
SUMMARY

This summary aims to give you an overview of the information contained in this Document. As this is a summary, it does not contain all the information that may be important to you. You should read the entire document before you decide to [REDACTED] in the [REDACTED].

There are risks associated with any [REDACTED]. Some of the particular risks in [REDACTED] in the [REDACTED] are set out in “Risk Factors” of this document. In particular, we are a biotechnology company seeking to [REDACTED] on the Main Board of the Stock Exchange under Chapter 18A of the Listing Rules on the basis that we are unable to meet the requirements under Rules 8.05(1), (2) and (3) of the Listing Rules. You should read that section carefully before you decide to [REDACTED] in the [REDACTED].

OVERVIEW

We were founded in 2012. Our product pipeline covers both the assessment and intervention of a broad range of cognitive impairments induced by vascular diseases, neurodegenerative diseases, psychiatric disorders and child development deficiencies, among others. Our core product, the Brain Function Information Management Platform Software System (the “**System**” or the “**Core Product**”), has been commercialized for eight indications from four major types of cognitive impairment and is under development for several other cognitive impairment indications as of the Latest Practicable Date. As of the Latest Practicable Date, we had three other products that had received regulatory approval in China, the Basic Cognitive Ability Testing Software (the “**BCAT**”), the Cognitive Ability Supplemental Screening and Assessment Software (the “**SAS**”) and the Dyslexia Supplemental Screening and Assessment Software (the “**DSS**”) and one other product that had received regulatory approval in the EU, the Cognitive Impairment Treatment Software, as well as six product candidates under different stages of preclinical and clinical development or registration process. We enjoy rights with respect to our products and product candidates in jurisdictions where we receive regulatory approvals.

WE MAY NOT BE ABLE TO ULTIMATELY DEVELOP AND MARKET THE SYSTEM WITH NEW INDICATIONS SUCCESSFULLY, AND CERTAIN AI-POWERED TECHNOLOGIES RELATED TO OUR PRODUCTS ARE STILL IN EARLY DEVELOPMENT STAGE.

We are a commercial stage company. As of the Latest Practicable Date, the System had been included in the provincial health insurance reimbursement lists of 30 provinces in China. We are also the first organizer of a project initiated by the NHC, according to Frost & Sullivan, under which we are tasked with helping hospitals to establish cognitive centers in over 2,100 public hospitals across China and promoting the development of cognitive impairment DTx market in China. We also collaborate with hospitals to establish cognitive centers outside of the NHC project to help us build long-term business relationship with the participating hospitals. We invest in this strategy by providing the System, the hardware on which the System operates, as well as the funding for renovating the cognitive center premises. As of the Latest Practicable

SUMMARY

Date, we had helped more than 120 hospitals establish cognitive centers in China, including several leading hospitals with “National Medical Center” (國家醫學中心) certification for various medical specialties by the NHC. We have also been deeply involved in the publications of the first four expert consensus in the field of DTx in China. In March 2023, we co-authored the “Chinese expert consensus on digital therapeutics for cognitive impairment (2023 edition)” (《認知數字療法中國專家共識(2023)》), which for the first time in China systematically defined cognitive impairment DTx, and has earned us widespread recognition by top hospitals and medical professionals in China, according to Frost & Sullivan. We are committed to making achievements in the brain scientific research to DTx products that benefit cognitive impairment patients.

