Interviewer Management System</i> across three locations. By combining historical cases and scenario-based videos, we conveyed interview management standards to interviewers, thereby enhancing the quality of our recruitment process.	<ul style="list-style-type: none">• We offer internship positions to help students on campus understand the real working environment, participate in real projects, and accumulate valuable work experience.	<ul style="list-style-type: none">• In order to further support the career development of college graduates, we regularly organize topic sharing sessions, invite our executives and scientists to give speeches or lectures, share industry trends and career development experience, and help students on campus clarify their employment direction.

6.1.2 Compensation and benefits

We continue to optimize our compensation management system, and have established internal management standards such as the *Compensation Management System*, the *Individual Performance Management System* and the *Organizational Performance Management System*, so as to ensure the fairness, transparency and competitiveness of the Company's compensation management. In addition, we have implemented a stock option plan to retain key talents and fully mobilize the motivation and creativity of employees through a combination of long-term and short-term incentives.

We have built a comprehensive welfare system for our employees and are committed to improving their happiness. We have a flexible working system to flexibly manage commuting time and make it easier for employees to commute during peak hours. Employees who are unable to arrive at the office due to special circumstances may apply to the Company to work from home if they can meet the office conditions and complete their work. We have set up leave entitlements that are higher than the national standard. In addition to statutory holidays, we also provide our employees with additional annual leave according to their length of service to help them achieve work-life balance and ensure that they get enough rest.

We pay great attention to the health of our employees. In addition to the basic social insurance, we have purchased commercial supplementary insurance on personal accidents and illness medical for our employees, and provided comprehensive physical examinations for them. In order to reduce the living costs of our employees, we provide them with transportation subsidies, meal subsidies and nearby rental subsidies to alleviate their pressure of living. During important statutory holidays and important moments of our employees, we provide them with gifts or souvenirs to show our care for them. In addition, we regularly organize team building activities to enhance team cohesion and communication between employees, with the aim of protecting the rights and interests of our employees and improve their happiness.

6.2 Training and Development

We attach great importance to talent cultivation and development, and have formulated a clear career development path for our employees and established a comprehensive knowledge training system to help them achieve their career ideals. We provide employees with a broad career development platform, and set up a sound performance appraisal and incentive mechanism to encourage employees to make progress and realize the mutual growth of individuals and the Company.

6.2.1 Talent cultivation

We have established a sound talent cultivation system and formulated the *Training Management System*, which aims to enhance the professional skills and comprehensive quality of our employees through systematic training, and promote their personal growth and career development.

We have designed customized training programs for employees at all levels. For new employees, we provide new employee training and offline sharing sessions to help them quickly understand their positions and integrate into the Company. For middle and senior management and key employees, we have specially launched a high-dimensional academy training program to further enhance their professional ability and general skills. In addition, we have established an online π -learning learning platform to provide employees with a variety of training courses and learning resources.

XtalPi's Training Program



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High-dimensional Academy Training Program

During the Reporting Period, XtalPi launched the “High-Dimensional Academy”, a tailored innovative training program for senior management and key personnel. In collaboration with external professional institutions, this program employs an offline immersive thematic learning model designed to enhance strategic thinking, management effectiveness and professional expertise, ensuring a strong talent foundation for our high-quality development.

Currently, we have conducted 11 training sessions covering topics such as founder financial advancement, coaching leadership, strategic performance design, B2B sales performance management, organizational design frameworks and corporate learning officers. These sessions have been attended by professionals across various departments, including Finance and Compliance Center, HR and Administration Center, Business Units, and Marketing and Brand Management Center. The training covers sales performance optimization, financial management optimization, leadership practice, whole-process performance management, organizational design and talent development, and corporate learning frameworks, aiming to drive collective progress for both employees and the company.

Founder's Financial Advancement Training



Coaching Leadership Training



Strategic Performance Design Training



Environmental, Social and Governance Report

During the Reporting Period, XtalPi's employees received an average of 5.7 hours of training. The following table summarizes the training of our employees:

Employee Training	Unit	2024
Percentage of employee training performance		
Training rate of full-time employees	%	79
By rank		
Senior management	%	3
Middle management	%	4
Non-management employees	%	93
By gender		
Male employees	%	56
Female employees	%	44
Employee training investment performance		
Total employee training hours	Hours	4,275
Amount of investment in employee training	RMB ten thousand	75.58
Training hours per person	Hours	5.7
Average training hours by gender		
Male employees	Hours	5.4
Female employees	Hours	6.1
Average training hours by rank		
Senior management	Hours	9.1
Middle management	Hours	5.5
Non-management employees	Hours	5.6

6.2.2 Promotion mechanism

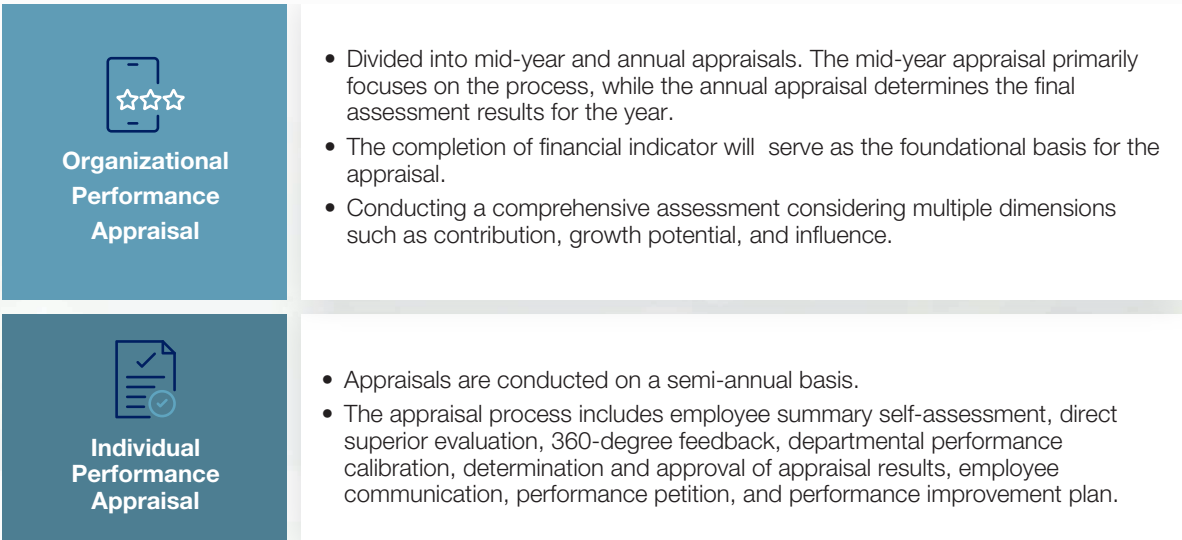
We insist on implementing a fair and just promotion strategy, and follow the *Rank Management Measures* as the basis for the promotion and development of internal employees to ensure the rationality and fairness of the promotion process of employees. In addition, we have set up a comprehensive employee promotion appraisal system, which combines various factors such as employees' contribution, growth and influence to conduct a comprehensive evaluation, aiming to comprehensively and objectively evaluate the performance and potential of employees, and ensure that every employee is given the due development opportunities in a fair and just environment.

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Adhering to the management concept of “Making the Best Use of Talents”, we have set up two talent development routes, namely the management sequence and the professional sequence, to provide a variety of choices for employees in various fields.



We have established a comprehensive performance evaluation system that assesses employees from two dimensions: organizational performance appraisal and individual performance appraisal.



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6.3 Employee Care

We always prioritize the well-being of our employees, offering support not only in their work but also providing care in their daily lives. We patiently listen to each employee's voice, striving through practical efforts to make every employee feel the warmth of home, thereby enhancing their happiness and sense of belonging.

6.3.1 Employee communication

We value the opinions and suggestions of every employee. We have established diverse and open communication channels to encourage employees to freely and actively express their thoughts and viewpoints. Employees are welcome to provide feedback on key issues such as performance appraisals and job promotions, and we will attach great importance on such feedback and make timely responses.

XtalPi Employee Communication Channels and Highlight Initiatives

 Two-way Communications	<ul style="list-style-type: none">• At onboarding anniversary events, we incorporate face-to-face sessions with HR and feedback surveys to address new employees' queries and gather their input;• Holding quarterly all-hands meetings to share the Company's strategic plans and policies, fostering a stronger sense of identification and belonging among our employees.
 Accelerating Employee Integration	<ul style="list-style-type: none">• Presenting anniversary gift boxes to our overseas employees as a token of recognition and gratitude for their contributions;• On international occasions such as International Women's Day, we conduct online interview activities to enhance communication and interaction among employees, creating a more united and harmonious work environment.
 Employer Branding Campaign	<ul style="list-style-type: none">• Regularly conducting employee satisfaction surveys to collect employees' thoughts and suggestions through various channels. These surveys help us gauge employees' satisfaction with the work environment, career development, team collaboration, and company culture.

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We place a high priority on employee retention and have implemented a series of initiatives to retain talent. We have increased the allocation of internal resources to employees in core positions to enhance their loyalty. We provide employees with abundant training opportunities to help them improve professional skills and actively offer nomination opportunities for employees to apply for and obtain talent qualification certifications, supporting them in gaining greater recognition and reputation within the industry.

For employees who submit resignations, we conduct face-to-face interviews to deeply understand the reasons behind their decision, actively address their concerns, and, when necessary, collaborate with senior management to retain them. This ensures the stability of core employees and the cohesion of the team. During the Reporting Period, the Company's employee turnover rate was 10.3%. The table below details the employee turnover:

Indicators	Unit	2024
Employee turnover rate by gender		
Male	%	5.83%
Female	%	4.47%
Employee turnover rate by age		
<30	%	3.66%
30–50	%	6.64%
>50	%	0.00%
Employee turnover rate by region		
Number of mainland China employees	%	9.49%
Number of Hong Kong, Macao, and Taiwan employees	%	0.14%
Number of overseas employees	%	0.68%

6.3.2 Employee activities

We firmly believe that a cohesive and dynamic team is a strong driving force for the development of a company, and the happiness of employees is a solid cornerstone for the continuous progress of the company. Therefore, we are committed to creating colorful activities for our employees, through which we continue to enhance team cohesion and their sense of well-being.

Peng π Future, Born With AI | XtalPi's 10th Anniversary Celebration

XtalPi hosted a variety of colorful 10th anniversary celebration activities in its offices in Shenzhen, Shanghai, Beijing, and Boston. We customized 10th anniversary uniforms, badges, and cakes, and designed diversified fun games and sports challenges to enhance team cohesion and employees' sense of belonging.

During the event, Co-founders Dr. Wen Shuhao, Dr. Ma Jian, and Dr. Lai Lipeng delivered speeches respectively, reviewing the company's journey from its beginnings in Boston to its successful listing on the Hong Kong Stock Exchange, and emphasizing the importance of technological innovation, teamwork, and social value creation. We hope to continue innovating in the fields of life sciences and new materials, making greater contributions to human health and social development.

XtalPi's 10th Anniversary Celebration



IT Day Cultural Day Sports Meet: AI Passion Ignites the Future

On March 14, we celebrated XtalPi's unique IT-Day Culture Day. With the theme of "AI Passion Ignites the Future", we organized a series of activities in our four workplaces in Shenzhen, Shanghai, Beijing, and Boston through an innovative format of online "XtalPi Circle" fitness check-in challenge and offline sports parties. The activities effectively boosted the cohesion of the organization and the morale of the employees. The offline sports meet promoted cross-departmental communication through random team formations, achieving a satisfaction score of 96. The online event attracted 110 participants, who received Lego cars as rewards, enhancing internal interaction and engagement.

XtalPi's IT Day Cultural Day Sports Meet



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“Wandering Between the Lines” World Book Day Activity

On April 23, World Book Day, XtalPi launched the “Wandering Between the Lines” book recommendation event, inviting employees to share their favorite books online. Our enthusiastic employees actively participated in the event, sharing their beloved books. Based on everyone’s recommendations, we compiled a collection of recommended books into a social media post, fostering an atmosphere of shared learning and growth.

XtalPi’s World Book Day Activity



Full Coding Power, Igniting Decoding Passion Across the Team: “1024 Programmer’s Day”

During the Programmers’ Day, we successfully carried out a series of highly engaging activities, conveying the company’s care and emphasis to the programmer community. Through these activities, we demonstrated our deep recognition and unremitting pursuit of the technical and cultural heritage. During the event, the number of interactions reached 191, with topic views totaling 2,100, and the highest single post interaction count reaching 235.

XtalPi’s “1024 Programmer’s Day” Activity



Environmental, Social and Governance Report

We always adhere to the philosophy of work-life balance and actively organize diverse employee family activities, demonstrating comprehensive care for employees' personal lives and career development.

"Little Scientists" Corporate Open Day Brand Event

We hosted the "Little Scientists" Family Day event in Shanghai, which attracted many families to explore the mysteries of the technological world together. During the event, the children wore customized "XtalPi Work card" and visited their parents' workplaces, gaining a deeper understanding of their work through interactive Q&A sessions. Additionally, an expert team prepared an online course for the children, using familiar cartoon characters to vividly explain scientific knowledge such as drug development, sparking their interest in science.

Furthermore, the children visited the intelligent automation laboratory, experiencing the charm of cutting-edge technology up close and engaging in fun interactions with robotic cars. In the Parent-Child Carnival game area, a variety of exciting games were set up, such as small chemistry experiments, clay design, and ring toss for lucky bags, allowing the children and their parents to enjoy a joyful time together.

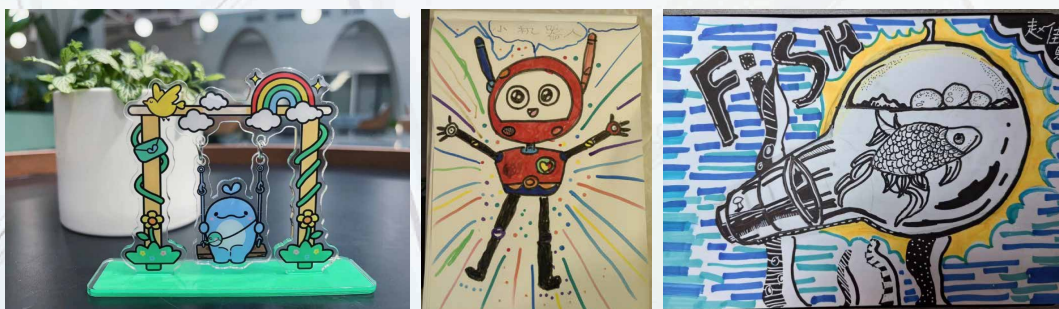
XtalPi's "Little Scientists" Corporate Open Day Brand Event



Celebrating Children's Day: XtalPi's Children's Painting Sharing Activity at Home and Abroad

As Children's Day approached, we specially organized a children's painting collection event for the families of employees at home and abroad. The event aimed to allow children to express their unique perspectives and beautiful aspirations for the world through art. The initiative received an enthusiastic response, with a total of 20 creative and colorful artworks submitted. These paintings not only showcased the children's rich imagination and artistic talent but also reflected XtalPi's care and support for employees' families.

XtalPi's Children's Painting Sharing Activity at Home and Abroad



Environmental, Social and Governance Report

6.4 Occupational Health and Safety

We pay great attention to employees’ occupational health and safety, establishing a robust occupational health and safety management system to provide a healthy and safe working environment. We also strengthen the promotion of safety awareness in daily operations to effectively safeguard employees’ occupational health and safety. We strictly comply with the legal and regulatory requirements of our operating locations and have developed internal policies such as the *EHS Management Guidelines* and the *Incident and Accident Management Measures* to ensure the safety of our operating environment. Additionally, the Company requires all engineering project contractors to adhere to the *Engineering Project Contractor Safety and Civilized Management Measures*, ensuring that safety and environmental requirements are met during project implementation. In the past three years, there were no work-related injuries or fatalities.

We have set occupational health and safety control objectives, and the table below shows the achievement status during the Reporting Period:

Indicators	2024 Achievement Status
Severe injury and fatality rate 0%	Achieved
Occupational disease incidence rate 0%	Achieved
Hazard rectification rate 100%	Achieved

To further ensure employee safety, we regularly conduct occupational health and safety audits to identify potential safety hazards and areas that do not meet safety standards, thereby ensuring the safety and compliance of the working environment. During the Reporting Period, we successfully passed the ISO 45001 Occupational Health and Safety Management System audit and obtained certification.

XtalPi ISO 45001 Occupational Health and Safety Management System Certification



During the Reporting Period, we conducted an annual safety training covering key areas such as safety responsibility systems, safety production month, accident case analysis, occupational health and environmental protection education, hazardous chemical safety knowledge, as well as emergency plan drills and emergency response. Through this training, employees across all departments significantly enhanced their safety awareness and emergency response capabilities, providing strong support for the company’s safe production and sustainable development. In addition, we also conducted an annual training focused on emergency response to sudden incidents such as fires and leaks. The training covered emergency response measures for fires and chemical leaks, risk identification of hazardous chemicals, protective measures, execution of emergency procedures, and environmental recovery after incidents. This training aimed to enhance employees’ emergency response capabilities, ensure their safety, minimize environmental impact, and comply with relevant regulations and standards.

Environmental, Social and Governance Report

7. GREEN DEVELOPMENT

Leveraging our technological advantages, we actively promote the development of green technologies, empowering green practices across various industries. We are committed to building an operational model that emphasizes efficient resource utilization and environmental friendliness, setting green development goals to move toward a more sustainable future.

7.1 Environmental Management

Environmental management system

We consistently adhere to the environmental management philosophy of "targeted pollution control, scientific pollution control, and lawful pollution control," striving to meet higher standards in the battle against pollution. We synergistically promote carbon reduction, pollution control, green expansion, and growth, driving steady and continuous improvement in ecological and environmental quality. The company strictly complies with laws and regulations such as the *Environmental Protection Law of the People's Republic of China* (《中華人民共和國環境保護法》), the *Law of the People's Republic of China on Appraising Environmental Impacts* (《中華人民共和國環境影響評估法》), and the *Regulations on the Administration of Construction Project Environmental Protection* (《建設項目環境保護管理條例》). We have established and implemented internal systems such as the *EHS Management Guidelines* and the *Environmental Protection Management System*.

We have set up a Safety Production Management Committee (the "**Safety Committee**"), with the chief executive officer of the Company serving as the highest responsible person, overseeing all safety, environmental protection, and occupational health efforts of the Company. The EHS team is responsible for daily management, establishing and improving the Company's environmental protection systems. Quarterly EHS meetings are held to regularly report progress to superiors. The engineering team serves as the implementation level for environmental management measures, focusing on the maintenance and inspection of waste gas emission and disposal facilities, ensuring the orderly advancement of environmental management work.





We actively promote environmental management system certification and have successfully obtained ISO 14001 Environmental Management System certification.




XtalPi ISO 14001 Environmental Management System Certification



Environmental, Social and Governance Report

We have established specific environmental goals and actively adopt quantitative metrics to measure the effectiveness of our environmental management strategies. We regularly track indicators such as greenhouse gas emission intensity and energy usage intensity, review the progress of achieving environmental goals, and enhance green operational performance.

 Greenhouse Gases Emissions	 Energy Utilization	 Water Resource Utilization	 Hazardous Waste Emission
<ul style="list-style-type: none">Using 2023 as the baseline year, the carbon emission intensity will be reduced by 12% by 2030 and by 25% by 2040.	<ul style="list-style-type: none">Using 2023 as the baseline year, the energy consumption intensity will be reduced by 12% by 2030 and by 25% by 2040.	<ul style="list-style-type: none">Using 2023 as the baseline year, the water consumption intensity will be reduced by 15% by 2030 and by 30% by 2040.	<ul style="list-style-type: none">Using 2023 as the baseline, by 2025, the generation of hazardous solid waste and hazardous liquid waste will be decreased by 0.5% annually compared to the previous year.

2024 highlight performance		
Environmental Protection Investment Amount		RMB2,097,000
Waste Compliance Disposal Rate		100%
Hazardous Waste Emission Intensity		Decreased by 54.9% compared to 2023

7.1.2 Environmental audits

We are committed to ensuring the effectiveness and compliance of environmental management, continuously improving environmental management standards, and strictly implementing internal and external environmental audit and inspection systems. We actively cooperate with external regulatory agencies to conduct quarterly and monthly inspections, promptly addressing and rectifying issues based on audit results, and continuously optimizing management measures.

In terms of internal control, we have established rigorous annual, monthly, and daily inspection procedures. Comprehensive environmental inspections are conducted before major events and holidays, covering key areas such as environmental protection facilities, hazardous chemical usage sites, hazardous chemical storage warehouses, and firefighting facilities. This helps to identify potential risks in a timely manner and implement effective prevention and control measures, ensuring the objectivity and reliability of risk assessments. During the Reporting Period, the Group did not experience any major environmental incidents or receive any environmental-related penalties.

7.1.3 Green Office

We uphold the philosophy of green development, striving to enhance employees' sense of environmental responsibility and promote the in-depth practice of green office culture. We regularly conduct environmental protection-themed training, helping employees comprehensively understand the importance of environmental protection and related knowledge through systematic education and promotion. To foster a green office culture, we post water-saving, energy-saving, and other environmental signs in office areas to remind employees to practice resource conservation and environmentally friendly behaviors in their daily work.

We practice the concept of green development in the procurement process. By leveraging a digital procurement system and collaborating closely with suppliers, we ensure a low-carbon, transparent and efficient green supply chain to enhance procurement efficiency and secure sustainable sourcing practices, thus laying a solid foundation for building an environmentally friendly supply chain ecosystem.

Environmental, Social and Governance Report

7.2 Emissions Management

On the basis of ensuring compliance with emissions regulations, we actively adopt advanced technologies and scientific methods to manage our pollutant emissions, minimizing the environmental impact of our operations and R&D activities.

7.2.1 Solid waste management

We strictly comply with laws and regulations such as the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste* (《中華人民共和國固體廢物污染環境防治法》) and follow the Company's internally established non-hazardous waste management procedures. During the collection, storage, transportation, utilization, and disposal of general solid waste, we rigorously implement preventive measures such as dust prevention, loss prevention, and leakage prevention. We strictly prohibit unauthorized dumping, stacking, discarding, or spilling of solid waste and encourage all departments to actively recycle and reuse solid waste to eliminate the random discharge and stacking of waste. For the disposal of general solid waste, the Company entrust qualified third parties to collect and recycle it, ensuring efficient utilization and resource recovery. Additionally, we require all departments to classify and handle domestic waste and dump it at designated temporary storage points, ensuring standardized and orderly management of non-hazardous solid waste.

7.2.2 Hazardous waste management

The Company's hazardous waste primarily includes laboratory waste, laboratory waste liquids, bio-experiment-contaminated solid waste, bio-experiment waste liquids, waste chemicals, spent activated carbon, and sludge generated from wastewater treatment. We adhere to relevant laws and regulations such as the *Measures for the Prevention and Control of Environmental Pollution by Waste Hazardous Chemicals* and have established and implemented internal systems such as the *Hazardous Waste Management Methods* and the *Hazardous Chemical Safety Management System* to ensure compliant disposal of hazardous waste.

The Company implements a comprehensive lifecycle management for hazardous waste, ensuring that industrial parks strictly classify, label, and record hazardous waste in accordance with relevant regulations. At the same time, we exercise strict control over the entire process of hazardous waste generation, storage, transfer, and disposal, entrusting qualified third-party agencies to handle hazardous waste to ensure safe and compliant treatment. Additionally, we regularly conduct training sessions for relevant employees on hazardous chemical management knowledge to enhance their safe operational capabilities in practical work.

7.2.3 Wastewater management

We strictly manage wastewater in accordance with laboratory wastewater disposal standards. During the construction and renovation of the Shanghai Zhangjiang Jichuang Park operational site, we incorporated wastewater disposal into the overall planning to ensure closed-loop treatment and centralized discharge of wastewater. At the same time, the Shenzhen operational site added an integrated wastewater treatment station in 2024, utilizing neutralization + coagulation sedimentation processes to treat wastewater, ensuring that the treated wastewater consistently meets relevant discharge standards. This wastewater treatment station can effectively handle wastewater generated during project R&D, as well as various types of wastewater such as wastewater from lab coat cleaning. We continuously upgrade and renovate wastewater disposal facilities to enhance the efficiency of wastewater disposal.

7.2.4 Waste gas management

The Company's air emissions are primarily derived from the volatilization of small quantities of chemical reagents, acids, alkalis, and organic solvents during the inspection process. We comply with relevant laws and regulations, including the *Air Pollution Prevention and Control Law of the People's Republic of China* (《中華人民共和國大氣污染防治法》) and the *Environmental Protection Law of the People's Republic of China* (《中華人民共和國環境保護法》), ensuring that our air emissions meet the required standards. We have adopted air-supply fume hoods and planned unified waste gas treatment facilities. We actively implement equipment upgrades and process improvements to reduce atmospheric pollutant emissions and minimize the impact on the surrounding environment. In 2024, the waste gas treatment facilities were renovated at the Shenzhen Operation Site (深圳運營場地) by optimizing the existing exhaust stack system. The exhaust stacks were combined, and a two-stage activated carbon adsorption system was introduced, significantly improving the efficiency of waste gas treatment and ensuring compliant emission of waste gas pollutants.

Environmental, Social and Governance Report

7.3 Resource Management

In alignment with the trend of developing a green circular economy, we continuously strengthen resource management, set efficiency targets for resource usage, and promote the efficient use and proper protection of resources, effectively reducing waste and pollution.

7.3.1 Energy management

Improving energy efficiency is one of the key approaches in implementing our low-carbon strategy and addressing climate change. We are committed to reducing energy consumption and minimizing environmental impact while driving business development, thereby promoting sustainable growth.

The Company's energy usage primarily consists of purchased electricity and heating and cooling sources. We have set energy consumption reduction targets to reduce energy consumption intensity by 12% by 2030 and by 25% by 2040. To achieve this goal, we keep enhancing energy efficiency through refined energy management, process and technology optimization, and the application of automation technologies.

Green R&D Empowered by Automated Lab Platform

Combined with high-precision big data analysis and AI models, our self-developed automated lab platform has enabled a more intelligent and automated R&D model. Through our in-house automation system, XtalDynamics, we have reduced the required number of physical experiments by 80%, effectively lowering energy consumption and waste emissions. Our automation platform has not only delivered significant resource savings and energy conservation and emission reduction benefits to the Company, but also empowered clients to conduct green R&D, driving rapid development in other industries such as green energy and new materials. It plays an increasingly important role in helping our nation achieve the "dual carbon" goals.

Energy-Saving and Environmental Protection Construction of New Facility in Shanghai

In 2024, during the renovation process at the Zhangjiang Jichuang Park site in Shanghai, we strictly adhered to the *Unified Standard for Energy Efficiency Design of Industrial Buildings* (《工業建築節能設計統一標準》). The ventilation system design was optimized by selecting high-efficiency, energy-saving and low-noise fans, and implementing vibration reduction, isolation, and noise control measures, which not only reduced energy consumption but also minimized noise impact on the surrounding environment, ensuring that the power consumption per unit of airflow was below the national limit. The laboratory air conditioning system utilizes multi-split technology combined with the PID control logic of the HVAC system, which automatically optimizes energy-saving modes based on temperature and humidity requirements. Additionally, through scheduled ventilation and air conditioning on/off control, we achieve efficient energy management, thereby improving the overall energy efficiency.

Furthermore, it introduced Bernoulli-type energy-saving fume hoods, which, compared to traditional fume hoods, reduce both exhaust and supply air volumes by approximately 50%. Half of the supply air is directly extracted from the outdoor air, eliminating the need for additional fresh air treatment, effectively lowering energy consumption and further enhancing energy-saving performance.

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7.3.2 Water resource management

We are committed to contributing to water resource conservation and have established specific water-saving targets. Using 2023 as the baseline year, we aim to reduce water intensity by 15% by 2030 and by 30% by 2040. In 2024, our water consumption was reduced by 37% compared to 2023, significantly exceeding our target progress.

Our water usage primarily comes from municipal water supply, with consumption concentrated in R&D as well as production processes, such as laboratory solution preparation, washing, and cleaning. We strictly manage water resources in accordance with the Company's environmental protection policies, effectively improving the management level of all water usage processes.

We have implemented a series of measures to reduce water consumption, including regular faucet inspections to prevent leaks and establishing a damage reporting mechanism to ensure timely repairs of any faults. Additionally, we raise employee awareness of water conservation through the display of water-saving signage and water conservation campaigns, encouraging all employees to embrace the concept of green office practices.

7.4 Addressing Climate Change

We place great importance on the risks and opportunities posed by climate change. In alignment with our business characteristics, we systematically identify and assess both physical and transition risks related to climate change. At the same time, we actively implement countermeasures to mitigate the potential impacts of climate change risks on our operations and R&D activities.

Through a comprehensive ESG governance framework, we continuously identify and update the potential climate-related risks and opportunities, and assess their direct and indirect impacts on the Company's operations under the supervision of the Board of Directors. Guided by the ESG Group, various functional departments carry out daily identification and management of climate-related risks, develop response strategies, and regularly review the progress of climate change risk management efforts. We actively promote management measures, such as energy-saving, emission reduction, and green operations, to ensure that carbon emissions are reduced and energy efficiency is improved in our daily operations.

The impact of climate change on the Company is primarily reflected in two areas: R&D activities and logistics operations. Leveraging artificial intelligence and automated experimental technologies for drug development, we need to control temperature and humidity during experiments to ensure the accuracy of results. Extreme weather events could affect the energy consumption demands of our laboratories, leading to increased operational costs. Furthermore, global supply chain fluctuations and rising transportation costs due to climate change may also impact the Company's raw material procurement and product delivery. Therefore, the Company has incorporated carbon emission management into its supply chain management system. We aim to reduce climate-related risks by optimizing logistics routes, enhancing transportation efficiency, and using low-carbon packaging materials.

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Risk Type	Risk Manifestations and Impacts	Countermeasures Against Risks
Physical risks	Extreme weather: Global climate change is leading to an increase in extreme weather events such as heatwaves, heavy rainfall, and flooding, which may impact the R&D experimental environment and the stability of the supply chain.	<ul style="list-style-type: none"> — Establishing emergency plans and drill mechanisms: Regularly conducting extreme weather simulation drills to enhance employees' ability to respond to emergencies. — Enhancing infrastructure resilience: Strengthening flood and wind resistance designs for laboratory and storage facilities, and optimizing drainage systems.
	Energy supply instability: As the global energy transition progresses, certain regions may face fluctuations in energy supply, leading to higher electricity costs.	<ul style="list-style-type: none"> — Setting up emergency power supply measures: Equipping facilities with backup power generation devices. — Implementing energy management: Promoting energy-efficient equipment, optimizing energy consumption scheduling, and improving energy utilization efficiency in laboratories and office areas.
Transition risks	Policy and regulatory changes: Stricter domestic and international regulations on carbon emissions and environmental protection, along with the implementation of carbon pricing mechanisms, may increase our operational costs.	<ul style="list-style-type: none"> — Enhancing policy adaptation capabilities: Closely tracking domestic and international climate policy trends and adjusting operational strategies accordingly.
	Market and technological changes: The rapid development of green technologies is driving the industry towards a low-carbon model. At the same time, client focus on sustainability is rising. Failure to adjust low-carbon technology application strategies in time may place the Company at a competitive disadvantage in the industry.	<ul style="list-style-type: none"> — Promoting green R&D: Leveraging our R&D advantages to increase investment in green technology R&D. — Applying artificial intelligence and automation technologies: Using artificial intelligence and simulation technologies to reduce resource consumption during experiments.

We have established a comprehensive emergency plan and optimized energy management through remote control software to ensure stable operations during extreme weather events or fluctuations in energy supply. At the same time, we continue to drive innovation in low-carbon technologies and artificial intelligence systems, accelerating the achievement of both our own and societal carbon goals.

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7.5 Green Empowerment

We are committed to driving green and sustainable development through innovative technologies. By leveraging our resources, we aim to facilitate the low-carbon and green transformation of industries, contributing to building a low-carbon and green future.

AI-Driven Green Agricultural R&D: Pesticide Polymorph Research Project

The importance of solid-state pesticide research is increasingly prominent. Based on the dual cores of physical-chemical theory and artificial intelligence theory, XtalPi has established a cyclic optimization and iteration process that integrates platforms, algorithms, and experiments under the “experiment + computation” R&D model, which continuously refines and iterates R&D outcomes, helping pesticide companies improve the stability, hygroscopicity, solubility, biological activity and product quality of pesticides, shorten project development cycles, improve pesticide utilization, reduce pollution, and enhance profitability through patent strategies, thereby expanding application value. We provide advanced, high-quality, and efficient solid-state drug R&D services to accelerate the drug R&D process.

AI-Powered New Energy Material R&D: Strategic Collaboration Between XtalPi and the GCL Group

In August 2024, we signed a five-year strategic cooperation agreement with the GCL Group to strengthen AI applications in the energy sector and accelerate the commercialization of artificial intelligence in the energy industry, setting a benchmark for AI applications in the sector. We provide the GCL Group with R&D services for high-tech new energy materials, including perovskites, supramolecules, lithium-ion batteries, cathode materials, and carbon-silicon materials, and jointly build a customized large-model + automation platform for the materials sector, advancing the industrial intelligence and paradigm upgrade of AI-powered new energy industry R&D. Additionally, the collaboration plans to jointly establish a New Material Research Institute in the Shenzhen Hetao Cooperation Zone (深圳河套合作區) to promote the green, low-carbon, and high-quality development in China's energy industry.

8. GIVING BACK TO SOCIETY

We adhere to the principle of “AI for Good” and actively fulfill our social responsibilities, being committed to the fields of education, science popularization, and social welfare. We encourage our employees to participate in public welfare initiatives. Through innovative technologies and concrete actions, we give back to society.

8.1 Education and Science Popularization

In 2024, we conducted multiple science popularization lectures and activities through a blended “online + offline” model, aiming to enhance the public's scientific literacy and contribute to social development.

Online Public Lecture: Innovation in Drug R&D Driven by Digitalization and Automation

On April 9, 2024, Dr. Yang Mingjun, Chief R&D Scientist of XtalPi, participated in Kaisi Club (愷思俱樂部)'s series of public lectures on digitalization in the pharmaceutical industry and delivered a presentation titled “Innovation in Drug R&D Driven by Digitalization and Automation” (《數智化和自動化驅動藥物研發創新》). Starting from the evolution of drug R&D models, key technological elements, and industry pain points, Dr. Yang systematically introduced XtalPi's innovative platforms and practical cases in the fields of digitalization and automation, followed by an in-depth discussion on the future trends of drug R&D.

Public Lecture on Innovation in Drug R&D Driven by Digitalization and Automation



Environmental, Social and Governance Report

We have meticulously designed a series of science and technology popularization and education activities, focusing on inspiring the enthusiasm for scientific exploration among youth, laying the foundation for nurturing future talents in science and technology.

Future Scientists: Summer Science and Technology Popularization and Research Learning Activities

We have specially launched the “Future Scientist” research and study brand targeting primary and secondary school groups, giving full play to the strengths of the laboratory of XtalPi and our team of scientists to present students with scenarios of new quality productivity beyond textbooks and classrooms, aiding the nation in cultivating future scientific and technological innovation talents. At present, the Company has hosted 500 students and received widespread acclaim.



We have partnered with Kailan Education (開瀾教育) and Zhangjiang Science Hall Science Festival (張江科學會堂科普季) to host special events of science and technology popularization and education on new quality productivity under the theme of “Future Scientist” in Shenzhen and Shanghai, respectively. In addition, we were invited to participate in the “Future City” AI Innovation Workshop organized by Shanghai Zhangjiang (Group) Co., Ltd, where we hosted a specialized session titled “Future Scientists: AI Empowering Drug Development”.

“Future Scientist” Research and Study Brand of XtalPi



Public Courses Sharing: "How to Invent a Drug" and "Robotic Arms and Degrees of Freedom Sharing"

We innovated the model of "Party Building + Public Welfare" and gave full play to the vanguard and exemplary role of Party members. Relying on professional advantages, representatives of Party members have elaborately created public welfare courses such as "How to Invent a Drug" and "Robotic Arms and Degrees of Freedom Sharing", popularizing scientific knowledge to children in an easy-to-understand way, stimulating their interest in exploration and cultivating their innovative thinking.

In the online small class, instructor Zhao Sen used vivid metaphors and animated characters such as Aladdin and Iron Man to explain the drug development process, the "clairvoyance" and "clairaudience" of scientists, as well as the clinical trial stages before a new drug is launched to the children.

Public Courses Sharing "How to Invent a Drug"



In the class, instructor Liu Yang explained the principle of degrees of freedom in an easy-to-understand manner to the children. Using a robotic arm as an example, he extended the concept to the human arm, guiding the children to find related examples in their daily lives. Following this, the children also participated in the practical operation experience of the AGV, combining theoretical knowledge with practical application to deepen the understanding of the principle of degrees of freedom.

Public Courses Sharing "Robotic Arms and Degrees of Freedom Sharing"



Environmental, Social and Governance Report

8.2 Social Welfare

We have always actively paid attention to community needs and carried out social welfare activities through various channels. We support youth education through charitable scholarship programs, striving to improve educational equity and quality. At the same time, we organize our employees to actively participate in environmental protection activities, putting the concept of sustainable development into practice with concrete actions.

We actively engage in student aid activities, collaborating with the Guangdong Provincial Education Foundation to donate discarded computer displays, aiding the development of regions with scarce educational resources. Meanwhile, we participate in the “Minor Protection Action” launched by the Shenzhen Longhua Administration of Civil Affairs, donating related products of research and study for special education to support the education of children with special needs.

Student Aid: Computer Donation Campaign

In November 2024, we joined hands with the Guangdong Provincial Education Foundation to conduct donation activities for used office equipment in Shenzhen, Shanghai and Beijing. A total of 198 computers were donated, which will be used to set up 2 large computer classrooms. The Guangdong Provincial Education Foundation awarded XtalPi with certificate of honor and letter of appreciation, recognizing our outstanding contribution to this event.

Certificate of Honor and Letter of Appreciation Received by XtalPi



荣誉证书

深圳晶泰科技有限公司:

欣受贵司向广东省教育基金会捐赠电脑 198 台 (件)。

谨对贵司为我省革命老区、边远山区教育事业, 改善办学条件所作出的贡献, 表示诚挚的感谢!

广东省教育基金会
2024 年 12 月

广东省教育基金会

感谢信

深圳晶泰科技有限公司:

感谢贵公司于 2024 年 12 月捐给 198 台 (件) 电脑捐赠给基金会。贵司捐赠的电脑, 经由深圳八宝信通信技术有限公司的专业技术人员将表整修, 经鉴定达到使用标准的电脑, 捐赠给我省革命老区地区缺少电脑而无法开设计算机课程的农村学校, 并为捐赠的电脑提供持续用年的保障服务。贵司领导可以持续关注基金会发布的捐赠事项执行情况, 了解和监督捐赠事项的落实情况。

贵司的热心捐赠, 不仅改善了学校的教学设备, 为当地开展信息化教学工作提供了坚实的保障。这些学生们有机会通过上机学习, 初步掌握计算机基础知识, 为未来发展奠定基础。这是学生们建设社会需求、提高科学文化素质、开阔视野的重要途径。你们的爱心善举必将成为学生进步、教师成长、学校发展取之不尽的精神动力和用之不穷的力量源泉。

再次向贵司对我省经济欠发达地区教育事业的支持表示衷心的感谢并致以最崇高的敬意!

广东省教育基金会
2024 年 12 月 9 日

“Minor Protection Action” Special Education Donation Activity

We actively participate in public welfare initiatives, and support the “Minor Protection Action” special education donation activity organized by the Shenzhen Longhua Administration of Civil Affairs (Disabled Persons’ Federation) by providing research and study materials. This initiative aims to offer higher quality educational support to children with special needs, helping them better integrate into society. Our close collaboration with the Shenzhen Longhua Administration of Civil Affairs has enabled us to provide essential material support for special education programs, contributing to the educational development of children with special needs.

“Minor Protection Action” Special Education Donation Activity

深圳龙华区民政局（残联）
深圳市雨燕残疾人关爱事业发展中心
深圳晶泰科技有限公司

“护苗行动”特殊教育助学暨罗城·深圳特殊教育学校捐赠活动



We actively promote environmental protection causes and actively guide employees to engage in environmental protection practices by organizing the “Recycling of Used Bottles” salon event.

“Recycling of Used Bottles” Environmental Protection Salon Event

On March 8, the Women’s Day, we meticulously planned and hosted the “Recycling of Used Bottles” salon event across our offices in Shenzhen, Beijing and Shanghai. The event specially invited employees to bring unused bottles and jars from their homes to the venue. Through DIY acrylic painting, these discarded items were ingeniously transformed into unique pieces of art, achieving the eco-friendly reuse of old objects.

“Recycling of Used Bottles” Salon Event of XtalPi



Environmental, Social and Governance Report

APPENDIX I KEY PERFORMANCE TABLES

Environmental Performance Table

Indicators	Unit	2024
Greenhouse Gas Emissions⁴		
Total greenhouse gas emissions (Scope 1 & Scope 2)	tCO ₂ e	6,625.51
Indirect greenhouse gas emission (Scope 2)	tCO ₂ e	6,625.51
Intensity of greenhouse gas emissions by revenue	tCO ₂ e/RMB million revenue	24.87
Waste		
Total amount of hazardous waste	Tonne	242.96
Intensity of hazardous waste by revenue	Tonne/RMB million revenue	0.91
Total amount of non-hazardous waste	Tonne	92.59
Intensity of non-hazardous waste by revenue	Tonne/RMB million revenue	0.35
Water Sourcing		
Water consumption from tap water/municipal water	Tonne	19,939.00
Intensity of water consumption by revenue	Tonne/RMB million revenue	74.84
Energy Consumption⁵		
Indirect Energy Consumption		
Consumption of purchased electricity	Mwh	7,806.31
Comprehensive Energy Consumption		
Comprehensive energy consumption (indirect)	tce	1,488.55
Total comprehensive energy consumption	tce	1,488.55
Intensity of total energy consumption by revenue	tce/RMB million revenue	5.44

⁴ The primary sources of greenhouse gas (GHG) emissions for XtalPi stem from the use of purchased electricity and purchased cooling/heating sources, with no Scope 1 GHG emissions involved. The Scope 2 GHG emissions data are calculated based on the 2022 national average CO₂ emission factor for grid electricity (excluding non-fossil energy electricity volumes from market-based transactions), as published in the *Announcement on the 2022 CO₂ Emission Factors for Grid Electricity* issued by the Ministry of Ecology and Environment of the People's Republic of China.

⁵ The accounting of energy consumption at operating locations in China was based on the *General Rules for Calculating Comprehensive Energy Consumption* (GB2589-2020) (《綜合能耗計算通則》) issued by the State Administration for Market Supervision and the Standardization Administration of People's Republic of China.