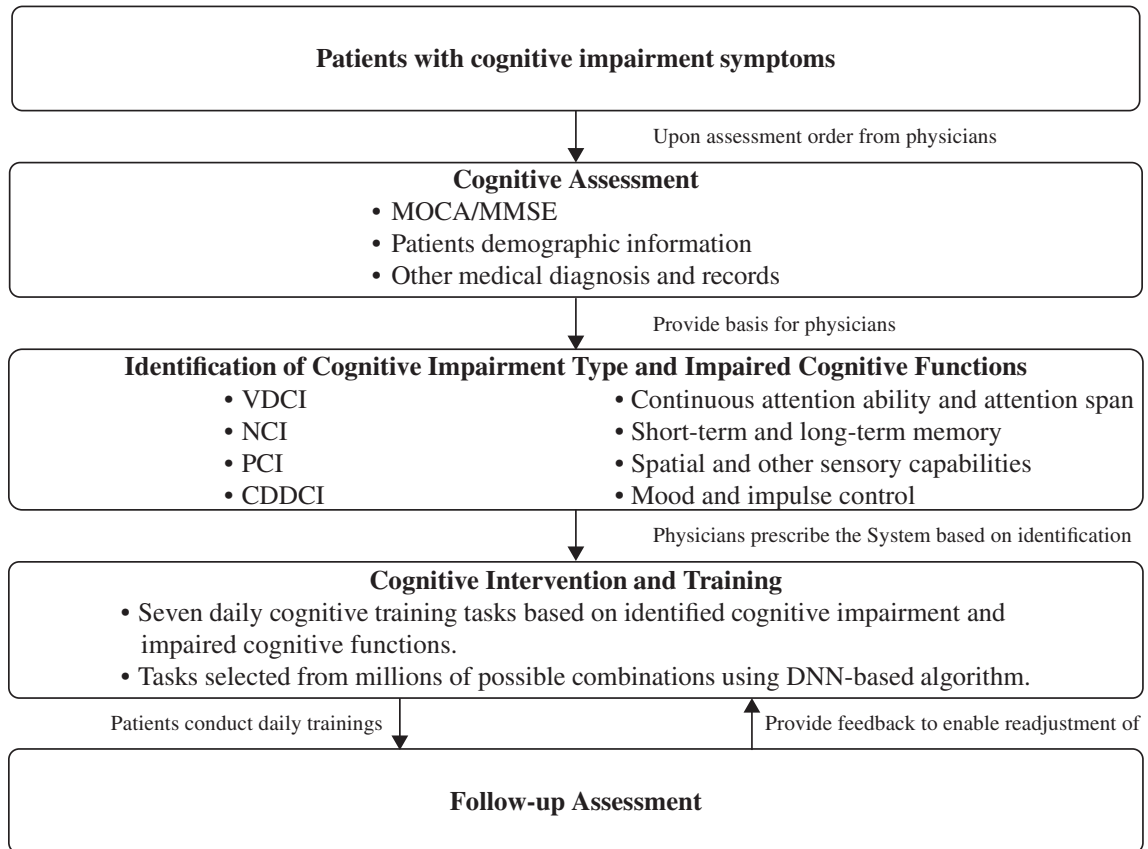
Overview of Our Core Product

Our Core Product, the System, is an evidence-based, medical-grade DTx product, and the first cognitive impairment DTx product in China that has received regulatory approval. The System is software that combines clinical experience in brain science with deep neural networks (the “DNN”) algorithms, a powerful category of machine learning (the “ML”) algorithms, to assess a patient’s cognitive impairment and provide personalized DTx treatment options. The System enables clinical assessment and interventions for various types of cognitive impairment induced by vascular diseases, neurodegenerative diseases, psychological disorders and child development deficiencies, among other types of cognitive impairments. Key components of the System include the virtual human technology and psychometric scale bank for initial assessment, a library of training tasks based on psychological paradigms and a DNN-based recommendation algorithm to tailor training to the patient’s cognitive deficit and treatment progress.

How the System Provides Clinical Assessment and Intervention

Patients with cognitive impairment symptoms begin their journey with the System with consultations with physicians, who may decide to conduct cognitive assessment using the System. Physicians then identify the types of the patients’ cognitive functions that are impaired with the assistance of the System and then direct the System to assign the relevant cognitive training tasks. Patients’ training results each day are fed into the DNN model to determine the training tasks for the next day. After a certain period of time of conducting the cognitive trainings, patients undergo follow-up cognitive assessment to evaluate whether the impaired cognitive functions experienced any improvements and provide feedback to enable readjustment of training tasks in order to further improve cognitive training efficacy. The following diagram sets forth a flowchart setting forth the different stages of how the System serves patients.

SUMMARY



The System provides a library of over 300 training tasks designed to stimulate specific aspects of cognitive function based on various psychological paradigms. These tasks target specific neural networks and brain regions associated with cognitive function. At the identification stage, physicians are able to determine the patients’ specific cognitive impairment indications. This leads to differences in how the training tasks are assigned to provide tailored medical solutions to patients suffering from different indications. Specifically, our DNN-based algorithms use the type of patient cognitive impairment as a critical input in determining what training task combinations are optimal for patient treatment. See “Business—Cognitive Intervention and Training” for details on the underlying brain science theories and the mechanism of this recommendation process.

SUMMARY

The following screenshot demonstrates the functioning of the River Crossing Training Task, one of the over 300 training tasks from the System’s library designed to target specific cognitive impairment.