Environmental, Social and Governance Report

Social Performance Table

Indicators	Unit	2024
Supplier		
Total number of suppliers	Entity	615
Number of suppliers by region		
Mainland China	Entity	591
Hong Kong, Macau and Taiwan and overseas	Entity	24
Employee Employment		
By employment category		
Total number of full-time employees	Person	753
Total number of part-time employees	Person	56
By region		
Number of employees in mainland China	Person	714
Number of employees in Hong Kong, Macau and Taiwan	Person	7
Number of employees overseas	Person	32
By gender		
Male employees	Person	432
Female employees	Person	321
By age		
< 30	Person	267
30–50	Person	480
> 50	Person	6
By position		
Senior Management	Person	23
Middle Management	Person	32
Non-management employees	Person	698
Employee turnover rate		
Total turnover rate	%	10.30
By gender		
Turnover rate of male employees	%	5.83
Turnover rate of female employees	%	4.47
By age		
Turnover rate of employees under 30	%	3.66
Turnover rate of employees aged 30–50	%	6.64
Turnover rate of employees over 50	%	0.00

Environmental, Social and Governance Report

Indicators	Unit	2024
By region		
Turnover rate of employees in mainland China	%	9.49
Turnover rate of employees in Hong Kong, Macau and Taiwan	%	0.14
Turnover rate of employees outside China	%	0.68
Health and Safety		
Number of work injuries	Case	0
Number of work-related fatalities	Person	0
Rate of work-related fatalities	%	0
Lost days due to work injury — Employee	Day	0
Training and Development		
Percentage of trained employees	%	79
Total employee training hours	Hour	4,275
Average training investment per employee	RMB ten thousand	0.1
Percentage of employees trained by gender		
Male employees	%	56
Female employees	%	44
Percentage of employees trained by position		
Senior Management	%	3
Middle Management	%	4
Non-management employees	%	93
Average training hours completed per employee	Hour	5.7
Average training hours completed per employee by gender		
Male employees	Hour	5.4
Female employees	Hour	6.1
Average training hours completed per employee by position		
Senior Management	Hour	9.1
Middle Management	Hour	5.5
Non-management employees	Hour	5.6
Product quality and safety		
Number of client complaints	Case	0
Client satisfaction	%	95
Number of product recall batches	Batch	0

Environmental, Social and Governance Report

Indicators	Unit	2024
Intellectual Property		
Number of patent applications	Case	110
Number of authorized patents	Case	67
Number of registered trademarks	Case	281
Number of copyrights	Case	71
Number of patents	Case	225
Social Welfare		
Charitable donations	RMB ten thousand	65

Governance Performance Table

Indicators	Unit	2024
Business Ethics and Anti-corruption		
Total hours of business ethics and anti-corruption training for Directors	Hour	14
Average hours spent by management on business ethics and anti-corruption training	Hour/person	0.5
Number of management participating in business ethics and anti-corruption training	Person-time	5
Average hours spent by employees on business ethics and anti-corruption training	Hour/person	0.5
Number of employees participating in business ethics and anti-corruption training	Person-time	168
Number of concluded legal cases regarding corrupt practices brought against the Company or its employees	Case	0

Environmental, Social and Governance Report

APPENDIX II HKEX INDEX

ESG Aspects and General Disclosures and Key Performance Indicators (KPIs)			Sections
Environmental			
A1: Emissions	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	7.2 Emissions Management
	A1.1	The types of emissions and respective emissions data	7.2 Emissions Management Key Performance Table
	A1.2	Repealed 1 January 2025	/
	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Key Performance Table
	A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Key Performance Table
	A1.5	Description of emission target(s) set and steps taken to achieve them	7.2 Emissions Management 7.4 Addressing Climate Change
	A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them	7.2 Emissions Management
A2: Use of Resources	General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	7.3 Resource Management 7.4 Addressing Climate Change
	A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility)	Key Performance Table
	A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility)	Key Performance Table
	A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them	7.3 Resource Management
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them	7.3 Resource Management
	A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced	Our business does not involve the management and use of packaging materials
A3: The Environment and Natural Resources	General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	7.1 Environmental Management
	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	7.1 Environmental Management

Environmental, Social and Governance Report

ESG Aspects and General Disclosures and Key Performance Indicators (KPIs)			Sections
Social			
B1: Employment	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	6.1 Compliant Employment
	B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region	6.1 Compliant Employment Key Performance Table
	B1.2	Employee turnover rate by gender, age group and geographical region	Key Performance Table
B2: Health and Safety	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	6.4 Occupational Health and Safety
	B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year	6.4 Occupational Health and Safety Key Performance Table
	B2.2	Lost days due to work injury	6.4 Occupational Health and Safety Key Performance Table
	B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored	6.4 Occupational Health and Safety
B3: Development and Training	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	6.2 Training and Development
	B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management)	6.2 Training and Development Key Performance Table
	B3.2	The average training hours completed per employee by gender and employee category (e.g. senior management, middle management)	6.2 Training and Development Key Performance Table
B4: Labour Standards	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to prevention of child or forced labour.	6.1 Compliant Employment
	B4.1	Description of measures to review employment practices to avoid child and forced labour	6.1 Compliant Employment
	B4.2	Description of steps taken to eliminate such practices when discovered	6.1 Compliant Employment
B5: Supply Chain Management	General Disclosure	Policies on managing environmental and social risks of the supply chain.	5.1 Responsible Procurement
	B5.1	Number of suppliers by geographical region	Key Performance Table
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored	5.1 Responsible Procurement
	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored	5.1 Responsible Procurement
	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored	5.1 Responsible Procurement

Environmental, Social and Governance Report

ESG Aspects and General Disclosures and Key Performance Indicators (KPIs)			Sections
B6: Product Liability	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	4.2 Quality Assurance
	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	Key Performance Table
	B6.2	Number of products and service related complaints received and how they are dealt with	4.3 Client Service Key Performance Table
	B6.3	Description of practices relating to observing and protecting intellectual property rights	4.1 Innovation-driven
	B6.4	Description of quality assurance process and recall procedures	4.2 Quality Assurance
	B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored	4.3 Client Service
B7: Anti-corruption	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	3.2 Business Ethics and Anti-corruption
	B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases	3.2 Business Ethics and Anti-corruption Key Performance Table
	B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored	3.2 Business Ethics and Anti-corruption
	B7.3	Description of anti-corruption training provided to directors and staff	3.2 Business Ethics and Anti-corruption Key Performance Table
B8: Community Investment	General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	8.2 Social Welfare
	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport)	8.1 Education and Science Popularization
8.2 Social Welfare	B8.2	Resources contributed (e.g. money or time) to the focus area	8.1 Education and Science Popularization 8.2 Social Welfare Key Performance Table

Independent Auditor's Report

TO SHAREHOLDERS OF XTALPI HOLDINGS LIMITED (formerly known as “QuantumPharm Inc.”)

(incorporated in the Cayman Islands with limited liability)

OPINION

What we have audited

The consolidated financial statements of XtalPi Holdings Limited (formerly known as “**QuantumPharm Inc.**”) (the “**Company**”) and its subsidiaries (the “**Group**”), which are set out on pages 144 to 217, comprise:

- the consolidated balance sheet as at 31 December 2024;
- the consolidated statement of profit or loss and other comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, comprising material accounting policy information and other explanatory information.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2024, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with IFRS Accounting Standards and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

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

Independence

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

Independent Auditor's Report

KEY AUDIT MATTERS

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

Key audit matters identified in our audit are summarised as follows:

- Revenue recognition
- Fair value measurement of financial assets at fair value through profit or loss classified as level 3 financial instruments

Key Audit Matter	How our audit addressed the Key Audit Matter
Revenue recognition	
<p>Refer to Note 5 to consolidated financial statements.</p> <p>During the year ended 31 December 2024, the Group recognised revenue of RMB266,433,000 primarily from sales of intelligent robotics solutions and drug discovery solutions.</p> <p>Management identified distinct performance obligations in the contracts with customers and allocated the transaction price to each performance obligation, which required significant management's judgment and interpretation on the terms of the contracts. Revenue was recognised upon transfer of control of goods or services, at a point in time or over time, depending on the nature of the arrangements.</p> <p>We focus on this area due to the level of management's judgment involved in identifying, allocating of transaction price and fulfilling of the performance obligations.</p>	<p>Our procedures in relation to this key audit matter included:</p> <ul style="list-style-type: none">— we obtained an understanding of, evaluated and tested , on a sample basis, the Group's relevant internal controls in relation to revenue recognition;— we tested the sales transactions, on a sample basis, by examining the relevant supporting documents including underlying sales contracts, correspondence for delivery and customers' acceptance receipts;— we evaluated the identification of distinct performance obligations, transaction price allocation and revenue recognition criteria of the identified performance obligation determined by management, on a sample basis, by inspecting the sales contracts; and— we circulated confirmations, on a sample basis, to the customers to confirm the sales transactions for the year and respective trade receivable balances as at the year end date. <p>Based on the procedures performed, we found that the management's judgment involved in the identifying, allocating of transaction price and fulfilling of the performance obligations was supported by the evidence obtained.</p>

Key Audit Matter

How our audit addressed the Key Audit Matter

Fair value measurement of financial assets at fair value through profit or loss classified as Level 3 financial instruments

Refer to notes 3.3 and 20 to the consolidated financial statements.

As at 31 December 2024, the Group's financial assets at fair value through profit or loss totalled RMB2,341,109,000, of which RMB531,088,000 related to investments in preference shares, convertible debts of unlisted entities and investments in private equity funds which were measured based on significant unobservable inputs and classified as "Level 3 financial instruments".

The determination of the fair value of investments in preference shares, convertible debts of unlisted entities and investments in private equity funds required significant management's judgments, including the use of appropriate valuation methods, assumptions and unobservable inputs. Management applied valuation methods including back-solve approach, market approach and others, and significant assumptions including recent transaction price, expected volatility, risk-free interest rate and discount for lack of marketability ("**DLOM**").

We focused on this area due to the significant management's judgments and assumptions involved in determining the fair value of the investments in preference shares, convertible debts of unlisted entities and investments in private equity funds.

Our procedures in relation to this key audit matter included:

- we obtained an understanding of management's valuation process and internal controls, evaluated and tested, on a sample basis, the Group's relevant internal controls in relation to the fair value measurement of level 3 financial instruments, including management's selection of valuation methods and significant assumptions in the valuation;
- we assessed the valuation of the investments in preference shares, convertible debts of unlisted entities and investments in private equity funds, on a sample basis, with the involvement of our internal valuation experts, as follows:
 - we assessed the appropriateness of valuation methods adopted;
 - we evaluated the significant assumptions including expected volatility, risk-free interest rate and DLOM based on our industry knowledge and independent research performed by us, and recent transaction prices by examining relevant supporting evidence; and
 - we tested the arithmetical accuracy of the valuation computation.

Based on the procedures performed, we found that the management's judgments and assumptions involved in the valuation of investments in preference shares, convertible debts of unlisted entities and investments in private equity funds classified as level 3 financial instruments were supported by the evidence obtained.

Independent Auditor's Report

OTHER INFORMATION

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

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

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

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

RESPONSIBILITIES OF DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

Those charged with governance are responsible for overseeing the Group's financial reporting process.

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

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

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

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

Independent Auditor's Report

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Plan and perform the group audit to obtain sufficient appropriate audit evidence regarding the financial information of the entities or business units within the Group as a basis for forming an opinion on the consolidated financial statements. We are responsible for the direction, supervision and review of the audit work performed for purposes of the group audit. We remain solely responsible for our audit opinion.

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Yeung Yee Mau.

PricewaterhouseCoopers

Certified Public Accountants

Hong Kong, 28 March 2025

Consolidated Statement of Profit or Loss

		Year ended 31 December	
	Note	2024 RMB'000	2023 RMB'000
Revenues	5	266,433	174,420
Research and development expenses	6	(418,238)	(480,664)
General and administrative expenses	6	(417,883)	(295,986)
Contract fulfillment costs	6	(143,007)	(126,178)
Selling and marketing expenses	6	(70,992)	(62,482)
Impairment losses on financial assets	3.1(b)	(1,228)	(217)
Other income	7	65,914	27,513
Other gains, net	8	34,794	41,282
Operating loss		(684,207)	(722,312)
Finance income		55,642	102,693
Finance expenses		(6,757)	(9,575)
Finance income, net	9	48,885	93,118
Changes in fair value of convertible redeemable preferred shares	32	(875,356)	(1,275,165)
Share of net losses of investments accounted for using equity method	19	(4,191)	(1,964)
Loss before income tax		(1,514,869)	(1,906,323)
Income tax expense	10	—	—
Loss for the year		(1,514,869)	(1,906,323)
(Loss)/profit for the year attributable to:			
Equity holders of the Company		(1,516,606)	(1,914,384)
Non-controlling interests		1,737	8,061
		(1,514,869)	(1,906,323)
Loss per share for loss attributable to equity holders of the Company (expressed in RMB per share)	11		
Basic loss per share		(0.79)	(3.96)
Diluted loss per share		(0.79)	(3.96)

The notes on pages 150 to 217 are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Loss for the year	(1,514,869)	(1,906,323)
Other comprehensive (loss)/income		
<i>Items that will not be reclassified to profit or loss</i>		
— Changes in fair value of convertible redeemable preferred shares due to own credit risk	(19,774)	(20,111)
— Currency translation differences	(25,553)	(77,949)
<i>Items that may be subsequently reclassified to profit or loss</i>		
— Currency translation differences	26,565	(15,492)
Other comprehensive loss for the year, net of tax	(18,762)	(113,552)
Total comprehensive loss for the year	(1,533,631)	(2,019,875)
Total comprehensive (loss)/income for the year attributable to:		
Equity holders of the Company	(1,536,017)	(2,028,164)
Non-controlling interests	2,386	8,289
	(1,533,631)	(2,019,875)

The notes on pages 150 to 217 are an integral part of these consolidated financial statements.

Consolidated Balance Sheet

		As at 31 December	
	Note	2024 RMB'000	2023 RMB'000
Assets			
Non-current assets			
Property, plant and equipment	15	320,397	369,887
Right-of-use assets	16	90,920	189,250
Intangible assets	17	7,743	7,869
Investments accounted for using the equity method	19	25,836	23,841
Financial assets at fair value through profit or loss	20	555,060	424,023
Prepayments	23	18,251	24,916
Term deposits	25	21,266	20,552
		1,039,473	1,060,338
Current assets			
Contract costs	5(a)	25,671	37,891
Trade and note receivables	22	98,746	38,506
Contract assets	5(b)	3,586	—
Prepayments, deposits and other receivables	23	85,132	41,147
Financial assets at fair value through profit or loss	20	1,786,049	863,368
Restricted cash	24	797	2,337
Term deposits	25	149,138	1,251,353
Cash and cash equivalents	26	1,166,148	710,761
		3,315,267	2,945,363
Total assets		4,354,740	4,005,701
Equity			
Equity attributable to equity holders of the Company			
Share capital	33	237	50
Other reserves	34	12,535,678	(227,110)
Accumulated losses		(8,572,161)	(7,040,349)
		3,963,754	(7,267,409)
Non-controlling interests		28,553	26,167
Total equity/(deficits)		3,992,307	(7,241,242)

The notes on pages 150 to 217 are an integral part of these consolidated financial statements.

Consolidated Balance Sheet

		As at 31 December	
	Note	2024 RMB'000	2023 RMB'000
Liabilities			
Non-current liabilities			
Lease liabilities	16	64,905	137,183
Convertible redeemable preferred shares	32	—	10,780,342
Deferred government grants	30	17,804	32,042
		82,709	10,949,567
Current liabilities			
Trade payables	27	16,143	13,654
Other payables and accruals	28	157,051	131,289
Short-term bank borrowings	29	51,900	60,000
Derivative financial instruments	31	—	560
Deferred government grants	30	5,754	7,433
Contract liabilities	5(c)	16,916	25,658
Lease liabilities	16	31,960	58,782
		279,724	297,376
Total liabilities		362,433	11,246,943
Total equity/(deficits) and liabilities		4,354,740	4,005,701

The notes on pages 150 to 217 are an integral part of these consolidated financial statements.

Consolidated Statement of Changes in Equity

	Note	Equity attributable to equity holders of the Company				Non-controlling interests RMB'000	Total equity/(deficits) RMB'000
		Share capital RMB'000	Other reserves RMB'000	Accumulated losses RMB'000	Total RMB'000		
Balance at 1 January 2024		50	(227,110)	(7,040,349)	(7,267,409)	26,167	(7,241,242)
Loss for the year		—	—	(1,516,606)	(1,516,606)	1,737	(1,514,869)
Other comprehensive (loss)/income:							
Changes in fair value of convertible redeemable preferred shares due to own credit risk	34	—	(19,774)	—	(19,774)	—	(19,774)
Currency translation differences	34	—	363	—	363	649	1,012
Total comprehensive (loss)/income for the year		—	(19,411)	(1,516,606)	(1,536,017)	2,386	(1,533,631)
Transactions with equity holders							
Conversion of convertible redeemable preferred shares to ordinary shares	33, 34	173	11,721,245	—	11,721,418	—	11,721,418
Transfer of accumulated changes in fair value due to own credit risk upon derecognition of Convertible redeemable Preferred Shares	34	—	15,206	(15,206)	—	—	—
Issuance of ordinary shares initial public offering ("IPO"), net of underwriting commissions and other issuance costs	33, 34	14	901,648	—	901,662	—	901,662
Equity-settled share-based compensation-value of employee services	34, 35	—	136,678	—	136,678	—	136,678
Proceeds from exercise of share options	34	—	7,422	—	7,422	—	7,422
Total transactions with equity holders		187	12,782,199	(15,206)	12,767,180	—	12,767,180
Balance at 31 December 2024		237	12,535,678	(8,572,161)	3,963,754	28,553	3,992,307
Balance at 1 January 2023		50	(201,756)	(5,125,965)	(5,327,671)	17,878	(5,309,793)
Loss for the year		—	—	(1,914,384)	(1,914,384)	8,061	(1,906,323)
Other comprehensive (loss)/income:							
Changes in fair value of convertible redeemable preferred shares due to own credit risk	34	—	(20,111)	—	(20,111)	—	(20,111)
Currency translation differences	34	—	(93,669)	—	(93,669)	228	(93,441)
Total comprehensive (loss)/income for the year		—	(113,780)	(1,914,384)	(2,028,164)	8,289	(2,019,875)
Transactions with equity holders							
Equity-settled share-based compensation-value of employee services	35	—	88,426	—	88,426	—	88,426
Total transactions with equity holders		—	88,426	—	88,426	—	88,426
Balance at 31 December 2023		50	(227,110)	(7,040,349)	(7,267,409)	26,167	(7,241,242)

The notes on pages 150 to 217 are an integral part of these consolidated financial statements.

Consolidated Statement of Cash Flows

		Year ended 31 December	
	Note	2024 RMB'000	2023 RMB'000
Cash flows from operating activities			
Net cash used in operating activities	36(a)	(478,681)	(567,564)
Cash flows from investing activities			
Interest received from term deposits		62,927	102,122
Payments for purchase of property, plant and equipment		(58,108)	(123,792)
Proceeds from disposals of property, plant and equipment		2	84
Payments for purchase of intangible assets		(3,759)	(6,844)
Payments for acquisition of investments accounted for using equity method	19	(6,016)	(2,000)
Payments for acquisition of investments in financial assets at fair value through profit or loss	20	(2,438,563)	(2,871,961)
Proceeds from disposal of financial assets at fair value through profit or loss		1,430,742	2,298,231
Placement of term deposits		(419,604)	(2,764,609)
Proceeds from maturity of term deposits		1,498,630	4,067,707
Changes in restricted cash		1,540	3,095
Proceeds from government grants		6,300	33,550
Net cash generated from investing activities		74,091	735,583
Cash flows from financing activities			
Interest paid for borrowings		(1,780)	(1,554)
Payments of lease liabilities		(51,780)	(48,332)
Proceeds from issuance of ordinary shares, net of underwriting commission		904,518	—
Payments of listing expenses		(2,856)	—
Proceeds from draw down of bank borrowings		61,900	60,000
Repayments of short-term bank borrowings		(70,000)	(36,000)
Net cash generated from/(used in) financing activities		840,002	(25,886)
Net increase in cash and cash equivalents		435,412	142,133
Cash and cash equivalents at beginning of the year	26	710,761	574,219
Effects of exchange rate changes on cash and cash equivalents		19,975	(5,591)
Cash and cash equivalents at end of the year	26	1,166,148	710,761

The notes on pages 150 to 217 are an integral part of these consolidated financial statements.

Notes to the Consolidated Financial Statements

1 GENERAL INFORMATION

XtalPi Holdings Limited (formerly known as QuantumPharm Inc.) (the “**Company**”) was incorporated in the Cayman Islands on April 28, 2017 as an exempted company with limited liabilities. The address of its registered office is PO Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands.

The Company is an investment holding company. The Company and its subsidiaries are principally engaged in the provision of intelligent robotics solutions and drug discovery solutions based on its innovative research platform driven by artificial intelligence (“**AI**”) and robotics technologies that is driving intelligent and digital innovations in life sciences and materials sciences. The Company’s shares have been listed on the Main Board of The Stock Exchange of Hong Kong Limited (the “**Stock Exchange**”) since 13 June 2024.

On 8 November 2024, a special resolution passed by the shareholders, the English name of the Company has been changed from “QuantumPharm Inc.” to “XtalPi Holdings Limited” with effect from 8 November 2024.

The consolidated financial statements is presented in thousands of unit of Renminbi (RMB’000), unless otherwise stated.

2 SUMMARY OF ACCOUNTING POLICY INFORMATION

The principal accounting policies applied in the preparation of the consolidated financial statements are set out below. These policies have been consistently applied throughout all the years presented, unless otherwise stated.

2.1 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with IFRS Accounting Standards issued by the International Accounting Standards Board (“**IASB**”) and the disclosure requirements of the Hong Kong Companies Ordinance Cap.622. The consolidated financial statements have been prepared on a historical cost basis, except for financial assets at fair value through profit and loss, convertible redeemable preferred shares and derivative financial instruments, which are carried at fair value.

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

(a) Amendments to standards adopted by the Group

The Group has applied the following amendments to standards for the first time for their annual reporting period commencing on 1 January 2024:

Amendments to IAS 1	Classification of Liabilities as Current or Non-current and Non-current Liabilities with Covenants
Amendments to IFRS 16	Lease Liability in a Sale and Leaseback
Amendments to IAS 7 and IFRS 7	Supplier Finance Arrangements

The adoption of these amended standards does not have any significant impact on the consolidated financial statements of the Group.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.1 Basis of preparation *(Continued)*

(b) New and amendments to standards not yet adopted

The following new and amendments to standards have been issued but are not yet effective and have not been early adopted by the Group for the first time for the financial year beginning on 1 January 2024:

		Effective for accounting periods beginning on or after
Amendments to IAS 21	Lack of Exchangeability	1 January 2025
Amendments to IFRS 9 and IFRS 7	Classification and Measurement of Financial Instruments	1 January 2026
Annual Improvements to IFRS Accounting Standards	Annual Improvements to IFRS Accounting Standards — Volume 11	1 January 2026
Amendments to IFRS 9 and IFRS 7	Contracts Referencing Nature-dependent Electricity	1 January 2026
IFRS 18	Presentation and Disclosure in Financial Statements	1 January 2027
IFRS 19	Subsidiaries without Public Accountability: Disclosures	1 January 2027

The directors have performed assessment on the above new and amendments to standards, and has concluded on a preliminary basis that these new and amendments to standards would not have a significant impact on the Group's consolidated financial statements when they become effective, except for IFRS 18 which will impact the presentation of profit and loss and result in additional disclosure in the consolidated financial statements. The Group is still in the process of evaluating the impact of adoption of IFRS 18.

2.2 Summary of material accounting policies

2.2.1 Principles of consolidation and equity accounting

(a) Subsidiaries

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

Inter-company transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit or loss, statement of comprehensive loss, statement of changes in equity and balance sheet respectively.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.1 Principles of consolidation and equity accounting *(Continued)*

(b) *Associates*

Associates are all entities over which the Group has significant influence but not control or joint control. This is generally the case where the Group holds between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting (see (c) below), after initially being recognised at cost.

(c) *Equity accounting*

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses of the investee in profit or loss, and the Group's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from equity-accounted investments are recognised as a reduction in the carrying amount of the investment.

Where the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity. Unrealised gains on transactions between the Group and its equity-accounted investments are eliminated to the extent of the Group's interest in these entities. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of equity-accounted investees have been changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity-accounted investments is tested for impairment in accordance with the policy described in Note 2.2.5.

(d) *Changes in ownership interests*

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of the Group.

When the Group ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss.

If the ownership interest in a joint venture or an associate is reduced but joint control or significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to profit or loss where appropriate.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.2 Foreign currency translation

(a) *Functional and presentation currency*

Items included in the financial information of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the “**functional currency**”). Upon the listing of the Company's shares on the Main Board of the Stock Exchange on 13 June 2024, the Company is expecting to transact its future operating and financing activities primarily in Hong Kong Dollars (“**HK\$**”). Consequently, the Company determined to change its functional currency from United States Dollars (“**US\$**”) to HK\$. The functional currencies of its overseas subsidiaries and PRC subsidiaries remain as US\$ and RMB, respectively. The Consolidated financial statements is presented in RMB, as the major operations of the Group are within the PRC.

(b) *Transactions and balances*

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are generally recognised in profit or loss.

Foreign exchange gains and losses are presented in the consolidated statement of profit or loss on a net basis within other gains, net.

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

(c) *Group companies*

The results and financial position of all the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

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

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are taken to other comprehensive income. When a foreign operation is sold or any borrowings forming part of the net investment are repaid, the associated exchange differences are reclassified to profit or loss, as part of the gain or loss on sale.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.3 Property, plant and equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and accumulated impairment losses, if any. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Construction in progress mainly represents leasehold improvements and lab equipment under construction, which is stated at actual construction cost less accumulated impairment losses. Construction in progress is transferred to appropriate categories of property and equipment upon the completion of their respective construction and depreciated over their respective estimated useful lives.

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

Depreciation is calculated using the straight-line method to allocate their costs, net of their residual values over their estimated useful lives or, in the case of leasehold improvements, the shorter lease term, as follows:

Computer and office equipment	3 to 5 years
Lab equipment	1 to 10 years
Leasehold improvements	shorter of estimated useful lives and remaining lease terms

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

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.2.5).

The gains or losses on disposals of property, plant and equipment is the difference between the net sales proceeds and the carrying amount of the relevant assets and are recognised in profit or loss.

2.2.4 Intangible assets

(a) System software licenses

Acquired system software licenses are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised using straight-line method over their estimated useful lives of one to ten years.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.4 Intangible assets *(Continued)*

(b) Research and development

Costs incurred on development projects are capitalised as intangible assets when recognition criteria are met, including:

- it is technically feasible to complete the intangible asset so that it will be available for use;
- management intends to complete the intangible asset and use or sell it;
- there is an ability to use or sell the intangible asset;
- it can be demonstrated how the intangible asset will generate probable future economic benefits;
- adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and
- the expenditure attributable to the intangible asset during its development can be reliably measured.

Directly attributable costs that are capitalised as part of the intangible asset include employee costs and an appropriate portion of relevant overheads.

Capitalised development costs are recorded as intangible assets and amortised from the point at which the asset is ready for use.

Research expenditure and development expenditure that do not meet the criteria above are recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

There were no development costs meeting these criteria and capitalised as intangible assets as of 31 December 2024 and 2023.

2.2.5 Impairment of non-financial assets

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

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.6 Investment and other financial assets

(a) Classification

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

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

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

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

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

(b) Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, being the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

(c) Measurements

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

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

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.6 Investment and other financial assets *(Continued)*

(c) Measurements *(Continued)*

Debt instruments

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

- **Amortised cost:** Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortised cost. Interest income from these financial assets is included in finance income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in "other gains, net" together with foreign exchange gains and losses. Impairment losses are presented as separate line item in the consolidated statement of profit or loss.
- **Fair value through other comprehensive income ("FVOCI"):** Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in other comprehensive income ("OCI") is reclassified from equity to profit or loss and recognised in "other gains, net". Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in "other gains, net" and impairment expenses are presented as separate line item in the consolidated statement of comprehensive loss.
- **Fair value through profit or loss:** Assets that do not meet the criteria for amortised cost or financial assets at fair value through other comprehensive income are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss is recognised in profit or loss and presented net within "other gains, net" in the period in which it arises.

Equity instruments

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

Changes in the fair value of financial assets at fair value through profit or loss ("FVTPL") are recognised in "other gains, net" in the consolidated statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.6 Investment and other financial assets *(Continued)*

(d) Impairment

The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Group applies the simplified approach permitted by IFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables.

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

2.2.7 Contract fulfillment costs/contract costs

Costs to fulfill a contract are capitalised if the costs relate directly to an existing contract or to a specifically identifiable anticipated contract; generate or enhance resources that will be used to provide goods or services in the future; and are expected to be recovered. Costs that relate directly to an existing contract or to a specifically identifiable anticipated contract may include direct labor, direct materials, costs that are explicitly chargeable to the customer and other costs that are incurred only because the Group entered into the contract.

The asset recognised from capitalising the costs to obtain or fulfill a contract is amortised on a systematic basis consistent with the pattern of the transfer of the goods or services to which the asset relates. Capitalised costs might relate to an entire contract, or could relate only to specific performance obligations within a contract. Impairment loss are recognised to the extent that the carrying amount of an asset exceeds the remaining amount of consideration that the entity expects to receive, less the costs that relate directly to providing those goods or services that have not been recognised as expenses.

2.2.8 Trade and note receivables

Trade and note receivables are amounts due from customers for the sale of goods or services performed in the ordinary course of business. If collection of trade receivables is expected in one year or less (or any in the normal operating cycle of the business if longer), they are classified as current assets. If not, they are presented as non-current assets.

Trade and note receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognised at fair value. The Group holds the trade and note receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest method. See Note 3.1(b) for further information about the Group's accounting for trade and note receivables and a description of the Group's impairment policies.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.9 Cash and cash equivalents

In the consolidated statement of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

2.2.10 Convertible redeemable preferred shares

Convertible redeemable preferred shares (“CRPS”) issued by the Company are redeemable at the option of the holder upon occurrence of certain events. These instruments can also be converted into ordinary shares of the Company at any time at the option of the holders, or automatically upon occurrence of an initial public offering of the Company, see Note 32 for details.

The Group designated the CRPS as financial liabilities at fair value through profit or loss. They are initially recognised at fair value. Any directly attributable transaction costs are recognised in profit or loss. Fair value changes relating to market risk are recognised in profit or loss, the component of fair value changes relating to the Company’s own credit risk is recognised in other comprehensive income. Amounts recorded in other comprehensive income related to credit risk are not subject to recycling in profit or loss, but are transferred to accumulated losses when realised.

2.2.11 Borrowings and borrowing costs

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the borrowings using the effective interest method.

Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, canceled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as other income or finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.12 Employee benefits

(a) *Short-term obligations*

Liabilities for wages and salaries, including non-monetary benefits and accumulating sick leave that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the consolidated balance sheets.

(b) *Pension obligations*

Full-time employees in the PRC are covered by various government-sponsored defined contribution pension plans under which the employees are entitled to a monthly pension based on certain formulas. The relevant government agencies are responsible for the pension liability to these retired employees. The Group contributes on a monthly basis to these pension plans. Under these plans, the Group has no further payment obligation for post-retirement benefits beyond the contributions made. Contributions to these plans are expensed as incurred and contributions paid to the defined-contribution pension plans for an employee are not available to reduce the Group's future obligations to such defined contribution pension plans even if the employee leaves.

(c) *Housing funds, medical insurances and other social insurances*

Employees of the Group in the PRC are entitled to participate in various government supervised housing funds, medical insurances and other social insurance plan. The Group contributes on a monthly basis to these funds based on certain percentages of the salaries of the employees, subject to certain ceiling. The Group's liability in respect of these funds is limited to the contributions payable in each year. Contributions to the housing funds, medical insurances and other social insurances are expensed as incurred.

(d) *Bonus entitlements*

The expected cost of bonus payments is recognised as a liability when the Group has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made. Liabilities of bonus plan are expected to be settled within 12 months and are measured at the amounts expected to be paid when they are settled.

(e) *Termination benefits*

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or when an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits at the earlier of the following dates: (a) when the Group can no longer withdraw the offer of those benefits; and (b) when the Group recognises costs for a restructuring that is within the scope of IAS 37 and involves the payment of terminations benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.13 **Share-based payments**

The Group operates an equity-settled share-based compensation plan (i.e. share option scheme and restricted share units (“**RSUs**”) scheme), under which the Group receives services from employees and others who provide similar services as employees (“**Service Recipients**”), as consideration for equity instruments of the Company. Share options and RSUs granted to the grantees of the Group are measured at the grant date based on the fair value of equity instruments and are recognised as an employee benefit expenses over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied, with a corresponding increase in equity as “equity-settled share-based compensation reserve”.

At the end of each reporting period, the Group revises its estimates of the number of options and RSUs that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

The total amount to be expensed is determined by reference to the fair value of the options and RSUs granted:

- including any market performance conditions (e.g. the entity’s share price),
- excluding the impact of any service and non-market performance vesting conditions (e.g. profitability and remaining as an employee of the entity over a specified time period), and
- including the impact of any non-vesting conditions (e.g. the requirement for employees to save or hold shares for a specific period of time).

2.2.14 **Government grants**

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants relating to costs are deferred and recognised in the consolidated statement of profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred government grants and are credited to profit or loss on a straight-line basis over the expected lives of the related assets.

2.2.15 **Revenue recognition**

The Group provides intelligence robotics solutions to customers, which include solid-state R&D services, automated chemical synthesis services, XtalPi R&D solutions and others and drug discovery solutions.

Revenue is measured at the fair value of the consideration received or receivable for the services in the ordinary course of the Group’s activities and is recorded net of value-added tax (“**VAT**”). Revenue is shown, net of discounts and after eliminating sales between the Group companies.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.15 Revenue recognition *(Continued)*

(a) *Revenue from drug discovery solutions and solid-state R&D services*

The drug discovery solutions generally cover developmental stages from early hit generation to investigational new drugs (“**IND**”) enabling studies for the initiation of Phase I clinical trials. The Group customises generation of millions of hit molecules for a given target and utilises multi-dimensional screening to optimise drug properties to ensure novelty and patentability of molecules, narrowing down to a list of dozens of compounds from thousands of compounds.

The solid-state R&D services include high-precision computational services and wet lab experimental services. The computational services include crystal structure prediction (“**CSP**”), morphology prediction, as well as screenings performed on conformers and carriers for crystallisation. The experimental services encompass critical aspects of crystallisation process development and crystal structure determination.

Depending on the terms of services to be delivered, the Group generally recognises the relevant revenue at point in time when it transfers control of the relevant research results to a customer, being when the relevant research results are delivered to the customer, the customer has full discretion over the results, and there is no unfulfilled obligation that could affect the customer’s acceptance of the results.

There are certain special customised drug discovery solutions of which the Group is required to timely deliver the discovery progress and results, revenue recognition of these services is over time based on the input method. This method measures the Group’s efforts or inputs towards fulfilling a performance obligation relative to the total expected inputs.

(b) *Revenue from automated chemical synthesis services and others*

The application of automated chemical synthesis services can shorten the time required to synthesize new molecules, enable efficient discovery of molecules with desired properties, provide insights of chemical reactions for large-scale production, and reduce human errors. Automated chemical synthesis services is provided on full time-equivalent (“**FTE**”) basis, the Group provides its customer with a project team of employees dedicated to the chemical synthesis with automated and AI platform for a specific period of time and charges the customer at a fixed rate per employee. The Group also provides various other services to customers mainly includes provision of artificial experimental services.

The Group generally recognises its revenue over time as the customer simultaneously receives and consumes the services when the Group performs its promised obligation of such services. For the artificial experimental services, the Group recognise the revenue at point in time when the Group transfer the control of services result to a customer.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.15 Revenue recognition *(Continued)*

(c) Revenue from XtalPi R&D solutions

The XtalPi R&D solutions can help customers to design a customized hardware and software with AI platform to complete fully automated sample pre-processing, enabling full-process automation, digitisation and intelligence.

The Group generally recognises its revenue at the point in time when control of the hardware or software is transferred to the customers, generally on delivery or acceptance of the products as agreed in the sales contracts.

The Group accounts for revenue from contracts with customers, which includes the identification and assessment of the services promised within a contract to evaluate which promises are distinct from each other. Contracts with customers may include multiple performance obligations which are separately identifiable with standalone selling prices of the services being provided to the customers. Services offered to different customers varies according to customers' needs. The transaction price generally includes fixed fees due at contract inception as well as fixed fees payable at end of different services performed.

The Group generally determines standalone-selling prices for each individual distinct performance obligation identified based on the prices charged to customers. If the standalone selling price is not directly observable, it is estimated using expected cost plus a margin or adjusted market assessment approach, depending on the availability of observable information, and considering the Group's pricing policies and market practices in making pricing decisions. Assumptions and estimations have been made in estimating the relative stand-alone selling price of each distinct performance obligation, and changes in judgments on these assumptions and estimates may affect the revenue recognition.

When either party to a contract has performed, the Group presents the contract in the consolidated balance sheet as a contract asset or a contract liability, depending on the relationship between the entity's performance and the customer's payment. A contract asset is the Group's right to consideration in exchange for services that the Group has transferred to a customer. A receivable is recorded when the Group has an unconditional right to consideration. A right to consideration is unconditional if only the passage of time is required before payment of that consideration is due.

Retention receivables, prior to expiration of defect liability period, are classified as contract assets, which is 1 years from the date of the acceptance of the products or solutions. The contract assets are transferred to trade receivables when the rights become unconditional. The Group typically transfers contract assets to trade receivables when the defect liability period expires.

Contract liabilities represent the cash collected upfront from the customers for purchase of services while the underlying services have not yet been rendered to the customers. The contract liabilities are recognised as revenues when the underlying services have been rendered to the customers.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.16 Leases

The Group mainly leases offices as lessee. Lease terms are negotiated on an individual basis and contain various terms and conditions.

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liabilities;
- any lease payments made at or before the commencement date less any lease incentives received;
- any initial direct costs; and
- restoration costs.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received;
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk for leases held by the Group, which does not have recent third party financing; and
- makes adjustments specific to the lease, e.g., term, country, currency and security.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.16 Leases *(Continued)*

Payments associated with short-term leases are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less without a purchase option.

2.2.17 Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in assets and liabilities attributable to temporary differences and to unused tax losses.

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the places where the Group operates and generates taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Group measures its tax balances either based on the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

(b) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or a liability in a transaction other than a business combination that at the time of the transaction, affects neither accounting nor taxable profit or loss and does not give rise to equal taxable and deductible temporary differences. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in foreign operations where the Company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.2 Summary of material accounting policies *(Continued)*

2.2.17 Current and deferred income tax *(Continued)*

(c) Offsetting

Deferred tax assets and liabilities are offset where there is a legally enforceable right to offset current tax assets and liabilities and where the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

2.3 Summary of other accounting policies

2.3.1 Separate financial statements

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

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

2.3.2 Segment reporting

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

The Group has principally engaged in the business relating to intelligent robotics solutions and drug discovery solutions (including one-stop drug discovery solutions).

The CODM reviews the consolidated result of operations when making decisions about allocating resources and assess performance of the Group as a whole. The CODM assesses the performance of the operating segments mainly based on revenue of each operating segment. Thus, segment result would present revenues for each segment only, which is in line with the CODM's performance review. For the purpose of internal reporting and management's operation review, the CODM considered that the Group's business are operated and managed as one single segment and no separate segment information was presented for the year ended 31 December 2024.

2.3.3 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the consolidated balance sheets when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.3 Summary of other accounting policies *(Continued)*

2.3.4 *Restricted cash*

Cash that is restricted from withdrawal, use or pledged as security is reported separately on the face of the consolidated balance sheets, and is not included in the total cash and cash equivalents in the consolidated statement of cash flows. The Group's restricted cash mainly represents security deposits held in designated bank accounts as security deposits for derivative financial instruments.

2.3.5 *Share capital*

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

2.3.6 *Provisions*

Provisions for legal claims and service warranties are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognised for future operating losses.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The discount rate used to determine the present value is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as interest expense.

2.3.7 *Loss per share*

(a) Basic loss per share

Basic loss per share is calculated by dividing:

- The loss attributable to equity holders of the Company, excluding any costs of servicing equity other than ordinary shares.
- By the weighted average number of ordinary shares outstanding during the financial period, adjusted for bonus elements in ordinary shares issued during the period and excluding treasury shares.

(b) Diluted loss per share

Diluted loss per share adjusts the figures used in the determination of basic loss per share to take into account:

- The after-income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and
- The weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

Notes to the Consolidated Financial Statements

2 SUMMARY OF ACCOUNTING POLICY INFORMATION *(Continued)*

2.3 Summary of other accounting policies *(Continued)*

2.3.8 Interest income

Interest income from FVTPL is included in “other gains, net”.

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes. Any other interest income from term deposits is included in finance income.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets, the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

2.3.9 Derivative financial instruments

Derivative financial instruments are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting year. Changes in fair value of derivative financial instruments are recognised in profit or loss.

3 FINANCIAL RISK MANAGEMENT

3.1 Financial risk factors

The Group’s activities expose it to a variety of financial risks, primarily the market risk (including foreign exchange risk, cash flow and fair value interest rate risk and price risk), credit risk and liquidity risk. The Group’s overall risk management programme focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group’s financial performance.

(a) Market risk

(i) Foreign exchange risk

Foreign exchange risk arises when future commercial transactions or recognised assets and liabilities are denominated in a currency that is not the Group entities’ functional currency. The Company’s primary subsidiaries were incorporated in the PRC and these subsidiaries considered RMB as their functional currency.

The Group manages its foreign exchange risk by performing regular reviews of the Group’s net foreign exchange exposures and may enter into certain forward foreign exchange contracts, when necessary, to manage its exposure and to mitigate the impact on exchange rate fluctuations. During the years ended 31 December 2024 and 2023, the Group had entered into certain forward foreign currency contracts, details of which are further presented in Note 31.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT (Continued)

3.1 Financial risk factors (Continued)

(a) Market risk (Continued)

(i) Foreign exchange risk (Continued)

As at 31 December 2024 and 2023, the Group exposes to the foreign exchange risk from the following monetary assets/liabilities, of which the monetary assets/liabilities are denominated in a currency other than the functional currency of the related Group's entities:

Functional currency of Group's entities	Denomination currency of the monetary assets/ liabilities	As at 31 December	
		2024 RMB'000	2023 RMB'000
US\$	RMB	63,622	47,273
RMB	US\$	11,925	13,131

The Group is primarily exposed to changes in RMB/US\$ and US\$/HK\$ exchange rates in the Group entities whose functional currency is RMB, US\$ or HK\$. If RMB had strengthened/weakened by 5% against US\$ with all other variables held constant, the post-tax loss would have been RMB2,149,000 lower/higher and RMB1,481,000 lower/higher, for the year ended 31 December 2024 and 2023, respectively. As HK\$ is pegged to US\$, management believes that the foreign exchange risk for translations between HK\$ and US\$ do not have material impact to the operations in Hong Kong.

(ii) Cash flow and fair value interest rate risk

The Group's income and operating cash flows are substantially independent of changes in market interest rates and the Group has no significant interest-bearing assets and liabilities except for cash and cash equivalents, term-deposits and borrowings from bank, and details of which have been disclosed in Note 26, Note 25 and Note 29, respectively.

The Group's cash and cash equivalents, term-deposits and borrowings were carried at fixed rates and expose the Group to fair value interest rate risk, therefore the changes in market interest rates will not result in any impact to the Group's income and operating cash flows.