River Crossing Training Task



To enhance treatment effectiveness, the System uses a DNN-based recommendation algorithm to personalize the training program for each patient. This algorithm takes into account individual differences in cognitive impairment and sensitivity to training tasks. By dynamically adapting training scenarios, the System improves training effectiveness and facilitates cognitive improvement in patients. See “—Our Core Product” and “Business—Core Product: Brain Function Information Management Platform Software System—Mechanism of Action” for more detail.

SUMMARY

OUR PIPELINE

The following chart summarizes the development status of the System under various indications, as well as other products and product candidates in our pipeline as of the Latest Practicable Date.

Product	Disease Area	Indication	Assessment/ Intervention	Phase				Upcoming Milestone	Estimated and Actual Time of Commercialization	Commercialization Country/Region
				Preclinical	Clinical Trial	Registration	Commercialization			
Vascular disease induced cognitive impairment	Vascular disease induced cognitive impairment	Vascular cognitive impairment	Assessment + Intervention					🏆	June 2020	China
		Aphasia	Assessment + Intervention					🏆	June 2020	China
		Atrial fibrillation induced cognitive impairment	Assessment + Intervention					2025 Q2 Data Analysis Completion	2026	China
		Hypertension induced cognitive impairment	Assessment + Intervention					2025 Q2 Data Analysis Completion	2026	China
		Coronary heart disease induced cognitive impairment	Assessment + Intervention					2025 Q2 Data Analysis Completion	2026	China
		Post-cardiac surgery rehabilitation	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	2026	China
		Heart failure induced cognitive impairment	Assessment + Intervention					2026 H1 Clinical Trial Initiation	2028	China
		Alzheimer's disease	Assessment + Intervention					🏆	June 2020	China
		Amnesic mild cognitive impairment	Assessment + Intervention					2025 Data Analysis Completion	2026	China
		Parkinson's disease	Assessment + Intervention					2026 Q2 Clinical Trial Initiation	2027	China
Psychiatric disorder induced cognitive impairment	Psychiatric disorder induced cognitive impairment	Depression	Assessment + Intervention					🏆	June 2020	China
		Schizophrenia	Assessment + Intervention					🏆	June 2020	China
		Sleep disorders	Assessment + Intervention					🏆	June 2020	China
		Anxiety	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	2026	China





Brain Function Information Management Platform Software System ★

SUMMARY

Product	Disease Area	Indication	Assessment/ Intervention	Phase				Upcoming Milestone	Estimated and Actual Time of Commercialization	Commercialization Country/Region
				Preclinical	Clinical Trial	Registration	Commercialization			
		Attention deficit hyperactive disorder	Assessment + Intervention					June 2020	China	
		Autism	Assessment + Intervention					June 2020	China	
	Child development deficiency induced cognitive impairment	Language delay	Assessment + Intervention					2025 Q2 Clinical Trial Initiation	China	
		Cerebral palsy	Assessment + Intervention					2025 Q2 Clinical Trial Initiation	China	
		Dyslexia	Intervention					2025 Q1 Clinical Trial Initiation	China	
		Epilepsy	Assessment + Intervention					2025 Q2 Clinical Trial Initiation	China	
		Bone fracture induced pain	Assessment + Intervention					2025 Q4 Clinical Trial Completion	China	
		Diabetes	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	China	
		Phenylketonuria induced cognitive impairment	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	China	
	Other disorders	Kidney disease induced cognitive impairment	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	China	
		Multiple sclerosis	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	China	
		Hepatic encephalopathy	Assessment + Intervention					2025 Q3 Clinical Trial Initiation	China	
		Post-breast cancer surgery rehabilitation	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	China	
		Post-lung cancer surgery rehabilitation	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	China	
		Drug addiction	Assessment + Intervention					2025 Q1 Clinical Trial Initiation	China	