(iii) Price risk

The Group's exposure to price risk arises from investments held by the Group and classified in the balance sheets at FVTPL, including wealth management products measured at FVTPL and other types of investments that designated as FVTPL. The Group is generally not exposed to commodity price risk. The sensitivity analysis of these investments has been disclosed in Note 3.3.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT *(Continued)*

3.1 Financial risk factors *(Continued)*

(b) Credit risk

Credit risk mainly arises from cash and cash equivalent, restricted cash, term deposits, as well as credit exposures on trade receivables and other receivables and deposits.

(i) Risk management

Credit risk is managed on a group basis. Cash and cash equivalent, restricted cash, term deposits and wealth management products are mainly placed with reputable financial institutions in the PRC, which management considers being of high credit quality. For trade and other receivables, the Group assesses the credit quality of the receivables by taking account of various factors, including past operational and financial performance and other factors.

(ii) Impairment of financial assets

The Group has following types of financial assets that are subject to the expected credit loss model:

- Trade receivables and contract assets
- Term deposits
- Cash and cash equivalent
- Restricted cash
- Other receivables and deposits

Trade receivables and contract assets

As at 31 December 2024 and 2023, trade receivables and contract assets were mainly due from customers. The credit quality of these counterparties are assessed on a regular basis, which takes into account their financial position, past experience and other factors.

The Group applies the IFRS 9 simplified approach to measure expected credit losses which uses a lifetime expected loss allowance for all trade receivables and contract assets.

Management considers the nature of business of its customers, the default rates given by external research over the expected lives of the debtors, repayment and default histories of different customers or industries to assess the credit risk characteristics and the likelihood of loss allowance of its customers. The Group uses probability of default (PD), exposure at default (EAD) and loss given default (LGD) to measure the credit risk and expected credit loss rates for its customers.

The historical loss rates are also adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(ii) Impairment of financial assets (Continued)

Trade receivables and contract assets (Continued)

On that basis, the credit loss allowance as at 31 December 2024 and 2023 was determined as follows for trade receivables and contract assets:

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Provision on collective basis		
Expected credit loss rate	2.95%	4.51%
Gross carrying amount of trade receivables and contract assets	97,929	40,326
Credit loss allowance	(2,893)	(1,820)

Impairment losses on trade receivables and contract assets are presented as credit loss allowance within operating loss. Subsequent recoveries of amounts previously written off are credited against the same line item. Movements on the Group's credit loss allowance for trade receivables and contract assets are as follows:

	Year ended 31 December	
	2024	2023
	RMB'000	RMB'000
At beginning of the year	1,820	1,772
Increase in loss allowance recognised in the consolidated statements of profit or loss	1,169	48
Written off as uncollectible	(96)	—
At end of the year	2,893	1,820

Trade receivables and contract assets are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of a debtor to engage in a repayment plan with the Group, and a failure to make contractual payment.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT (Continued)

3.1 Financial risk factors (Continued)

(b) Credit risk (Continued)

(iii) Other financial assets at amortised cost

Credit risk also arises from term deposits, cash and cash equivalents and restricted cash, as well as credit exposures on other receivables. The carrying amount of each class of these financial assets represents the Group's maximum exposure to credit risk in relation to the corresponding class of financial assets.

Other receivables and deposits mainly include deposits, loans to third parties and other receivables. Management of the Group makes periodic collective assessments as well as individual assessment on the recoverability of other receivables based on historical settlement records and past experiences. The Group measures credit risk using probability of default, exposure at default and loss given default. This is similar to the approach used for the purposes of measuring expected credit loss under IFRS 9.

For impairment on other receivables and deposits, it is measured as either 12-month expected credit losses or lifetime expected credit loss, depending on whether there has been significant increase in credit risk since initial recognition. Other financial assets that are not credit-impaired on initial recognition are classified in 'stage 1' and the expected credit losses are measured as 12-month expected credit losses. If a significant increase in credit risk of other financial asset has occurred since initial recognition, the financial asset is moved to 'stage 2' but is not yet deemed to be credit-impaired. The expected credit losses are measured as lifetime expected credit loss. If any financial asset is credit-impaired, it is then moved to 'stage 3' and the expected credit loss is measured as lifetime expected credit loss. Management makes periodic collective assessments as well as individual assessment on these financial assets based on historical settlement records and past experience.

On that basis, movements on the Group's credit loss allowance for other receivables are as follows:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
At beginning of the year	169	2,400
Increase in loss allowance recognised in the consolidated statement of profit or loss	59	169
Written off as uncollectible	—	(2,400)
At end of the year	228	169

Note: The recoverability of an amount due from an associate, which is in significant financial difficulty, of RMB2,400,000 was uncertain and full impairment was provided as at 31 December 2023 and such provision was written off during the year ended 31 December 2023 as the relevant payment was over due for more than 3 years and there is no reasonable expectation of recovery.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT (Continued)

3.1 Financial risk factors (Continued)

(c) Liquidity risk

The Group aims to maintain sufficient cash and cash equivalents. Due to the dynamic nature of the underlying business, the Group's finance department maintains flexibility in funding by maintaining adequate cash and cash equivalents.

Cash flow forecasting is performed by the finance department of the Group. The finance department of the Group monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs as well as the liabilities to other parties.

The table below analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows. The financial liabilities at fair value through profit or loss are managed on a fair value basis rather than by maturing dates and not included in the following table.

	Less than 1 year RMB'000	Between 1 and 2 years RMB'000	Between 2 and 5 years RMB'000	Over 5 years RMB'000	Total RMB'000
As at 31 December 2024					
Trade payables	16,143	—	—	—	16,143
Other payables and accruals (excluding non-financial liabilities)	77,766	—	—	—	77,766
Short-term bank borrowings	52,725	—	—	—	52,725
Lease liabilities	33,908	27,993	40,140	—	102,041
	180,542	27,993	40,140	—	248,675
As at 31 December 2023					
Trade payables	13,654	—	—	—	13,654
Other payables and accruals (excluding non-financial liabilities)	53,428	—	—	—	53,428
Short-term bank borrowings	61,085	—	—	—	61,085
Lease liabilities	65,468	35,419	103,288	12,520	216,695
Derivative financial instruments	560	—	—	—	560
	194,195	35,419	103,288	12,520	345,422

Details of convertible redeemable preferred shares at fair value through profit or loss are presented in Note 32.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT *(Continued)*

3.2 Capital risk management

The Group's objectives on managing capital are to safeguard the Group's ability to continue as a going concern and support the sustainable growth of the Group in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to enhance shareholders' value in the long term. The Group monitors capital (including share capital, share premium and preferred shares on an as-if-converted basis) by regularly reviewing the capital structure. As part of this review, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

As at 31 December 2024 and 2023, the directors of the Company consider that the capital risk of the Group is minimal as the Group's capital structure is mainly financed by ordinary and preferred shares with net cash position as at 31 December 2024.

3.3 Fair value estimation

The Group's financial instruments carried at fair value at each reporting date are measured by level of the inputs to valuation techniques used to measure fair value. Such inputs are categorised into three levels within a fair value hierarchy as follows:

- Level 1: The fair value of financial instruments traded in active markets (such as publicly traded derivatives, and equity securities) is based on quoted market prices at the end of the reporting period. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1.
- Level 2: The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques which maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.
- Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities.

The following table presents the Group's financial assets and financial liabilities that are measured at fair value at 31 December 2024 and 2023:

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
At 31 December 2024				
Financial assets				
Financial assets at fair value through profit or loss				
— Investments in the unlisted entities	—	—	380,131	380,131
— Investment in a listed entity	23,972	—	—	23,972
— Wealth management products and funds	—	—	1,786,049	1,786,049
— Investments in private equity funds	—	—	80,981	80,981
— Investments in convertible debts	—	—	69,976	69,976
	23,972	—	2,317,137	2,341,109

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT (Continued)

3.3 Fair value estimation (Continued)

	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
At 31 December 2023				
Financial assets				
Financial assets at fair value through profit or loss				
— Investments in the unlisted entities	—	—	316,161	316,161
— Investment in a listed entity	40,267	—	—	40,267
— Wealth management products and funds	—	—	863,368	863,368
— Investment in a convertible debt	—	—	67,595	67,595
	40,267	—	1,247,124	1,287,391
Financial liabilities				
Financial liabilities at fair value through profit or loss				
— Derivative financial instruments	—	560	—	560
— Convertible redeemable preferred shares	—	—	10,780,342	10,780,342
	—	560	10,780,342	10,780,902

There is no financial liability that measured at fair value at 31 December 2024.

Details of convertible redeemable preferred shares and other financial liabilities are disclosed in Note 32.

There were no transfers between level 1, 2 and 3 of fair value hierarchy classifications during the year ended 31 December 2024.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT *(Continued)*

3.3 Fair value estimation *(Continued)*

(a) Financial instruments in Level 1 and Level 2

The fair value of financial instruments traded in active markets is based on quoted market prices at the consolidated statement of financial position date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, price services or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in level 1. Instruments included in level 1 comprised investments in listed instruments classified as financial assets at FVTPL.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques which maximise the use of observable market data and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2. Instruments included in level 2 comprised derivative financial instruments.

(b) Financial instruments in Level 3

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- the use of quoted market prices or dealer quotes for similar instruments,
- discounted cash flow analysis, and
- observable and unobservable inputs, including discount rate, risk-free interest rate, discount for lack of marketability ("**DL**OM"), and expected volatility, etc.

Level 3 instruments of the Group's assets and liabilities include investments in unlisted entities, wealth management products and funds, convertible debt, private equity funds, other financial liabilities and convertible redeemable preferred shares at fair value through profit or loss.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT (Continued)

3.3 Fair value estimation (Continued)

(b) Financial instruments in Level 3 (Continued)

The following table presents the changes in level 3 items including investments in unlisted companies, investments in wealth management products and funds, investments in private equity funds and investments in convertible debt at fair value through profit or loss for the year ended 31 December 2024:

	Investments in unlisted companies at fair value through profit or loss RMB'000	Investments in wealth management products at fair value through profit or loss RMB'000	Investments in private equity funds at fair value through profit or loss RMB'000	Investments in convertible debt at fair value through profit or loss RMB'000
At 1 January 2023	211,465	356,361	—	3,250
Additions	31,791	2,781,650	—	63,744
Disposals	(11,537)	(2,279,405)	—	—
Transfer from investment in an associate (Note 19)	70,249	—	—	—
Change in fair value through profit or loss	10,340	9,173	—	598
Currency translation differences	3,853	(4,411)	—	3
At 31 December 2023 and 1 January 2024	316,161	863,368	—	67,595
Additions	77,335	2,284,728	82,667	30,000
Disposals	(2,864)	(1,423,547)	—	(34,137)
Change in fair value through profit or loss	(15,004)	53,157	(1,668)	5,516
Currency translation differences	4,503	8,343	(18)	1,002
At 31 December 2024	380,131	1,786,049	80,981	69,976

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT (Continued)

3.3 Fair value estimation (Continued)

(b) Financial instruments in Level 3 (Continued)

The quantitative information about the significant unobservable inputs used in Level 3 fair value measurements comprises:

Description	Fair value at As at 31 December		Unobservable inputs	Range of inputs As at 31 December		Relationship of unobservable inputs to fair value
	2024 RMB'000	2023 RMB'000		2024	2023	
Unlisted preferred shares	314,487	151,237	Risk-free rate	1.12%- 4.31%	1.45%- 2.39%	The higher the risk-free rate, the lower the fair value.
			Expected volatility	63%-95%	66%-75%	Depends on rights and restrictions of shares held by the Group
A series of Unlisted preferred shares and ordinary shares	65,644	164,924	Latest transaction price	N/A	N/A	The higher the recent transaction price, the higher the fair value.
Wealth management products	1,786,049	863,368	Expected rate of return	0.53%- 3.56%	2.35%- 5.71%	The higher the expected rate of return, the higher the fair value.
Private equity funds	80,981	—	Expected rate of return	N/A	N/A	The higher the expected rate of return, the higher the fair value.
Convertible bonds	69,976	67,595	Latest transaction price	N/A	N/A	The higher the recent transaction price, the higher the fair value.

Note:

Investments in unlisted equity securities as stated above are measured at fair value, using certain valuation techniques, with the assistance of external valuer, to determine their fair value. As these investees are still at early development stage without generated predictable cash flows and have multiple classes of equity, the Group adopted Back-solve Approach to determine the fair value of each investee at a whole based on the valuation of their respective recent round of financing considered conducted on arm's length bases. Thereafter, the Group further adopted Equity Allocation Method to determine the fair value of the instrument held by the Group. The key valuation assumptions used to determine the fair value included risk-free rate, expected volatility, as well as expected probability of initial public offering, liquidation or redemption. Changes in fair value of investments in unlisted entities and other were recorded in "Other gains, net". During the year ended 31 December 2024, certain investments have been reclassified from "A series of Unlisted preferred shares" to "Unlisted preferred shares and ordinary shares" based on the different valuation techniques adopted by the Group.

Notes to the Consolidated Financial Statements

3 FINANCIAL RISK MANAGEMENT *(Continued)*

3.3 Fair value estimation *(Continued)*

(b) Financial instruments in Level 3 *(Continued)*

The Group performed sensitivity test on risk-free interest rate and volatility, if the risk-free interest rate had increased/decreased by 10% with all other variables held constant, the estimated fair value for the years ended 31 December 2024 and 2023 would have been approximately RMB127,000 lower/higher and RMB143,000 lower/higher, respectively.

If the volatility had increased/decreased by 10% with all other variables held constant, the estimated fair value for the years ended 31 December 2024 and 2023 would have been approximately RMB129,000 higher/lower and RMB1,773,000 lower/higher, respectively.

Investments in wealth management products and funds are measured at fair value through profit or loss. If the fair value had increased/decreased by 1%, the loss before income tax for the years ended 31 December 2024 and 2023 would have been approximately RMB18,670,000 lower/higher and RMB8,634,000 lower/higher, respectively.

Details of the movements and significant observable inputs used in convertible redeemable preferred shares and other financial liabilities are set out in Note 32.

(c) Financial instruments at amortised cost

The carrying amounts of the Group's other financial assets measured at amortised costs, including term deposits, cash and cash equivalents, restricted cash, trade and note receivables, contract asset, other receivables and deposits and the Group's financial liabilities, including trade payables, other payables and accruals, approximate their fair values due to their short maturities.

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. Estimates and judgments are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below:

(a) Impairment assessment of non-financial assets

Non-financial assets, mainly including property, plant and equipment, right-of-use assets, intangible assets and investments accounted for using equity method, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The recoverable amounts have been determined based on value-in-use calculations or fair value less costs to disposal. These calculations require the use of judgments and estimates.

Notes to the Consolidated Financial Statements

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS *(Continued)*

(a) Impairment assessment of non-financial assets *(Continued)*

Management judgment is required in the area of asset impairment particularly in assessing: (i) whether an event has occurred that may indicate that the related asset values may not be recoverable; (ii) whether the carrying value of an asset can be supported by the recoverable amount, being the higher of fair value less costs to sell and net present value of future cash flows which are estimated based upon the continued use of the asset in the business; (iii) the selection of the most appropriate valuation technique, e.g. the market approach, the income approach, as well as a combination of approaches, including the adjusted net asset method; and (iv) the appropriate key assumptions to be applied in preparing cash flow projections including whether these cash flow projections are discounted using an appropriate rate. Changing the assumptions selected by management in assessing impairment, including the discount rates or the growth rate assumptions in the cash flow projections, could materially affect the net present value used in the impairment test and as a result affect the Group's financial condition and results of operations. If there is a significant adverse change in the projected performance and resulting future cash flow projections, it may be necessary to take an impairment charge to the consolidated statement of profit or loss.

(b) Fair value measurement of financial assets and liabilities at fair value through profit or loss

As disclosed in Note 2.2.6, Note 2.3.9, Note 2.2.10, the Group recognised the financial assets and liabilities at fair value at recognition date as well as at each subsequent recording date. The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period. Changes in these assumptions and estimates could materially affect the respective fair value of these financial instruments.

(c) Current and deferred income taxes

The Group is subject to income taxes in the PRC and other jurisdictions. Judgment is required in determining the provision for income taxes in each of these jurisdictions. There are transactions and calculations during the ordinary course of business for which the ultimate tax determination is uncertain. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred income tax provisions in the period in which such determination is made.

Deferred tax assets relating to certain temporary differences and tax losses are recognised when management considers it is probable that future taxable profits will be available against which the temporary differences or tax losses can be utilised.

(d) Share-based compensation arrangements

The Group measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is estimated using a model which requires the determination of the appropriate inputs. In addition, the Group has to estimate the expected yearly percentage of grantees that will stay within the Group at the end of vesting periods of the options in order to determine the amount of share-based compensation expenses charged to the consolidated statement of profit or loss. The assumptions and models used for estimating the fair value of share-based payment transactions are disclosed in Note 35.

The Group estimate the expected forfeiture rate at the end of vesting periods ("**Forfeiture Rate**") of the share options granted in order to determine the amount of share-based payment expenses charged to profit or loss. The Forfeiture Rate of the share options of the Group to grantees were assessed to be ranging from 8.3% to 15.0% during the years ended 31 December 2024 and 2023.

Notes to the Consolidated Financial Statements

5 REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue disaggregated by revenue source as follows:

		Year ended 31 December	
		2024	2023
		RMB'000	RMB'000
Intelligent robotics solutions		162,771	86,692
Drug discovery solutions		103,662	87,728
		266,433	174,420
Timing of revenue recognition:			
A point in time		196,394	130,760
Over time		70,039	43,660
		266,433	174,420

Revenue disaggregated by geography, based on the billing address of the customers is as follows:

		Year ended 31 December	
		2024	2023
		RMB'000	RMB'000
Mainland China		151,349	95,530
United States		79,887	52,245
Other regions		35,197	26,645
		266,433	174,420

Revenue from external customers contributing over 10% to the total revenue of the Group during the year ended 31 December 2024 and 2023 is as follows:

		Year ended 31 December	
		2024	2023
		RMB'000	RMB'000
Customer A		36,293	N/A*
Customer B		N/A*	21,048

* Less than 10% of the total revenue of the Group in the respective year.

Notes to the Consolidated Financial Statements

5 REVENUE FROM CONTRACTS WITH CUSTOMERS *(Continued)*

(a) Contracts costs

The balance represents the costs recognised to fulfill several research and development service contracts. The movement of the balance is as follows:

	Year ended 31 December	
	2024	2023
	RMB'000	RMB'000
At beginning of the year	37,891	33,280
Contracts costs recognised for fulfilling contracts during the period	63,290	89,777
Amortisation as contract fulfillment costs	(75,510)	(85,166)
At end of the year	25,671	37,891

(b) Contract assets

The Group has recognised the contract assets related to retention receivable with customers:

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Contract assets	3,629	—
Loss allowance	(43)	—
	3,586	—

(c) Contract liabilities related to contracts with customers

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Advance from customers	16,916	25,658

Contract liabilities is arising from the negotiation of larger prepayments and an increase in numbers of contract signed.

During the year ended 31 December 2024, revenue of RMB20,298,000 (2023: RMB13,041,000) recognised in relation to contract liabilities that was included in the contract liabilities at the beginning of the year.

Notes to the Consolidated Financial Statements

6 EXPENSE BY NATURE

Expenses included in research and development expenses, general and administrative expenses, contract fulfillment costs and selling and marketing expenses are analysed as follows:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Employee benefit expenses (Note 12)	602,378	591,202
Professional service fees	69,055	50,489
Depreciation of property, plant and equipment (Note 15)	83,382	70,812
Sample material costs	62,444	58,379
Depreciation of right-of-use assets (Note 16)	52,662	45,232
Network and cloud service expenses	32,480	37,279
Short-term rental and utilities	13,644	13,695
Property management fees	28,176	25,217
Listing expense	46,036	20,575
Auditor's remuneration	4,097	2,380
— Audit and audit-related services	3,750	2,380
— Non-audit services	347	—
Others	55,766	50,050
	1,050,120	965,310

7 OTHER INCOME

The Group received certain financial subsidies from local government authorities with certain specified conditions.

8 OTHER GAINS, NET

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Net foreign exchange losses	(1,951)	(40,368)
Gains on derivative financial instruments	4,314	4,232
Net fair value changes on financial assets measured at FVTPL (Note 20)	25,278	(4,375)
Gain on a transfer of investment in an associate to financial assets measured at FVTPL (Note 19)	—	70,249
Gains on termination and modification of lease	7,229	13,686
Others	(76)	(2,142)
	34,794	41,282

Notes to the Consolidated Financial Statements

9 FINANCE INCOME, NET

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Finance income		
— Interest income from bank deposits	55,642	102,693
Finance expenses		
— Interest expenses on lease liabilities	(4,977)	(8,030)
— Interest expenses on short-term bank borrowings	(1,780)	(1,545)
	(6,757)	(9,575)
Finance income, net	48,885	93,118

10 INCOME TAX EXPENSE

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Current income tax	—	—
Deferred income tax	—	—
	—	—

The Group's principal applicable taxes and tax rates are as follows:

Cayman Islands

The Company and certain subsidiaries that were incorporated in the Cayman Islands as exempted companies with limited liability under the Companies Law of the Cayman Islands are not subject to the Cayman Islands income tax pursuant to the current laws of the Cayman Islands.

Hong Kong

The subsidiaries in Hong Kong are subject to Hong Kong profit tax at a rate of 16.5% during the year ended 31 December 2024 and 2023.

Notes to the Consolidated Financial Statements

10 INCOME TAX EXPENSE (Continued)

PRC

The Group's subsidiaries established in the PRC are generally subject to Corporate Income Tax ("CIT") at a rate of 25% on the estimated assessable profit in accordance with relevant PRC income tax laws and certain preferential tax treatments available to certain subsidiaries during the year ended 31 December 2024 and 2023.

Shenzhen Jingtai Technology Co., Ltd. ("Shenzhen Jingtai"), Beijing Jingtai Technology Co., Ltd. ("Beijing Jingtai"), Shanghai Zhiyao Technology Co., Ltd., and Jingtai Zhiyao Technology (Shanghai) Co., Ltd. ("Jingtai Zhiyao Shanghai") were approved as "High and New Technology Enterprise" and entitled to a preferential income tax rate of 15% during the year ended 31 December 2024. There are certain other subsidiaries of the Group in the PRC that have been granted certain tax concessions for small scale entities by tax authorities in the PRC and enjoy reduced tax rates.

United States

The subsidiaries in the United States are subject to Federal Tax at a rate of 21% and State Tax at a rate of 8% during the year ended 31 December 2024 and 2023.

The reconciliation between the Group's income tax expenses and the amount which is calculated based on the statutory income tax rate of 25% in the PRC is as follows:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Loss before income tax	(1,514,869)	(1,906,323)
Tax calculated at tax rate of 25%	(378,717)	(476,581)
Effect of different tax rates applicable to different entities within the Group	230,170	318,745
Effect of preferential income tax rate of subsidiaries	62,321	49,049
Super deduction for research and development expenses	(41,335)	(61,196)
Income not subject to tax	(14,693)	(30,130)
Items not deductible for tax purposes	22,333	23,600
Temporary differences for which no deferred assets were recognized	778	4,428
Reversal of temporary differences not recognized as deferred assets	(3,732)	—
Tax losses for which no deferred tax assets was recognised	122,875	172,085
	—	—

The Group only recognises deferred tax assets for cumulative tax losses if it is probable that future taxable amounts will be available to utilise those tax losses. Management will continue to assess the recognition of deferred tax assets in future reporting periods.

As at 31 December 2024 and 2023, the Group had unrecognised tax losses to be carried forward against future taxable income amounted to RMB3,476,520,000 and RMB2,580,556,000 respectively. These unrecognised tax losses will mainly expire within 5 to 10 years. As at 31 December 2024 and 2023, the potential deferred tax assets in respect of the above unrecognised tax losses amounted to RMB518,347,000 and RMB463,196,000, respectively.

Notes to the Consolidated Financial Statements

11 LOSS PER SHARE

(a) Basic loss per share

Basic loss per share is calculated by dividing the loss attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the year.

	Year ended 31 December	
	2024	2023
Loss attributable to equity holders of the Company (RMB'000)	1,516,606	1,914,384
Weighted average number of ordinary shares in issue (thousand shares)	1,929,429	483,979
Basic loss per share (RMB per share)	(0.79)	(3.96)

(b) Diluted loss per share

During the year ended 31 December 2024, the Company's dilutive potential ordinary shares included CRPS and share options and RSUs (2023: CRPS and share options).

Diluted loss per share presented is the same as the basic loss per share as the inclusion of the potential ordinary shares in the calculation of dilutive loss per share would be anti-dilutive.

12 EMPLOYEE BENEFIT EXPENSES

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Wages, salaries and bonuses	364,687	371,265
Pensions costs and housing benefits	66,725	82,628
Share-based compensation expenses (Note 35)	136,678	88,426
Other employee benefits and costs	40,386	52,011
	608,476	594,330
Less: employee benefit expenses capitalised as cost to fulfill revenue contracts	(6,098)	(3,128)
	602,378	591,202
Charged to:		
Research and development expenses	237,268	273,971
General and administrative expenses	232,892	190,677
Contract fulfillment costs	84,616	85,446
Selling and marketing expenses	47,602	41,108
	602,378	591,202

Notes to the Consolidated Financial Statements

12 EMPLOYEE BENEFIT EXPENSES *(Continued)*

Pensions costs, housing benefits and other employee benefits

As stipulated by rules and regulations in the PRC, the Group contributes to state-sponsored retirement schemes for its employees in the PRC. The Group's employees make monthly contributions to the schemes certain percentage of the relevant income (comprising wages, salaries, allowances and bonus, and subject to maximum caps), while the Group also contributes certain percentage of such relevant income, subject to certain ceiling and has no further obligations for the actual payment of post-retirement benefits beyond the contributions. The state-sponsored retirement schemes are responsible for the entire post-retirement benefit obligations payable to the retired employees.

(a) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the years ended 31 December 2024 and 2023 including three directors in each year, whose emoluments are reflected in the analysis shown in Note 13. The emoluments paid and payables to the remaining individuals during the years are as follows:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Wages and salaries	2,736	5,024
Discretionary bonuses	1,289	808
Pensions costs and housing benefits	257	151
Share-based compensation expenses	6,931	17,443
	11,213	23,426

The remunerations of the highest paid non-director individuals during the year fell within the following bands:

Emolument band (in HK\$)	Year ended 31 December	
	2024	2023
HK\$5,500,001 to HK\$6,000,000	1	—
HK\$6,500,001 to HK\$7,000,000	1	—
HK\$7,500,001 to HK\$8,000,000	—	1
HK\$17,500,001 to HK\$18,000,000	—	1
	2	2

During the years ended 31 December 2024 and 2023, no emoluments have been paid to the five highest paid individuals of the Group as an inducement to join or upon joining the Group or as compensation for loss of office.

Notes to the Consolidated Financial Statements

13 DIRECTORS' EMOLUMENTS

	Director's fee RMB'000	Salaries RMB'000	Discretionary bonuses RMB'000	Pension costs – defined contribution plans RMB'000	Share-based compensation expenses RMB'000	Total RMB'000
Year ended 31 December 2024						
Executive directors						
Dr. WEN Shuhao (<i>Chairman</i>)	—	3,102	1,172	135	44,695	49,104
Dr. MA Jian (<i>Chief Executive</i>)	—	3,102	1,172	135	25,763	30,172
Dr. LAI Lipeng	—	3,094	1,172	132	18,407	22,805
Dr. JIANG Yide Alan	—	2,721	156	96	2	2,975
Non-executive director						
Ms. GU Cuiping (<i>Note (iii)</i>)	—	—	—	—	—	—
Independent non-executive directors						
Mr. Law Cheuk Kin Stephen (<i>Note (ii)</i>)	—	361	—	—	72	433
Ms. Chan Wing Ki (<i>Note (ii)</i>)	—	180	—	—	36	216
Mr. Chow Ming Sang (<i>Note (ii)</i>)	—	228	—	—	36	264
	—	12,788	3,672	498	89,011	105,969
Year ended 31 December 2023						
Directors						
Dr. WEN Shuhao (<i>Chairman</i>)	—	2,979	502	129	36,573	40,183
Dr. MA Jian (<i>Chief Executive</i>)	—	4,050	502	121	11,258	15,931
Dr. LAI Lipeng	—	3,959	502	126	8,042	12,629
Dr. JIANG Yide Alan	—	1,864	107	109	7	2,087
Ms. GU Cuiping (<i>Note (iii)</i>)	—	—	—	—	—	—
Mr. LIU Qin (<i>Note (i)</i>)	—	—	—	—	—	—
Ms. SHU Wanting (<i>Note (i)</i>)	—	—	—	—	—	—
Mr. HAO Rui (<i>Note (i)</i>)	—	—	—	—	—	—
Mr. LU Hai (<i>Note (i)</i>)	—	—	—	—	—	—
	—	12,852	1,613	485	55,880	70,830

Notes:

- (i) Resigned since November 2023.
- (ii) Appointed on 28 May 2024.
- (iii) Resigned on 30 October 2024.

Notes to the Consolidated Financial Statements

13 DIRECTORS' EMOLUMENTS *(Continued)*

During the year ended 31 December 2024, no options were granted to any executive director of the Company (2023: Nil) and 1,800,000 restricted share units were granted to three independent non-executive directors of the Company (2023: Nil) (Note 35(b)).

Directors' retirement and termination benefits

None of the directors received or will receive any retirement and termination benefits during the years ended 31 December 2024 and 2023.

Consideration provided to third parties for making available directors' services

During the years ended 31 December 2024 and 2023, no consideration was provided to or receivable by any third parties for making available directors' services.

Information about loans, quasi-loans and other dealings in favour of directors, controlled bodies corporate by and connected entities with such directors

There is no other loans, quasi-loans and other dealing arrangements in favour of the directors, or controlled bodies corporate by and connected entities with such directors subsisted at the end of each of the years ended 31 December 2024 and 2023 or at any time during the years ended 31 December 2024 and 2023.

Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements and contracts in relation to the Group's business to which the Company was a party and in which a director of the Company had a material interest, whether directly or indirectly, subsisted at the end of each of the years ended 31 December 2024 and 2023 or at any time during the years ended 31 December 2024 and 2023.

14 DIVIDENDS

No dividends have been paid or declared by the Company during each of the years ended 31 December 2024 and 2023.

Notes to the Consolidated Financial Statements

15 PROPERTY, PLANT AND EQUIPMENT

	Computer and office equipment RMB'000	Leasehold improvements RMB'000	Lab equipment RMB'000	Construction In Progress RMB'000	Total RMB'000
At 1 January 2023					
Cost	15,010	77,538	167,549	120,884	380,981
Accumulated depreciation	(5,423)	(34,543)	(23,375)	—	(63,341)
Net book amount	9,587	42,995	144,174	120,884	317,640
Year ended 31 December 2023					
Opening net book amount	9,587	42,995	144,174	120,884	317,640
Additions	227	5,550	4,335	113,021	123,133
Disposals	(30)	—	(48)	—	(78)
Transfer	5,671	58,773	71,364	(135,808)	—
Depreciation charge (Note 6)	(4,769)	(27,479)	(38,564)	—	(70,812)
Currency translation adjustment	4	—	—	—	4
Closing net book amount	10,690	79,839	181,261	98,097	369,887
At 31 December 2023					
Cost	20,522	141,861	240,853	98,097	501,333
Accumulated depreciation	(9,832)	(62,022)	(59,592)	—	(131,446)
Net book amount	10,690	79,839	181,261	98,097	369,887
Year ended 31 December 2024					
Opening net book amount	10,690	79,839	181,261	98,097	369,887
Additions	140	1,120	1,717	39,691	42,668
Disposals and other decrease	(129)	(2,683)	(6,008)	—	(8,820)
Transfer	992	30,110	64,914	(96,016)	—
Depreciation charge (Note 6)	(5,087)	(29,398)	(48,897)	—	(83,382)
Currency translation adjustment	3	10	31	—	44
Closing net book amount	6,609	78,998	193,018	41,772	320,397
At 31 December 2024					
Cost	20,615	170,102	299,283	41,772	531,772
Accumulated depreciation	(14,006)	(91,104)	(106,265)	—	(211,375)
Net book amount	6,609	78,998	193,018	41,772	320,397

Notes to the Consolidated Financial Statements

15 PROPERTY, PLANT AND EQUIPMENT *(Continued)*

During the year ended 31 December 2024, depreciation of property, plant and equipment has been charged to the consolidated statement of profit or loss as follows:

	Year ended 31 December	
	2024	2023
	RMB'000	RMB'000
Research and development expenses	60,959	64,838
General and administrative expenses	21,813	5,387
Selling and marketing expenses	610	587
	83,382	70,812

16 LEASES

Right-of-use assets of the Group represent the leased offices and labs buildings:

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Right-of-use assets		
Offices and Lab buildings	90,920	189,250
Lease liabilities		
Current	31,960	58,782
Non-current	64,905	137,183
	96,865	195,965

Depreciation of right-of-use assets has been charged to the consolidated statement of profit or loss as follows:

	Year ended 31 December	
	2024	2023
	RMB'000	RMB'000
Research and development expenses	32,387	20,954
General and administrative expenses	19,873	23,855
Selling and marketing expenses	402	423
	52,662	45,232

The Group obtains rights to control the use of offices and labs building for a period of time through lease arrangements. Lease arrangements are negotiated on an individual basis and contain a wide range of different terms and conditions including lease payments and lease terms ranging from 2 to 10 years.

The total cash outflow in financing activities for leases was RMB70,341,000 and RMB58,110,000 for the years ended 31 December 2024 and 2023, respectively.

Notes to the Consolidated Financial Statements

17 INTANGIBLE ASSETS

The Group's intangible assets represent the system software licenses purchased:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
At beginning of the year		
Cost	21,172	12,918
Accumulated amortisation	(13,303)	(6,234)
	7,869	6,684
Opening net book amount	7,869	6,684
Additions	4,056	6,844
Disposal	(783)	—
Amortisation charge	(3,421)	(5,678)
Exchange differences	22	19
	7,743	7,869
Closing net book amount	7,743	7,869
At end of the year		
Cost	18,790	21,172
Accumulated amortisation	(11,047)	(13,303)
	7,743	7,869

Amortisation of intangible assets has been charged to the consolidated statement of profit or loss as follows:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Research and development expenses	1,741	4,593
General and administrative expenses	1,314	963
Selling and marketing expenses	366	122
	3,421	5,678

Notes to the Consolidated Financial Statements

18 SUBSIDIARIES

(a) Subsidiaries of the Company

The Group's principal subsidiaries during the years are set out below.

Name of entity	Place of incorporation and nature of entity	Principal activities and place of operation	Particulars of issued/Registered/ paid-in capital	Effective interest held	
				2024	2023
Directly held:					
XtalPi Inc.	United States, limited liability company	Provision of intelligent robotics solutions and drug discovery solutions in the United States	US\$10	100%	100%
QuantumPharm Limited	Hong Kong, limited liability company	Investment holdings	US\$1,289	100%	100%
XtalPi Investment Inc.	Cayman Islands, limited liability company	Investment holdings	US\$21,160,387	87.69%	87.69%
Indirectly held:					
Shenzhen Jingtai	PRC, wholly foreign owned enterprise	Provision of intelligent robotics solutions and drug discovery solutions in the PRC	US\$200,000,000	100%	100%
Beijing Jingtai	PRC, wholly foreign owned enterprise	Provision of drug discovery solutions in the PRC	RMB200,000,000	100%	100%
Jingtai Zhiyao Shanghai	PRC, wholly foreign owned enterprise	Provision of intelligent robotics solutions and drug discovery solutions in the PRC	US\$100,000,000	100%	100%
Shanghai Zhiyao Technology Co., Ltd.	PRC, wholly foreign owned enterprise	Provision of intelligent robotics solutions and drug discovery solutions in the PRC	RMB300,000,000	100%	100%
XtalPi Investment Limited	Hong Kong, limited liability company	Investment holdings	—	87.69%	87.69%

(b) Material non-controlling interests

Set out below is summarised financial information of XtalPi Investment Inc., a subsidiary with non-controlling interest that are considered material to the Group. The amounts disclosed are before inter-company eliminations.

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Summarised balance sheets		
Non-current assets	338,760	308,947
Current assets	12,714	36,199
Current liabilities	(12,983)	(83,707)
Net assets	338,491	261,439
Balance of non-controlling interest	41,668	32,183

Notes to the Consolidated Financial Statements

18 SUBSIDIARIES (Continued)

(b) Material non-controlling interests (Continued)

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Summarised statement of profit or loss and comprehensive income		
Loss for the year	14,120	118,688
Other comprehensive loss	5,262	1,293
Total comprehensive loss	19,382	119,981
Attributable to non-controlling interest	2,224	14,770
Summarised cash flows		
Cash flows from operating activities	(9,439)	(15,347)
Cash flows from investing activities	(58,781)	4,261
Cash flows from financing activities	43,420	843
Net decrease in cash and cash equivalents	(24,800)	(10,243)

19 INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Movements of the Group's investments in associates that accounted for using the equity method is as follows:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
At beginning of the year	23,841	18,706
Additions	6,016	6,886
Share of results	(4,191)	(1,964)
Disposal	(50)	—
Currency translation differences	220	213
At end of the year	25,836	23,841

In November 2023, the Group no longer retained its board representation of an associate, therefore the Group's investment in this associate with carrying amount of nil was derecognised and transferred to investment in financial assets at fair value through profit or loss measured at fair value of RMB70,249,000 upon the transfer. Accordingly, a gain on transfer of investment in an associate to financial assets measured at FVTPL was recognised as other gains, net (Note 8).

As at 31 December 2024 and 2023, none of the associates of the Group is considered as material.

Notes to the Consolidated Financial Statements

19 INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD *(Continued)*

Individually immaterial associates

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Aggregate carrying amount of individually immaterial associates	25,836	23,841
	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Aggregate amounts of the Group's share of: Loss from continuing operations	4,191	1,964

20 FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Investments in financial assets at fair value through profit or loss included in non-current assets:		
A listed entity	23,972	40,267
Unlisted entities	380,131	316,161
A convertible debt <i>(note)</i>	69,976	67,595
Private equity funds	80,981	—
	555,060	424,023
Investments in financial assets at fair value through profit or loss included in current assets:		
Wealth management products and funds <i>(Note 3.3(b))</i>	1,786,049	863,368

Notes to the Consolidated Financial Statements

20 FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS *(Continued)*

Movement of FVTPL is analysed as follows:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
At beginning of the year	1,287,391	640,890
Additions and transfers	2,440,593	2,877,184
Disposals	(1,426,411)	(2,290,942)
Transfer from investment in associates	—	70,249
Changes in fair value	25,278	(10,472)
Currency translation differences	14,258	482
At end of the year	2,341,109	1,287,391

Note:

- (i) On 24 June 2024, there was a partial conversion of the debts for an existing investee to ordinary shares upon the occurrence of financing activities.

On 10 October 2024, the Group has subscribed series A preference shares of another existing investee at a cash consideration of RMB20 million. By the closing of the new transaction, the Group has hold aggregate 16% equity interest.

- (ii) On 23 January 2024, the Group entered into a convertible loan agreement with an independent third party company which is principally engaged in developing technology solution for desert digital intelligent agriculture. Pursuant to this agreement, the Group agreed to provide a convertible loan with principal amount of up to RMB30 million at a simple interest rate of 8% per annum and that the Group shall have the right to convert all of the principal outstanding under the loan into certain conditions.
- (iii) Wealth management products and funds purchased by the Group mostly are issued by major and reputable financial institutions without guaranteed returns. The expected rates of return for such wealth management products and funds held by the Group range from 0.53% to 3.56% and 2.35% to 5.71% as at December 31, 2023 and 2024, respectively.

21 DEFERRED INCOME TAX

The movement in deferred tax assets and liabilities in relation to lease liabilities and right-of-use assets are as follows:

	As at 31 December	
	2024 RMB'000	2023 RMB'000
The deferred tax asset comprises temporary differences attributable to: Lease liabilities	20,380	46,948
Set-off of deferred tax liabilities in relation to right-of-use assets	(20,380)	(46,948)
Net deferred tax assets	—	—

Notes to the Consolidated Financial Statements

21 DEFERRED INCOME TAX (Continued)

	Deferred tax assets RMB'000	Deferred tax liabilities RMB'000	Total RMB'000
As at 1 January 2023	18,811	(18,811)	—
Credited/(charged) to profit or loss	28,137	(28,137)	—
As at 31 December 2023 and 1 January 2024	46,948	(46,948)	—
(Charged)/credited to profit or loss	(26,568)	26,568	—
As at 31 December 2024	20,380	(20,380)	—

22 TRADE AND NOTE RECEIVABLES

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Trade receivables	94,300	40,326
Less: credit loss allowance	(2,850)	(1,820)
	91,450	38,506
Note receivables	7,296	—
	98,746	38,506

The credit period granted to the Group's customers is usually from 30 to 60 days. As at 31 December 2024 and 2023, the aging analysis of trade receivables based on invoice dates is as follows:

	As at 31 December	
	2024 RMB'000	2023 RMB'000
0 to 90 days	82,298	32,017
91 to 180 days	2,397	5,307
181 to 365 days	2,314	1,916
Over 1 year	7,291	1,086
	94,300	40,326

Notes to the Consolidated Financial Statements

22 TRADE AND NOTE RECEIVABLES *(Continued)*

The carrying amounts of trade receivables approximate their fair values and are denominated in the following currencies:

	As at 31 December	
	2024 RMB'000	2023 RMB'000
RMB	63,448	20,663
US\$	30,492	19,663
SGD	360	—
	94,300	40,326

23 PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Non-current		
Prepayment for equipment	18,251	24,916
Current		
Prepayments	24,511	9,298
Deposits	10,613	12,094
Value-added tax recoverables	15,824	19,705
Receivables from employee share options exercised	26,462	—
Loan to a third party and interest receivable <i>(note)</i>	5,209	—
Loan to an associate and interest receivable <i>(Note 39(b))</i>	1,530	—
Others	1,211	219
	85,360	41,316
Less: loss allowance	(228)	(169)
	85,132	41,147

The carrying amounts of deposits and other receivables approximate their fair values and are mainly dominated in RMB. The recoverability was assessed with reference to the credit status of the recipients and, as there is no significant increase in credit risk since initial recognition, the 12-month expected credit loss is considered minimal.

Note: On 25 March 2024, the Group entered into a loan agreement with an independent third party company, the Group agreed to provide a loan with principal amount of up to RMB5 million at a simple interest rate of 8% per annum.

24 RESTRICTED CASH

As at 31 December 2024, the restricted deposits were denominated in RMB and held in designated bank accounts mainly as guarantees of advance payment (As at 31 December 2023, all the restricted deposits were denominated in RMB and held in designated bank accounts mainly as security deposits for derivative financial instruments).

Notes to the Consolidated Financial Statements

25 TERM DEPOSITS WITH INITIAL TERMS OF OVER THREE MONTHS

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Included in non-current assets:		
RMB term deposits	21,266	20,552
Included in current assets:		
US\$ term deposits	40,009	1,093,990
RMB term deposits	109,129	157,363
	149,138	1,251,353
	170,404	1,271,905

The weighted average effective interest rate on the Group's term deposits with initial terms of over three months as at 31 December 2024 and 2023 was 3.97% and 5.22% per annum, respectively.

26 CASH AND CASH EQUIVALENTS

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Cash at banks	984,478	615,060
Term deposits with initial terms of within three months	181,670	95,701
	1,166,148	710,761
Denominated in:		
HK\$	668,165	2,658
RMB	343,521	311,097
US\$	154,462	397,006
	1,166,148	710,761

Cash at banks earns interest at floating rates based on daily bank deposit rates. The weighted average effective interest rate on bank deposits of the Group with initial within three months as at 31 December 2024 and 2023 was 4.24% and 3.71% per annum, respectively.