SUMMARY

Product	Disease Area	Indication	Assessment/ Intervention	Phase				Upcoming Milestone	Estimated and Actual Time of Commercialization	Commercialization Country/Region
				Preclinical	Clinical Trial	Registration	Commercialization			
Basic Cognitive Ability Testing Software	Cognitive impairment	Cognitive impairment	Assessment					2024 Q4 Commencement of Commercialization	2024	China
Cognitive Ability Supplemental Screening and Assessment Software	Cognitive impairment	Cognitive impairment	Assessment					2024 Q4 Commencement of Commercialization	2024	China
Dyslexia Supplemental Screening and Assessment Software	Child development deficiency induced cognitive impairment	Dyslexia	Assessment					2024 Q4 Commencement of Commercialization	2024	China
Covid-19 Induced Cognitive Impairment Assessment and Recovery Training Software	Other disorders	Covid-19 induced cognitive impairment	Assessment + Intervention					2025 H2 Registration Approval	2025	China
Attention Deficit Hyperactivity Disorder Assessment and Treatment Software	Child development deficiency induced cognitive impairment	Attention deficit hyperactivity disorder	Assessment + Intervention					2024 Q4 Clinical Trial Initiation	2025	China
Quantitative Cognitive Assessment Software for Depression	Psychiatric disorders	Depression	Assessment					2024 Q4 Clinical Trial Completion	2025	China
Depression Treatment Software	Psychiatric disorders	Depression	Intervention					2024 Q4 Clinical Trial Initiation	2026	China
Cognitive Impairment Assessment Software	Cognitive impairment	Cognitive impairment	Assessment					2025 Registration Submission	2026	EU
								2025 H2 Registration Submission	2026	US
Cognitive Impairment Treatment Software	Cognitive impairment	Cognitive impairment	Intervention					2026 Commencement of Commercialization	2026	EU
								2025 Registration Submission	2026	US

 Core Product
 Commercialized Product/Indication
 Product exempt from clinical trials under current relevant regulations
 Regulatory approvals obtained through submission of clinical evaluation materials on the System conducted by third parties

SUMMARY

We have built end-to-end capabilities ranging from R&D to commercialization.

- *R&D and Technology.* We have assembled a dedicated and multi-disciplinary R&D team of 122 members with 26 holding a masters degree and two holding PhDs as of the Latest Practicable Date. Our extensive technological capabilities enable us to flexibly and rapidly expand the indications coverage of our System, as well as to develop other assessment and intervention DTx products, in a cost-effective manner. For additional details of our R&D capabilities and technology, see “Business—Our Pipeline.”
- *Commercialization.* We believe our commercialization capabilities are largely attributable to our achievements in evidence-based academic and scientific research in the fields of cognitive impairment, and the performance of our System and other products, which have gained us wide recognition by customers and accelerated the commercialization of our System and other products. For additional details of our commercialization capabilities, see “Business—Our Pipeline.”

We believe that our diversified product portfolio, together with our end-to-end capabilities across R&D to commercialization, will create high entry barriers, solidify our industry position and fuel a strong growth trajectory.

OUR CORE PRODUCT

Our Core Product, the System, is an evidence-based, medical-grade DTx product, and the first cognitive impairment DTx product in China that has received regulatory approval. In September 2018, we obtained the initial Class II medical device registration certificate (the “**2018 Certificate**”) from the Hunan Medical Products Administration (the “**Hunan MPA**”) for the System. In June 2020, we obtained an amended certificate (the “**2020 Amended Certificate**”) from the Hunan MPA to include the screening, assessment, recovery and data analysis of eight specific indications (vascular cognitive impairment, aphasia, Alzheimer’s disease, depression, schizophrenia, sleep disorders, Attention Deficient Hyperactivity Disorder (the “**ADHD**”), and autism), making it possible for us to commercialize the System in China. The 2020 Amended Certificate and the 2018 Certificate are the same certificate with revised scope descriptions. In May 2023, we renewed the 2020 Amended Certificate with the Hunan MPA (the “**2023 Renewed Certificate**”), which contains the same indication coverage as the 2020 Amended Certificate.

As of the Latest Practicable Date, there are three recommendations from Chinese regulatory authorities regarding the reclassification of DTx medical devices from Class II to Class III. These represent advice from the relevant experts nationwide and are not binding regulations on medical device classification as of the Latest Practicable Date, according to our PRC Legal Advisor. As advised by Frost & Sullivan, such potential reclassifications would make a difference on the steps of clinical development and obtaining regulatory approvals that must be undertaken by players in the industry, not on the market demands or opportunities for

SUMMARY

such products. Players with the resources and experience in carrying out evidence-based clinical research and development would potentially enjoy competitive advantage with regards to cognitive impairments DTx products that may be reclassified into Class III medical device, according to Frost & Sullivan. See “PRC Regulatory Overview—Regulation Relating to Medical Devices—Potential reclassification of DTx medical devices from Class II to Class III” for more details on the recommended reclassifications and their potential impact on our market opportunities and competition.