The conversion of the RMB denominated balances maintained in the PRC into foreign currencies is subject to the rules and regulations of foreign exchange control promulgated by the PRC government.

Notes to the Consolidated Financial Statements

27 TRADE PAYABLES

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Trade payables	16,143	13,654

Trade payables were mainly denominated in RMB as at 31 December 2024 and 2023. The credit periods granted by suppliers generally range from 30 to 180 days. The aging analysis of trade payables, based on invoice date, is as follows:

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
0 to 90 days	11,761	11,683
90 to 180 days	4,382	1,971
	16,143	13,654

28 OTHER PAYABLES AND ACCRUALS

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Accrued salaries and staff benefits	78,360	73,596
Investment payable	24,885	19,561
Other payables to employees	14,300	—
Accrual for acquiring property, plant, and equipment	13,115	18,622
Withholding personal income tax for employees	9,799	4,204
Rental payables	2,875	515
Other tax payables	925	61
Accrued listing expense	—	5,382
Others	12,792	9,348
	157,051	131,289

The carrying amounts of other payables and accruals of the Group are mainly denominated in RMB.

Notes to the Consolidated Financial Statements

29 SHORT-TERM BANK BORROWINGS

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Short-term bank borrowings	51,900	60,000

All of the Group's short-term bank borrowings are denominated in RMB. The fair values of the Group's short-term bank borrowings approximate their carrying amounts.

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Weighted average interest rate	2.69%	3.03%
Secured by:		
Guaranteed by Shenzhen Jingtai and a patent right of Beijing Jingtai (<i>note (i)</i>)	9,900	—
Guaranteed by Dr. Wen Shuhao (<i>note (ii)</i>)	—	30,000
Guaranteed by Shenzhen Jingtai (<i>note (ii)</i>)	—	15,000
Guaranteed by Dr. Wen Shuhao, Shenzhen Jingtai and a patent right of Beijing Jingtai (<i>note (ii)</i>)	—	9,500
Guaranteed by Dr. Wen Shuhao and Shenzhen Jingtai (<i>note (ii)</i>)	—	5,500
	9,900	60,000

Note:

- (i) The carrying amount of the patent right of Beijing Jingtai was nil as at 31 December 2024 and 2023.
- (ii) These guarantees were released during the year ended 31 December 2024.

30 DEFERRED GOVERNMENT GRANTS

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Deferred government grants	23,558	39,475
Less: Amounts include under current liabilities	(5,754)	(7,433)
Amounts include under non-current liabilities	17,804	32,042

The government grants were received from the local government as subsidies to the Group's purchase of property, plant and equipment. They were recognised in profit or loss on a straight-line basis over the expected useful lives of the related assets.

Notes to the Consolidated Financial Statements

31 DERIVATIVE FINANCIAL INSTRUMENTS

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Fair value of derivatives not under hedge accounting:		
Cross currency swaps	—	560

As of 31 December 2023, the maturities of the derivative financial instruments are all within one year.

32 CONVERTIBLE REDEEMABLE PREFERRED SHARES

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Convertible redeemable preferred shares ("CRPS")	—	10,780,342

The details of each rounds of financing by issuance of convertible redeemable preferred shares to investors are set out in the table below:

	Date of issuance	Number of shares	Subscription price per share	Total consideration	
				US\$'000	RMB'000
Preferred shares					
Series pre-A	23 September 2015	145,221,000	RMB0.0138	—	2,000
Series A-1	26 November 2015	250,001,000	RMB0.0979	—	24,470
Series A-2	16 June 2016, July 2016 and 15 September 2017	56,338,300	US\$0.018933	1,069	7,436
Series B	16 September 2017	301,810,900	US\$0.047333	14,286	96,318
Series B+	5 September 2018	208,946,000	US\$0.143577	30,000	199,014
Series B+	26 October 2018	55,718,900	US\$0.143577	8,000	53,070
Series B++	9 August 2019	29,305,077	US\$0.223511	6,550	45,158
Series C	28 September 2020	696,568,031	US\$0.3758427	261,800	1,790,424
Series C	18 June 2021	71,838,567	US\$0.3758427	27,000	184,650
Series D	5 August 2021	621,632,043	US\$0.6112941	380,000	2,458,258

Notes to the Consolidated Financial Statements

32 CONVERTIBLE REDEEMABLE PREFERRED SHARES *(Continued)*

The key terms of convertible redeemable preferred shares are summarised as follows:

(i) Liquidation preference

In the event of any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, all assets and funds of the Company legally available for distribution to the shareholders (after satisfaction of all claims that may be preferred by applicable law) shall be distributed to the shareholders as follows: except for series C and series D preference shares holders, the holder of each series of convertible redeemable preferred shares shall be entitled to receive, on parity with each other, an amount equal to 100% of the each series preferred shares issue price, plus a simple annual return of 8% calculating from the date the Company received the respective applicable issue price to the actual payment date of the settlement, plus all declared but unpaid dividends on such respective series preferred shares (collectively, the **"Series preference Amount"**). For series C preference shares holders, the amount to be received would be the higher of 125% of the series C issue price plus all declared but unpaid dividends on such series C preferred shares and the Series preference Amount as defined above. For series D preference shares holders, the amount to be received would be the higher of 125% of the series D issue price plus all declared but unpaid dividends on such series D preferred shares and the Series preference Amount as defined above.

If the assets and funds available for distribution are insufficient to permit the payment to the holders of the preference shares, the liquidation preference amount will be paid to the holders of preferred shares and ordinary shares in the following order: (1) Series D; (2) Series C; (3) Series B++; (4) Series B+; (5) Series B; (6) Series A-2; (7) Series A-1; (8) Series pre-A and (9) all shareholders (including ordinary shareholders). After distributing or paying in full the liquidation preference amount to all of the holders of preferred shares and ordinary shares, the remaining assets of the Company available for distribution to members, if any, shall be distributed to the holders of the preferred shares and ordinary shares on a pro rata basis, based on the number of ordinary shares then held by each holder on an as-converted basis.

(ii) Dividend rights

- (a) subject to (ii)(b) below, no dividend or distribution, whether in cash, in property, or in any other equity securities of the Company, shall be declared, paid, set aside or made with respect to the ordinary shares at any time unless all accrued but unpaid dividends on the convertible redeemable preferred shares have been paid in full.
- (b) If a dividend or other distribution is declared, paid or set aside, subject to (ii)(a) above, it shall be distributed rateably among all shareholder according to the relative number of shares held by such shareholder on an as-converted basis. No dividends shall be distributed to any shareholder unless and until such distribution has been approved unanimously by the board of directors.

Notes to the Consolidated Financial Statements

32 CONVERTIBLE REDEEMABLE PREFERRED SHARES *(Continued)*

(iii) Conversion feature

The convertible redeemable preferred shares shall be converted into Class A Ordinary Shares at the option of the holders any time, or automatically be converted into Class A Ordinary Shares at the then-effective applicable conversion price, without the payment of any additional consideration, upon the earlier of (i) the qualified IPO; or (ii) the date specified by written consent of agreement of the holders representing at least 51% of each series preferred shares.

The conversion ratio, which shall initially be determined based on the issue price of the convertible redeemable preferred shares, shall be adjusted from time to time for (i) share split and combinations, (ii) Ordinary Class A Shares dividends and distributions, (iii) reorganisations, mergers, consolidations, reclassifications, exchanges and substitutions, and (iv) dilutive insurance.

(iv) Redemption feature

At any time after the earlier of the occurrence of the following event: (i) the Company fails to complete the qualified IPO upon the third anniversary of the date of the Series D Closing Date, and which was modified to March 31, 2025 in November 2023, and further extended to June 30, 2025 by the holders of preferred shares on May 28, 2024; (ii) adverse change in the regulatory environment that will cause the arrangement under the control documents in valid or unenforceable; (iii) any material breach of the transaction documents by any group company or the wilful fraud on the part of founders or founder vehicles which cause the material breach of the transaction documents, or the material violation of applicable law by any group company; (iv) the State Administration of Foreign Exchange of the PRC (“SAFE”) refrains the domestic company from receiving overseas funds, directly or indirectly, from the Company, which has a material adverse effect on the Company’s principal business; or (v) any preferred shareholder requests the Company to redeem all or part of the outstanding preferred shares because of the aforementioned events, an holder of any other series preferred shares may give a written notice by hand or letter mail or courier service to the Company at its principal executive offices at any time requesting redemption of all or part of the outstanding series preferred shares held by such initiating series holders, in which case the Company shall promptly pay to the initiating series holders and other holders who elect to participate in such redemption for each redeeming preferred share at an amount equivalent to the series issue price with a 8% per annum simple return rate calculating from the date the Company received the series issue price pursuant to the purchase agreements to the series redemption price payment date, deducting any paid dividend on each redeeming preferred share, plus any declared but unpaid dividends on each redeeming preferred share or pro rata for a partial year for each year such series preferred share was outstanding but in any event within ninety days of the date of the redemption notice (collectively, the “**Series Redemption Price**”).

Specially, for each redeeming series C preferred shares, the redemption price is equal to the higher of 125% of the Series C Issue Price plus any declared but unpaid dividends on each Redeeming C Preferred Share or pro rata for a partial year for each year such series C preferred share was outstanding but in any event within ninety (90) days of the date of the series C redemption notice or the Series Redemption Price as defined as above. For each redeeming series D preferred shares, the redemption price is equal to the higher of 125% of the Series D Issue Price plus any declared but unpaid dividends on each Redeeming D Preferred Share or pro rata for a partial year for each year such series D preferred share was outstanding but in any event within ninety (90) days of the date of the series D redemption notice or the Series Redemption Price as defined as above.

Notes to the Consolidated Financial Statements

32 CONVERTIBLE REDEEMABLE PREFERRED SHARES (Continued)

The movements of the CRPS during the year ended 31 December 2024 are set out as below:

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
At beginning of the year	10,780,342	9,320,782
Change in fair value through profit or loss	875,356	1,275,165
Change in fair value through other comprehensive income	19,774	20,111
Currency translation differences	45,946	164,284
Conversion of convertible redeemable preferred shares to ordinary shares	(11,721,418)	—
At end of the year	—	10,780,342

As at 31 December 2023, the Group has used the discounted cash flow method to determine the underlying share value of the Company and adopted equity allocation model to determine the fair value of the CRPS. Key valuation assumptions used to determine the fair value of CRPS included discount rate (15%), risk-free interest rate (4.6%), discount for lack of control (“DLOC”) (10%) and volatility (65%).

Discount rate (post-tax) was estimated by weighted average cost of capital as of each valuation date. In determining the discount rate, the Group considers various factors including the discount rates adopted by other companies which ranged from 12% to 18% and determined its discount rate at a higher end of the range. The Group estimated the risk-free interest rate based on the yield of various government bonds with maturity close to the initial public offering timing as of valuation date. Volatility was estimated based on annualised standard deviation of daily stock price return of comparable companies for a period from the respective valuation date and with similar span as time to expiration.

Changes in fair value of preferred shares were recorded in “Changes in fair value of convertible redeemable preferred shares and other financial liabilities”. And the fair value changes in the convertible redeemable preferred shares that are attributable to changes of own credit risk of this liability are recorded in other comprehensive income.

The Company performed sensitivity test to changes in unobservable inputs in determining the fair value of the CRPS. The changes in unobservable inputs including discount rate, risk-free interest rate and volatility will result in a significantly higher or lower fair value measurement. The increase in the fair value of the CRPS would increase the loss of fair value changes in the consolidated statements of profit or loss. When performing the sensitivity test, management applied an increase or decrease to each unobservable input, which represents management’s assessment of reasonably possible change to these unobservable inputs. If the Company’s key valuation assumptions used to determine the fair value of the CRPS had increased/decreased by 10% with all other variables held constant, the estimated fair value changes from carrying amount are listed in below table (assuming the change of key factor would not have significant impact on fair value changes attributable to credit risk):

	Discount rate RMB'000	Risk-free interest rate RMB'000	Volatility RMB'000
As at 31 December 2023			
Increase 10%	(1,595,683)	(2,658)	(5,803)
Decrease 10%	2,128,179	2,670	3,647

Notes to the Consolidated Financial Statements

33 SHARE CAPITAL

Authorised:

	Class A ordinary shares	Class B ordinary shares	Ordinary shares	Preferred shares	Total
			(At par value of US\$0.00001)		
At 1 January 2023, 31 December 2023 and 1 January 2024	2,132,966,842	429,653,340	—	2,437,379,818	5,000,000,000
Creation of addition of Class A ordinary shares	95,000,000,000	—	—	—	95,000,000,000
Conversion of preferred shares into Class A ordinary shares	2,437,379,818	—	—	(2,437,379,818)	—
Re-designation to ordinary shares (Note (i))	(99,570,346,660)	(429,653,340)	100,000,000,000	—	—
At 31 December 2024	—	—	100,000,000,000	—	100,000,000,000

Issued:

	Number of Class A ordinary shares '000	Number of Class B ordinary shares '000	Number of ordinary shares	Total number of ordinary shares '000	Nominal value of ordinary shares (At par value of US\$0.00001) RMB'000
At 1 January 2023 and 31 December 2023	352,366,603	429,653,340	—	782,019,943	50
Conversion of convertible redeemable preferred shares into Class A ordinary shares	2,437,379,818	—	—	2,437,379,818	173
Re-designation to ordinary shares	(2,789,746,421)	(429,653,340)	3,219,399,761	—	—
Issuance of ordinary shares (Note ii)	—	—	196,169,000	196,169,000	14
Repurchase of shares (shares repurchased and cancelled)	—	—	(2,045,000)	(2,045,000)	—
At 31 December 2024	—	—	3,413,523,761	3,413,523,761	237

Notes:

- (i) Pursuant to the Articles and the Pre-IPO Shareholders' Agreement, all the preferred shares shall be automatically and immediately converted into Class A ordinary shares upon completion of an initial public offering of the Company. The preferred shares will be converted into Class A ordinary shares on a one-to-one ratio and subject to customary adjustments.

Upon the completion of the initial public offering by the Company on 13 June 2024, all the preferred shares were automatically converted into Class A ordinary shares. Upon the conversion of all the issued and outstanding preferred shares into Class A ordinary shares, the weighted voting rights structure also ceased as all Class A and Class B ordinary shares entitle the holder to exercise one vote on all matters subject to the vote general meetings of the Company. Immediate following the above conversion all Class A and Class B ordinary shares are re-designated and reclassified as ordinary shares with par value of US\$0.00001 each.

- (ii) On 13 June 2024, upon the Listing on the Main Board of the Stock Exchange, the Company issued 187,373,000 new ordinary shares at par value of US\$0.00001 per share for cash consideration of HK\$5.28 each. And on 7 July 2024, the Company exercised over-allotment option and issued 8,796,000 new ordinary shares at par value of US\$0.00001 per share for cash consideration of HK\$5.28 each.

Notes to the Consolidated Financial Statements

34 OTHER RESERVES

	Share premium RMB'000	Treasury shares RMB'000	Exchange reserves RMB'000	Share- based payment reserves RMB'000	Others RMB'000	Total RMB'000
As at 1 January 2023	4,591	(19)	(354,146)	65,866	81,952	(201,756)
Equity-settled share-based compensation						
– value of employee services	—	—	—	88,426	—	88,426
Changes in fair value of convertible redeemable preferred shares due to own credit risk	—	—	—	—	(20,111)	(20,111)
Currency translation difference	—	—	(93,669)	—	—	(93,669)
As at 31 December 2023	4,591	(19)	(447,815)	154,292	61,841	(227,110)
Changes in fair value of convertible redeemable preferred shares due to own credit risk	—	—	—	—	(19,774)	(19,774)
Conversion of convertible redeemable preferred shares into Class A ordinary shares	11,721,245	—	—	—	—	11,721,245
Transfer of accumulated changes in fair value due to own credit risk upon derecognition of Convertible redeemable Preferred Shares	—	—	—	—	15,206	15,206
Issuance of ordinary shares relating to initial public offering, net of underwriting commissions and other issuance costs	901,648	—	—	—	—	901,648
Equity-settled share-based compensation						
– value of employee services	—	—	—	136,678	—	136,678
Exercise of share options	8,758	—	—	(1,336)	—	7,422
Currency translation difference	—	—	363	—	—	363
As at 31 December 2024	12,636,242	(19)	(447,452)	289,634	57,273	12,535,678

Notes to the Consolidated Financial Statements

35 SHARE-BASED PAYMENTS

During the years ended 31 December 2024 and 2023, the Group has a Pre-IPO Share Incentive Plan and a Post-IPO RSU Scheme in place under which options and RSUs have been granted.

(a) Pre-IPO Share Incentive Plan

During the year ended 31 December 2021, the board of directors of the Company approved the establishment of the Omnibus Incentive Plan ("**Pre-IPO Share Incentive Plan**") with the purpose of motivating, attracting and retaining those individuals for outstanding performance to generate superior returns to the shareholders of the Group. The Pre-IPO Share Incentive Plan is valid and effective for 10 years from the date of the approval of the board of directors. The maximum aggregated number of shares which may be issued pursuant to the Pre-IPO Incentive Plan is 298,041,143 ordinary shares.

According to the Pre-IPO Share Incentive Plan, 298,041,143 ordinary shares have been reserved under QuantumPharm Roc Holdings Limited, the shareholding platform to be issued to any qualified participants.

The exercise price of options is based on a fixed price in the agreement with employees. The term of the Option shall expire at close of the principal stock market or exchange on which the Shares are quoted or traded on the tenth (10th) anniversary of the Grant Date, unless terminated earlier in accordance herewith. In no event may any portion of the Option be exercised after it has expired.

Set out below are summaries of options granted under the plan:

	Number of options	Weighted average exercise price per share option US\$
Outstanding as at 1 January 2024	297,555,144	0.16
Granted during the year	14,527,004	0.25
Forfeited during the year	(21,050,000)	(0.21)
Exercised during the year	(7,787,000)	(0.13)
Outstanding as at 31 December 2024	283,245,148	0.17
Vested and exercisable at 31 December 2024	177,156,898	0.11
Outstanding as at 1 January 2023	206,691,385	0.15
Granted during the year	98,873,759	0.25
Forfeited during the year	(8,010,000)	(0.17)
Outstanding as at 31 December 2023	297,555,144	0.16
Vested and exercisable at 31 December 2023	—	—

Notes to the Consolidated Financial Statements

35 SHARE-BASED PAYMENTS (Continued)

(a) Pre-IPO Share Incentive Plan (Continued)

Share options under Pre-IPO Share Incentive Plan outstanding at the end of the year have the following expiry date and exercise prices:

Grant date	Expiry date	Exercise price US\$	Vesting year	2024	2023
1 October 2015	1 October 2025	0.00001	4 years from grant date	22,837,200	22,837,200
1 October 2015	14 July 2031	0.00082	4 years from grant date	10,000,000	10,000,000
26 November 2015	26 November 2025	0.00032	4 years from grant date	1,350,000	1,550,000
1 March 2016	1 March 2026	0.00032	4 years from grant date	1,500,000	1,500,000
1 March 2016	1 March 2026	0.00150	4 years from grant date	8,000,000	8,000,000
1 March 2016	1 March 2026	0.00284	4 years from grant date	120,000	200,000
1 February 2017	1 February 2027	0.00150	4 years from grant date	7,000,000	7,000,000
1 February 2017	1 February 2027	0.00284	4 years from grant date	1,002,000	1,190,000
1 February 2017	1 February 2027	0.01733	4 years from grant date	—	80,000
1 March 2017	1 March 2027	0.00150	4 years from grant date	5,000,000	5,000,000
1 June 2017	1 June 2027	0.00284	4 years from grant date	—	2,500,000
16 September 2017	16 September 2027	0.00284	4 years from grant date	1,905,000	3,375,000
16 September 2017	16 September 2027	0.02160	4 years from grant date	700,000	700,000
1 August 2018	1 August 2028	0.00284	4 years from grant date	—	3,000,000
1 August 2018	1 August 2028	0.00710	4 years from grant date	1,841,000	2,850,000
1 August 2018	1 August 2028	0.07352	4 years from grant date	570,000	670,000
1 March 2019	1 March 2029	0.00710	4 years from grant date	1,908,000	2,560,000
1 March 2019	1 March 2029	0.09421	4 years from grant date	3,789,000	4,224,500
3 September 2019	3 September 2029	0.00284	4 years from grant date	1,000,000	1,000,000
3 September 2019	3 September 2029	0.02872	4 years from grant date	1,128,000	1,790,000
3 September 2019	3 September 2029	0.26309	4 years from grant date	532,149	532,149
1 March 2020	1 March 2030	0.06705	4 years from grant date	680,000	1,030,000
1 March 2020	1 March 2030	0.17441	4 years from grant date	800,000	900,000
28 September 2020	28 September 2030	0.18792	4 years from grant date	360,000	560,000
1 January 2021	1 January 2031	0.00284	4 years from grant date	2,600,000	2,600,000
1 January 2021	1 January 2031	0.18792	4 years from grant date	30,000	30,000
1 January 2021	1 January 2031	0.18792	Fully vested upon listing	11,977,500	12,000,000
15 April 2021	15 April 2031	0.00284	4 years from grant date	2,665,925	2,665,925
15 April 2021	15 April 2031	0.18792	4 years from grant date	1,340,000	1,340,000
15 April 2021	15 April 2031	0.18792	4 years from grant date	36,595,019	36,752,019
15 April 2021	15 April 2031	0.18792	4 years from grant date	38,183,589	38,183,589
15 April 2021	15 April 2031	0.33876	4 years from grant date	2,250,000	3,400,000
1 October 2021	1 October 2031	0.18792	4 years from grant date	240,000	350,000
26 November 2021	26 November 2031	0.30565	4 years from grant date	12,500	50,000
1 January 2022	1 January 2032	0.30565	4 years from grant date	1,900,000	2,100,000
11 January 2022	11 January 2032	0.18792	4 years from grant date	300,000	300,000
31 March 2022	31 March 2032	0.18792	4 years from grant date	100,000	100,000
31 March 2022	31 March 2032	0.30565	4 years from grant date	80,000	90,000
30 June 2022	30 June 2032	0.30565	4 years from grant date	281,004	291,004
30 June 2022	30 June 2032	0.52234	4 years from grant date	80,000	130,000
30 September 2022	30 September 2032	0.30565	4 years from grant date	1,025,000	2,200,000
31 December 2022	31 December 2032	0.30565	4 years from grant date	350,000	12,400,000

Notes to the Consolidated Financial Statements

35 SHARE-BASED PAYMENTS (Continued)

(a) Pre-IPO Share Incentive Plan (Continued)

Grant date	Expiry date	Exercise price US\$	Vesting year	2024	2023
31 December 2022	31 December 2032	0.46200	4 years from grant date	720,000	800,000
31 March 2023	31 March 2033	0.30565	4 years from grant date	40,000	570,000
30 June 2023	30 June 2033	0.30565	4 years from grant date	270,000	270,000
30 September 2023	30 September 2033	0.30565	4 years from grant date	2,350,500	3,200,000
30 September 2023	30 September 2033	0.18792	4 years from grant date	7,763,000	8,770,000
30 September 2023	30 September 2033	0.18792	3 years from grant date	80,000	80,000
30 September 2023	30 September 2033	0.48000	4 years from grant date	1,960,000	1,960,000
24 November 2023	24 November 2033	0.48000	4 years from grant date	100,000	100,000
24 November 2023	24 November 2033	0.30565	4 years from grant date	—	70,000
24 November 2023	24 November 2033	0.24678	4 years from grant date	83,703,758	83,703,758
1 March 2024	1 March 2034	0.18792	4 years from grant date	11,595,004	—
1 March 2024	1 March 2034	0.30565	4 years from grant date	150,000	—
1 March 2024	1 March 2034	0.52700	4 years from grant date	2,480,000	—
				283,245,148	297,555,144
Weighted average remaining contractual life of options outstanding at end of year				7.17	7.03

The options may exercise of any time after the IPO of the Company provided the options have vested and subject to the term of the share option agreement.