The System is software that combines clinical experience in brain science with DNN algorithms, a powerful category of ML algorithms, to assess a patient’s cognitive impairment and provide personalized DTx treatment options. The System enables clinical assessment and interventions for various types of cognitive impairment induced by vascular diseases, neurodegenerative diseases, psychological disorders and child development deficiencies, among other types of cognitive impairments. The System incorporates our two underlying technologies, namely virtual human and AI technologies. In particular, our DNN algorithms are trained with a large amount of information on patient demographics, clinical assessment, diagnosis and information collected during patients’ participation in training tasks at diverse difficulty levels. Our DNN algorithms undergo constant iteration and training to dynamically adjust the content of the training tasks. The DNN algorithms can identify the most suitable training out of millions of different possible combinations, building on over 300 training modules that are designed to activate the appropriate brain regions for the best therapeutic effect.

Competitive Advantages

Supported by our core technologies of virtual human and AI, our System features two primary competitive advantages in terms of assessment efficiency and treatment efficacy.

- *Assessment Efficiency.* Our virtual human technology can perform medical assessment and communicate with a large number of patients at once, greatly improving their assessment efficiency. Our AI technology enables physicians to perform assessment and intervention in a streamlined and user-friendly manner.
- *Treatment Efficacy.* By dynamically identifying and recommending the most suitable training out of millions of different possible combinations, our DNN algorithms enable the System to offer self-adaptive and personalized trainings that lead to more favorable enhancement of cognitive functions for patients who use the System together with drug therapies compared to patients under drug therapies alone, as measured by patients’ response time, accuracy rate, improvement in training performance scores and length of user stay.

SUMMARY

Key Indications

Our System targets a variety of cognitive impairment indications, covering the assessment and intervention of four major types of cognitive impairment, namely VDCI, NCI, PCI and CDDCI, with eight commercialized indications in four major types of cognitive impairment. We also have several other indications under development, including atrial fibrillation, hypertension-related cognitive impairment, coronary artery disease-related cognitive impairment, and amnesic mild cognitive impairment, among others.

We are pursuing further development and commercialization of these key indications by conducting or planning to conduct clinical trials with the goal of obtaining regulatory approval and achieving commercialization. We also plan to work to integrate these new indications into our System and to actively promote these new capabilities to our collaborating hospitals and new hospital customers who may be looking for an assessment and/or intervention option for these new indications. As part of our key indication expansion efforts, we are collaborating with the Anzhen hospital and multiple other hospitals and clinical trial institutions to evaluate our System in application to cognitive impairment induced by various different conditions. This includes atrial fibrillation (Trial Registration: NCT05374642), coronary heart disease (Trial Registration: NCT05735041) and hypertension (Trial Registration: NCT05704270). For more information on the future development plan of our Core Product, see “Business—Core Product: Brain Function Information Management Platform Software System—Future Development Plans for Our System.” For additional details on our planned use of [REDACTED] in relation to the future development of these indications, see “Future Plans and Use of [REDACTED]—Use of [REDACTED].”

OUR KEY PRODUCTS AND PRODUCT CANDIDATES

As of the Latest Practicable Date, four of our products besides the System had obtained regulatory approval in China or abroad, including, among others, the Basic Cognitive Ability Testing software (the “BCAT”), the Cognitive Ability Supplemental Screening and Assessment software (the “SAS”) and the Dyslexia Supplemental Screening and Assessment Software (the “DSS”). All three of these products were developed based on the technology framework of the assessment function of the System. We also conducted additional R&D on the BCAT and the SAS to make cognitive impairment assessment by physicians more accurate and efficient.

BCAT

BCAT is designed to facilitate healthcare professionals’ assessment of patients’ basic cognitive capacity by enabling patients to self-administer tests of their cognitive capacities relating to processing speed, working memory, episodic memory, visual-spatial ability and verbal comprehension. We obtained a Class II medical device registration certificate from the Hunan MPA for the BCAT in October 2022. The BCAT can improve the efficiency of medical assessment by medical professionals, promote cost-efficient diagnostic paradigms and improve patient’s treatment experience.

SUMMARY

SAS

SAS is designed to facilitate healthcare professionals’ assessment of patients’ cognitive capacity by enabling patients to self-administer the Mini-Mental State Examination (the “**MMSE**”) and Montreal Cognitive Assessment (the “**MoCA**”) tests. We obtained a Class II medical device registration certificate from the Hunan MPA for the SAS in December 2022 after submitting relevant clinical evaluation materials. Though the SAS is no substitute for human judgement and cannot on its own automatically derive diagnostic conclusions, it can improve the efficiency of medical assessment by medical professionals, promote cost-efficient diagnostic paradigms and improve patient’s treatment experience.

DSS

DSS is designed to facilitate the assessment of risk of developmental dyslexia in children. We received a Class II medical device registration certificate for DSS in September 2023.

Other Product Candidates

We also have the following products under different stages of development.

- *COVID-19 Induced Cognitive Impairment Assessment and Recovery Training Software:* We collaborated with Xuanwu Hospital to complete a clinical trial focused on cognitive decline due to COVID-19 infection, commonly referred to as “COVID-19 brain fog” in October 2023. We have submitted Class II medical device registration for this product candidate in the second quarter of 2024 and expect to receive registration approval in the second half of 2025. Once approved, we plan to promote the commercialization of this product through existing sales channels.
- *ADHD Assessment and Treatment Software:* We are currently under preclinical development of the ADHD assessment and treatment software (the “**ADHD Software**”). We intend to initiate clinical trial for our ADHD Software by the fourth quarter of 2024.
- *Quantitative Cognitive Assessment Software for Depression:* We are currently under clinical development for the quantitative cognitive assessment software for depression, which is an electronic cognitive function assessment tool developed based on the latest scientific development on an understanding of human intelligence and cutting-edge clinical research on cognitive dysfunction associated with depression. We expect to complete the trial by the fourth quarter of 2024.
- *Depression Treatment Software:* We are currently under preclinical development of the depression treatment software, called “Mind Island Aurora,” which is a computerized system utilizing a combination of game-playing and Computerized Cognitive Behavioral Therapy (the “**CCBT**”) to improve the symptoms related to depression. The software aims at deepening patients’ understanding about emotional rationalization and interpersonal skills in an interest-inspiring way. We expect to initiate clinical trial in the fourth quarter of 2024.

SUMMARY

- *Cognitive Impairment Assessment Software and Cognitive Impairment Treatment Software*: In order to expand our international footprint and build global influence, we are developing the following products in the U.S. and the EU: Cognitive Impairment Assessment Software and Cognitive Impairment Treatment Software. On July 22, 2022, we obtained the CE mark in the EU for our Cognitive Impairment Treatment Software, which allows its commercialization in Europe that is expected to commence in 2026. We are also developing our Cognitive Impairment Treatment Software and Cognitive Impairment Assessment Software in the U.S. in preparation for regulatory filings under Section 510(k).

OUR COMPETITIVE STRENGTHS

We believe the following strengths have contributed to our success and differentiated us from our competitors:

- Seasoned player in China’s cognitive impairment DTx market with significant market opportunities;
- Comprehensive coverage of cognitive impairment indications with rapid pipeline expansion;
- R&D capabilities and core technologies supported by multidisciplinary team;
- Strong commercialization capabilities and accelerated commercialization momentum propelled by academic and industry achievements; and
- Visionary management team with rich experience in brain sciences, AI technologies, and business development.

OUR STRATEGIES

We plan to execute the following strategies to achieve our mission and drive our future growth:

- Continue indication expansion of the System and development of other product candidates to further solidify our position in China’s cognitive impairment DTx market;
- Accelerate commercialization of the System and other products and enhance market penetration;
- Further improve our research and development capabilities;
- Expand our international footprint and build global influence; and
- Strategically seek merger and acquisition opportunities.

SUMMARY

OUR BUSINESS MODEL

We offer the System to hospitals which enable hospitals to provide assessment and intervention to their cognitive impairment patients utilizing the System (and potentially our other products and product candidates). We generate revenue from hospitals which pay us based on the amount of in-hospital use of the System integral software solutions by patients and the pricing based on negotiations between the hospitals and us with reference to the provincial health insurance reimbursement lists. To a lesser extent, we also provide the System integral software solutions directly to individual patients out of hospitals who pay us periodic subscription fees during the period they use the System. In addition to selling the System to hospitals and individual patients, we also offer research projects services by providing the System as well as technical and operational support services to help universities, hospitals and research institutions conduct research projects. We also began offering training facilitation service in 2023 where we assist our customer and the organizer of the training sessions in performing the organizational and logistical groundwork. The customer and organizer is a public institution dedicated to advancing the knowledge and capabilities of physicians and other medical professionals in China. We charge service fees from attendees. The service fee from each training is based on the type and number of training attendees when they sign up for the training. We record training facilitation service revenue at the completion of each training. Historically, we also sold hardware equipment with our System pre-installed together with user accounts which enable customers to use the System on the hardware equipment.