The Group estimate the expected forfeiture rate at the end of vesting periods (“**Forfeiture Rate**”) of the share options granted in order to determine the amount of share-based payment expenses charged to profit or loss. The Forfeiture Rate of the share options of the Group to grantees were assessed to be ranging from 8.3% to 15% during the year ended 31 December 2024.

The directors of the Company have used the binomial model to determine the fair value of the options as at the respective grant dates, which is to be expensed over the relevant vesting period.

Other than the exercise price mentioned above, significant judgment on parameter such as risk free rate, dividend yield and expected volatility, are required to be made by the directors in applying the binomial model, which are summarised as below:

	Year ended 31 December	
	2024	2023
Fair value per share (in US\$)	0.33–0.5	0.3719–0.4725
Exercise price (in US\$)	0.19–0.59	0.1879–0.4800
Risk-free interest rate	4.18%	3.84%–4.57%
Expected Life	10 years	10 years
Expected volatility	79.23%	73%–74%
Dividend yield	—	—

Notes to the Consolidated Financial Statements

35 SHARE-BASED PAYMENTS *(Continued)*

(b) Post-IPO RSU Scheme

On 28 May 2024, the board of directors of the Company approved the establishment of the Post-IPO RSU Scheme. The aggregate number of awarded shares currently permitted to be awarded under the share award scheme is limited to 204,406,365 new shares.

During the year ended 31 December 2024, the Company granted certain RSUs to eligible grantees, without consideration following the terms of the Post-IPO RSU Scheme, subject to the satisfaction of certain performance requirements as set out in the awards agreements and shall vest from grant date over four years.

Movement in the number of RSUs granted to eligible grantees of the Group for the years ended 31 December 2024 are as follows:

	Number of RSUs	Weghted average grant date fair value HK\$
Outstanding as at 1 January 2024	—	—
Granted during the year	1,800,000	5.50
Outstanding as at 31 December 2024	1,800,000	5.50

The fair value of the RSUs was calculated based on the market price of the Company's shares on the date of grant.

(c) Expenses arising from share-based payment transactions

During the years ended 31 December 2024 and 2023, share-based payment expenses of RMB136,678,000 and RMB88,426,000 were recognised respectively.

Notes to the Consolidated Financial Statements

36 NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS

(a) Cash generated from operation

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Loss before income tax	(1,514,869)	(1,906,323)
Adjustments for:		
— Depreciation of property and equipment	83,382	70,812
— Amortisation of intangible assets	3,421	5,678
— Depreciation of right-of-use assets	52,662	45,232
— Gains on termination and modification of lease	(7,229)	(13,686)
— Gain on a transfer of investment in an associate to financial assets measured at FVTPL	—	(70,249)
— Net fair value changes on FVTPL	(29,592)	1,415
— Changes in fair value of convertible redeemable preferred shares	875,356	1,275,165
— Disposal of investment in an associate	50	—
— Net impairment losses on financial assets	1,228	217
— Share-based compensation expenses	136,678	88,426
— Share of loss in equity method investments	4,191	1,964
— Foreign exchange losses	1,951	40,368
— Finance income	(55,642)	(102,693)
— Finance expenses	6,757	9,575
Changes in working capital:		
— Trade and other receivables	(87,197)	(2,503)
— Trade and other payables	63,722	8,331
— Contract costs	21,038	(4,611)
— Contract assets	(3,629)	—
— Contract liabilities	(8,742)	10,139
— Deferred governments grant	(22,217)	(24,821)
Cash used in operations	(478,681)	(567,564)

Notes to the Consolidated Financial Statements

36 NOTES TO CONSOLIDATED STATEMENT OF CASH FLOWS (Continued)

(b) Net cash/(debt) reconciliation

As at 31 December 2024 and 2023, the net cash/(debt) of the Group is as follows:

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Cash and cash equivalents	1,166,148	710,761
Term deposits	170,404	1,271,905
Short-term borrowings	(51,900)	(59,771)
Lease liabilities	(96,865)	(195,965)
Convertible redeemable preferred shares	—	(10,780,342)
Net cash/(debt)	1,187,787	(9,053,412)

An analysis of the movements in net cash/(debt) during the year ended 31 December 2024 and 2023 is as follows:

	Cash and cash equivalents RMB'000	Term deposits	Short-term borrowings RMB'000	Lease liabilities RMB'000	Convertible redeemable preferred shares RMB'000	Net debt RMB'000
As at 1 January 2023	574,219	2,537,703	(35,780)	(93,454)	(9,320,782)	(6,338,094)
Addition of right-of-use assets	—	—	—	(217,621)	—	(217,621)
Disposal of right-of-use assets	—	—	—	74,808	—	74,808
Cash flows	136,275	(1,303,098)	(24,000)	40,302	—	(1,150,521)
Effect on exchange difference	267	(64,822)	—	—	(164,284)	(228,839)
Change in fair value through profit or loss	—	—	—	—	(1,275,165)	(1,275,165)
Change in fair value through other comprehensive income	—	—	—	—	(20,111)	(20,111)
Interest received	—	102,122	—	—	—	102,122
Interest expense	—	—	(1,545)	(8,030)	—	(9,575)
Interest payments	—	—	1,554	8,030	—	9,584
As at 31 December 2023	710,761	1,271,905	(59,771)	(195,965)	(10,780,342)	(9,053,412)
Addition of right-of-use assets	—	—	—	(39,296)	—	(39,296)
Disposal of right-of-use assets	—	—	—	91,593	—	91,593
Cash flows	435,412	(1,141,953)	7,871	46,803	—	(651,867)
Effect on exchange difference	19,975	(15,190)	—	—	(45,946)	(41,161)
Change in fair value through profit or loss	—	—	—	—	(875,356)	(875,356)
Change in fair value through other comprehensive income	—	—	—	—	(19,774)	(19,774)
Conversion of convertible redeemable preferred shares to ordinary shares	—	—	—	—	11,721,418	11,721,418
Interest income	—	55,642	—	—	—	55,642
Interest expense	—	—	(1,780)	(4,977)	—	(6,757)
Interest payments	—	—	1,780	4,977	—	6,757
As at 31 December 2024	1,166,148	170,404	(51,900)	(96,865)	—	1,187,787

Notes to the Consolidated Financial Statements

37 FINANCIAL INSTRUMENTS BY CATEGORY

	As at 31 December	
	2024	2023
	RMB'000	RMB'000
Financial assets		
Measured at amortised cost		
Trade and note receivables (Note 22)	98,746	38,506
Contract assets	3,586	—
Prepayments, deposit and other receivables (Note 23)	11,596	12,144
Restricted cash (Note 24)	797	2,337
Term deposit (Note 25)	170,404	1,271,905
Cash and cash equivalents (Note 26)	1,166,148	710,761
	1,451,277	2,035,653
Measured at fair value		
Financial assets at fair value through profit or loss (Note 20)	2,341,109	1,287,391
	3,792,386	3,323,044
Financial liabilities		
Measured at amortised cost		
Trade payables (Note 27)	16,143	13,654
Other payables and accruals (Note 28)	77,766	57,579
Lease liabilities (Note 16)	96,865	195,965
Short-term bank borrowing (Note 29)	51,900	60,000
	242,674	327,198
Measured at fair value		
Derivative financial instruments (Note 31)	—	560
Convertible redeemable preferred shares (Note 32)	—	10,780,342
	—	10,780,902
	242,674	11,108,100

38 CAPITAL COMMITMENTS

		As at 31 December	
		2024	2023
		RMB'000	RMB'000
Contracted but not recognised:			
Short-term lease commitment		3,144	4,198

Notes to the Consolidated Financial Statements

39 RELATED-PARTY TRANSACTIONS

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operational decisions. Parties are also considered to be related if they are subjected to common control. Members of key management and their close family members of the Group are also considered as related parties.

The following significant transactions were carried out between the Group and its related parties during the year ended 31 December 2024. In the opinion of the directors of the Company, the related party transactions were carried out in the normal course of business and at terms negotiated between the Group and the respective related parties.

(a) Transactions with related parties

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Revenue from services provided for associates	436	2,357
Services purchased from a shareholder	—	2,569

Revenue from services provided and services purchased were based on terms mutually agreed with related parties and in the ordinary course of business.

(b) Balances with related parties

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Loan to an associate and interest receivable	1,530	—
Amounts receivable from associates	210	395
Amounts payable to related parties		
A shareholder (trade)	—	95
An associate (non-trade)	4,886	5,048

(c) Key management personnel compensation

	Year ended 31 December	
	2024 RMB'000	2023 RMB'000
Wages, salaries and bonuses	51,013	51,599
Pensions costs, housing benefits and other employee benefits	3,399	2,900
Share-based compensation expenses	106,135	90,287
	160,547	144,786

Notes to the Consolidated Financial Statements

40 FINANCIAL POSITION OF THE COMPANY

(a) Statement of financial position of the Company

	As at 31 December	
	2024 RMB'000	2023 RMB'000
Assets		
Non-current assets		
Investment in subsidiaries	5,100,610	5,205,453
Investment in an associate	—	—
Financial assets at fair value through profit or loss	157,326	120,195
	5,257,936	5,325,648
Current assets		
Prepayments, deposits and other receivables	10,641	2,007
Financial assets at fair value through profit or loss	758,254	—
Cash and cash equivalents	384,786	252
	1,153,681	2,259
Total assets	6,411,617	5,327,907
Equity		
Share capital	237	50
Other reserves	12,658,674	(147,234)
Accumulated losses	(6,273,113)	(5,314,887)
Total equity/(deficits)	6,385,798	(5,462,071)
Liabilities		
Non-current liabilities		
Convertible redeemable preferred shares	—	10,780,342
	—	10,780,342
Current liabilities		
Other payables and accruals	25,819	9,636
	25,819	9,636
Total liabilities	25,819	10,789,978
Total equity/(deficits) and liabilities	6,411,617	5,327,907

Notes to the Consolidated Financial Statements

40 FINANCIAL POSITION OF THE COMPANY (Continued)

(b) Other reserve of the Company

	Share premium RMB'000	Treasury shares RMB'000	Exchange reserves RMB'000	Share- based payment reserves RMB'000	Others RMB'000	Total RMB'000
As at 1 January 2023	4,591	(19)	(232,717)	65,866	24,679	(137,600)
Equity-settled share-based compensation	—	—	—	88,426	—	88,426
Changes in fair value of convertible redeemable preferred shares due to own credit risk	—	—	—	—	(20,111)	(20,111)
Currency translation difference	—	—	(77,949)	—	—	(77,949)
As at 31 December 2023	4,591	(19)	(310,666)	154,292	4,568	(147,234)
Conversion of convertible redeemable preferred shares into Class A ordinary shares	11,721,245	—	—	—	—	11,721,245
Transfer of accumulated changes in fair value due to own credit risk upon derecognition of convertible redeemable preferred shares	—	—	—	—	15,206	15,206
Fair value change on convertible redeemable preferred shares due to own credit risk	—	—	—	—	(19,774)	(19,774)
Issuance of ordinary shares initial public offering ("IPO"), net of underwriting commissions and other issuance costs	901,648	—	—	—	—	901,648
Proceeds from exercise of share options	8,758	—	—	(1,336)	—	7,422
Equity-settled share-based compensation	—	—	—	136,678	—	136,678
Currency translation difference	—	—	43,483	—	—	43,483
As at 31 December 2024	12,636,242	(19)	(267,183)	289,634	—	12,658,674

41 CONTINGENT LIABILITIES

As at 31 December 2024 and 2023, there were no material contingent liabilities to the Group.

42 EVENTS OCCURRING AFTER THE REPORTING PERIOD

On 24 January 2025, the Group successfully completed a placing of 264,000,000 new Shares at the price of HK\$4.28 per Share. The total gross proceeds from the placing the Group are approximately HK\$1,130 million, and the net proceeds (after deducting all applicable costs and expenses, including commission and levies) arising from the placing amounted to approximately HK\$1,125 million.

On 19 February 2025, the Group successfully completed a further placing of 342,288,000 new Shares at the price of HK\$6.10 per Share. The total gross proceeds from the placing the Group are approximately HK\$2,088 million, and the net proceeds (after deducting all applicable costs and expenses, including commission and levies) arising from the placing amounted to approximately HK\$2,080 million.

Up to the report date, the Group has entered into several equity related investments with several entities with total consideration of approximately RMB69 million.

Definitions

In this annual report unless the context otherwise requires, the following terms shall have the meaning set out below.

“Articles of Association”	the ninth amended and restated articles of association of the Company adopted by special resolution on 28 May 2024 and effective on 13 June 2024, as amended, supplemented or otherwise modified from time to time
“Audit Committee”	the audit committee of our Board
“Board”	the board of Directors
“BVI”	the British Virgin Islands
“CCASS”	the Central Clearing and Settlement System established and operated by Hong Kong Securities Clearing Company Limited
“China” or “PRC”	the People’s Republic of China, but for the purpose of this annual report and for geographical reference only and except where the context requires otherwise, references in this report to “China” and the “PRC” do not apply to Hong Kong, the Macao Special Administrative Region and Taiwan
“close associate(s)”	has the meaning ascribed to it under the Listing Rules
“Company”	XtalPi Holdings Limited 晶泰控股有限公司, an exempted company incorporated in the Cayman Islands with limited liability on 28 April 2017, the Shares of which are listed on the Stock Exchange (stock code: 2228)
“Corporate Governance Code”	the Corporate Governance Code set out in Appendix C1 to the Listing Rules
“Crete Helix”	Crete Helix Ltd., a company incorporated in the BVI with limited liability on 25 May 2021, which is owned as to 1% by Jian Guo Pai and 99% by MH International
“CRPS”	Convertible Redeemable Preferred Shares
“Director(s)”	the director(s) of our Company
“ESG”	environmental, social and governance
“FVTPL”	fair value through profit or loss
“Global Offering”	has the same meaning as defined in the Prospectus
“Group”	the Company and its subsidiaries
“HK\$”	Hong Kong dollars, the lawful currency of Hong Kong
“HKEX Guide”	the “Guide for New Listing Applicants” published by the Stock Exchange in November 2023 which took effect on 1 January 2024
“Hong Kong” or “HK”	the Hong Kong Special Administrative Region of the PRC

“IFRS”	IFRS Accounting Standards, which include standards, amendments and interpretations promulgated by the International Accounting Standards Board and the International Accounting Standards and Interpretation issued by the International Accounting Standards Committee
“Listing”	the listing of the Shares on the Stock Exchange
“Listing Date”	13 June 2024, being the date on which the Shares are listed on the Stock Exchange
“Listing Rules”	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended, supplemented or otherwise modified from time to time
“LPHappy Family Trust”	the discretionary trust established on 28 June 2021 by Dr. Lai Lipeng as the settlor with TMF (Cayman) Ltd. as the trustee
“LPHappy Holding”	LPHappy Holding Limited, a company incorporated in the BVI with limited liability on 28 June 2021, which is a holding vehicle wholly owned by TMF (Cayman) Ltd., the trustee of the LPHappy Family Trust
“MH Fund Trust”	the discretionary trust established on 29 June 2021 by Dr. Ma Jian as the settlor with TMF (Cayman) Ltd. as the trustee
“MH International Holdings”	MH International Holdings Limited, a company incorporated in the BVI with limited liability on 28 June 2021, which is a holding vehicle wholly owned by TMF (Cayman) Ltd., a trustee of MH Fund Trust
“Model Code”	the Model Code for Securities Transactions by Directors of Listed Issuers set out in Appendix C3 to the Listing Rules
“Nomination Committee”	the nomination committee of our Board
“Ordinary Share(s)” or “Share(s)”	the ordinary share(s) of US\$0.00001 each (or such par value as adjusted from time to time) in the share capital of the Company
“Pathfinder SII”	has the meaning ascribed to it in Chapter 2.5 of the HKEX Guide, and unless the context otherwise requires, refers to the Pre-IPO Investor(s) the details of which are set out in “History, Development and Corporate Structure—Pre-IPO Investments—Information about the Pre-IPO Investors—Our Pathfinder SIIs and Sophisticated Independent Investors” in the Prospectus
“Post-IPO RSU Scheme”	the restricted share unit scheme conditionally adopted by the Shareholders on 28 May 2024 which came into effect upon Listing
“Post-IPO Share Option Scheme”	the share option scheme conditionally adopted by the Shareholders on 28 May 2024 which came into effect upon Listing
“Pre-IPO ESOP”	the QuantumPharm Inc. 2021 Omnibus Incentive Plan as adopted by the Shareholders on 14 July 2021 and amended on 5 August 2021
“Pre-IPO Investor(s)”	the investor(s) of the pre-IPO investment(s) in the Company, the details of which are set out in “History, Development and Corporate Structure—Pre-IPO Investments” in the Prospectus

Definitions

“Prospectus”	the prospectus of the Company dated 4 June 2024
“RSU(s)”	restricted share unit(s)
“QuantumPharm Employee Benefit Trust”	the discretionary trust established on 28 June 2021 with TMF Trust (HK) Limited as trustee and 13 employees of our Group as beneficiaries for the purpose of managing and administering the options granted to them under the Pre-IPO ESOP
“QuantumPharm Employee Holdings”	QuantumPharm Employee Holdings, a company incorporated in the BVI with limited liability on 25 June 2021, which is a holding vehicle wholly owned by TMF Trust (HK) Limited as trustee of the QuantumPharm Employee Benefit Trust
“QuantumPharm Holdings”	QuantumPharm Holdings Limited, a company incorporated in the BVI with limited liability on 25 April 2017, which is owned as to 1% by SSBL Holdings and 99% by WSH Family Holdings
“QuantumPharm Roc”	QuantumPharm Roc Holdings Limited, a company incorporated in the BVI with limited liability on 12 April 2019, which is wholly owned by QuantumPharm Holdings
“Remuneration Committee”	the remuneration committee of our Board
“Renminbi” or “RMB”	the lawful currency of the PRC
“Reporting Period”	the one-year period from 1 January 2024 to 31 December 2024
“Scheme Limit”	the maximum number of Shares in respect of which options and awards may be granted under the share schemes of the Company
“Sevening B Holdings”	Sevening B Holdings Limited, a company incorporated in the BVI with limited liability on 20 April 2017, which is wholly owned by Dr. Lai Lipeng
“SeveningBAlpha”	SeveningBAlpha Limited, a company incorporated in the BVI with limited liability on 20 May 2021, which is owned as to 1% by Sevening B Holdings and 99% by LPHappy Holding
“SFO”	the Securities and Futures Ordinance (Cap 571 of the Laws of Hong Kong)
“Shareholder(s)”	holder(s) of the Share(s)
“SSBL Holdings”	SSBL Holdings Limited, a company incorporated in the BVI with limited liability on 20 April 2017, which is wholly owned by Dr. Wen Shuhao
“Stock Exchange”	The Stock Exchange of Hong Kong Limited
“subsidiary(ies)”	has the meaning ascribed to it under the Listing Rules
“Treasury Shares”	Shares repurchased and held by the Company in treasury (which include Shares repurchased by the Company and held or deposited in CCASS for sale on the Stock Exchange) from time to time
“U.S.” or “United States”	the United States of America, its territories and possessions, any State of the United States, and the District of Columbia

“US\$”	United States dollars, the lawful currency of the United States
“WSH Family Holdings”	WSH Family Holdings Limited, a company incorporated in the BVI with limited liability on 27 August 2021, which is a holding vehicle wholly owned by TMF (Cayman) Ltd., a trustee of the WSH Family Trust
“WSH Family Trust”	the discretionary trust established on 28 June 2021 by Dr. Wen Shuhao as the settlor with TMF (Cayman) Ltd. as the trustee
“%”	per cent