Business Sustainability and Commercialization Strategies

We believe the long-term sustainability of our product commercialization can be substantiated by the following strategies and trends:

- *Further helping hospitals establish cognitive centers:* We became the first organizer of a project initiated by the NHC, according to Frost & Sullivan, under which we are tasked with helping to establish cognitive centers in over 2,100 public hospitals across China and promoting the development of cognitive impairment DTx market in China over the next five years. We intend to continue to help hospitals establish cognitive centers, and fully capitalize on the commercialization potential of our System in new cognitive centers in these hospitals, which we believe will provide us sustainable growth in our business and revenue scale.
- *Enhanced brand and product awareness:* We intend to recruit more talents with academic and professional experiences in the field of cognitive impairment DTx to expand our commercialization team and enhance the team’s academic and marketing capabilities in order to further promote our brand and product awareness.
- *Product innovation and indication expansion:* We plan to accelerate the development, registration, and commercialization processes to expand our System to more cognitive impairment indications by developing upgraded versions of the System or developing new products.

SUMMARY

- *Growing industry trend demonstrating strong market demand:* We believe we are well-positioned to capture the rapid growth in the cognitive impairment DTx market in China, and achieve sustainable business and revenue growth. The cognitive impairment DTx market in China has been growing rapidly as a result of strong market demands. According to Frost & Sullivan, the market size of the cognitive impairment DTx in China reached RMB268.6 million in 2023 and is expected to increase to RMB1,046.7 million in 2025 and RMB8,927.4 million in 2030, representing CAGRs of 97.4% and 53.5%, respectively.

See “Business—Business Sustainability and Commercialization Strategies” for more detailed descriptions of our strategies to achieve long-term sustainability of our product commercialization.

MARKET OPPORTUNITIES AND COMPETITION

Market Size

The market size of the cognitive impairment DTx in China reached RMB268.6 million in 2023 and is expected to increase to RMB1,046.7 million in 2025 and RMB8,927.4 million in 2030, representing CAGRs of 97.4% and 53.5%, respectively.

Classification of DTx Products

DTx is a type of healthcare assessment and intervention tool that uses digital technologies to prevent, diagnose, manage and treat diseases. There are two main categories of DTx: medical-grade DTx and non-medical-grade DTx.

- o Medical-grade DTx are typically required to undergo rigorous evidence-based clinical evaluation processes to demonstrate safety and efficacy in clinical trials and can be prescribed as effective first-line treatments without the side effects associated with conventional drugs. In contrast to non-medical-grade DTx, medical-grade DTx can provide diseases assessment and intervention either as monotherapy or in combination with existing drugs and other therapies. Because of the accessible nature of DTx, medical-grade DTx provide clinically validated therapeutic options that are appropriate for patients with chronic conditions that require ongoing treatment and monitoring and are consistent with government goals to promote access to healthcare in rural or underserved areas worldwide.
- o Non-medical-grade DTx refers to applications designed to help individuals maintain wellness and prevent diseases by providing DTx-based preventive care with a focus on cognitive and mental health. The safety and efficacy of non-medical-grade DTx are typically not validated through rigorous evidence-based clinical processes. Non-medical-grade DTx includes applications for health promotion, disease prevention, self-diagnosis, management, rehabilitation, palliative care and epidemic or pandemic care.

SUMMARY

Market Competition

Key players in the global cognitive impairment DTx market (outside China) include companies that offer cognitive training interactive games, cognitive behavioral therapies, health monitoring systems and other types of cognitive impairment DTx products. As of the Latest Practicable Date, there were approximately 19 FDA-approved products by approximately 13 key global players covering cognitive impairment induced by various indications.

In China, as of the Latest Practicable Date, approximately 100 cognitive impairment DTx products by approximately 50 players, including our Company, had been approved by the NMPA or its local counterparts, and at least 20 cognitive impairment DTx products by approximately 20 players are currently in the process of clinical trials and obtaining relevant medical device registration certificates, as of the Latest Practicable Date, according to Frost & Sullivan. We are the first company in China that has developed a medical-grade DTx product for cognitive impairment. We have a 25.0% market share in China’s cognitive impairment DTx market and 91.6% market share in China’s medical-grade cognitive impairment DTx market in terms of revenue in 2023, according to Frost & Sullivan. For more information, see “Industry Overview—Cognitive Impairment DTx Market—Competitive Landscape of Cognitive Impairment DTx.”

Our System targets a variety of cognitive impairment indications, covering the assessment and intervention of four major types of cognitive impairment: vascular disease induced cognitive impairment (the “**VDCI**”), Neurodegenerative disease induced cognitive impairment (the “**NCI**”), Psychiatric disorder induced cognitive impairment (the “**PCI**”), and Child development deficiency induced cognitive impairment (the “**CDDCI**”).

Key players in the global VDCI DTx market (outside China) include one player that offers at least two FDA-approved VDCI DTx products. In China, a total of approximately 28 VDCI DTx products by approximately 22 players, including our Company, had been approved by the NMPA or its local counterparts, and at least five VDCI DTx products by five players were in the process of clinical trials and obtaining relevant medical device registration certificates, as of the Latest Practicable Date, according to Frost & Sullivan.

Key players in the global NCI DTx market (outside China) include at least three players that offers at least four FDA-approved NCI DTx products. In China, a total of approximately 36 NCI DTx products by approximately 20 players, including our Company, had been approved by the NMPA or its local counterparts, and at least ten more NCI DTx products by at least ten players were in the process of clinical trials and obtaining relevant medical device registration certificates, as of the Latest Practicable Date, according to Frost & Sullivan.

SUMMARY

Key players in the global PCI DTx market (outside China) include 11 players that offer at least 15 FDA-approved PCI DTx products. In China, a total of approximately 32 PCI DTx products by approximately 31 players, including our Company, have been approved by the NMPA or its local counterparts, and at least five additional PCI DTx products by at least five players are currently in the process of clinical trials and obtaining relevant medical device registration certificates, as of the Latest Practicable Date, according to Frost & Sullivan.

Key players in the global CDDCI DTx market (outside China) include at least two players that offer at least two FDA-approved CDDCI DTx products. In China, a total of approximately 25 CDDCI DTx products by at least 22 players, including our Company, have been approved by the NMPA or its local counterparts, and at least ten CDDCI DTx products by at least ten players are currently in the process of clinical trials and obtaining relevant medical device registration certificates, as of the Latest Practicable Date according to Frost & Sullivan.

RESEARCH AND DEVELOPMENT

We focus our R&D efforts on developing innovative cognitive impairment medical technologies and solutions to assess and intervene in patients’ cognitive impairment caused by a variety of diseases. We have devoted significant resources to building up our R&D capabilities and technological infrastructure, enabling us to stay abreast of the latest technology trend in the DTx industry, provide clinically advanced new products and enhance the efficacy, ease of use, safety and reliability of our products, as well as expand their applications, as appropriate.

As a result of our investment in our R&D capabilities, we have independently developed critical components of the System including the underlying AI models that power the System comprising (i) the adaptive collaborative intervention model, which combines different AI models to give optimal treatment recommendations for patients and is designed to ensure that the training content stimulates the appropriate neural networks; and (ii) the large language model, which is designed to perform semantic analysis and response interpretation to allow the System to better understand patient input, and is the result of our adaptation of an open-source large language model. We are also independently developing our multimodal cognitive computing model, which uses various data such as a patient’s speech, movement, and appearance to understand cognitive impairments and improve diagnosis and our multimodal affective computing model, which is designed to capture and analyze patients’ changes in emotions and moods when responding to assessment questions or when conducting cognitive trainings. In terms of our virtual human technology, we have independently developed the critical technology components of speech correction, intention recognition and automated assessment and analysis.

SUMMARY

We are also investing in integrating new advances in AI technology with traditional medical care, such as pursuing the multimodal cognitive computing model that are based on task-based assessment, which requires a technology to detect abnormalities within a few hundred milliseconds. As a result of our efforts, we have built AI-based DNN algorithms, which enable the System to become highly self-adaptive. The DNN algorithms can identify the most suitable training out of millions of different possible combinations, building on over 300 training modules that are designed to activate the appropriate brain regions for the best therapeutic effect. We believe this dynamic and self-adaptive training leads to more personalized treatment and more favorable enhancement of cognitive functions for patients than traditional drug therapies, as measured by the MoCA scores and patients’ response time, accuracy rate, improvement in training performance scores and length of user stay.

Virtual human technology automates patient interaction and other processes that were traditionally performed by physicians with patients on a one-on-one basis, which enables physicians to assess a large number of patients at once. Our virtual human technology comprises a series of technological capabilities obtained from third parties or independently developed by us. These capabilities include (i) speech recognition and correction; (ii) intention recognition; and (iii) automated assessment and analysis. As a result of the abovementioned automated processes, our virtual human technology breaks through the constraints of traditional clinical assessment standards such as the MMSE and MoCA. These traditional standards typically require medical professionals to personally conduct one-on-one assessments, which lack efficiency as medical professionals can only ask, record and explain assessment questions and responses one patient at a time. In terms of virtual human technology, we have developed the key operative technology components of the virtual human technology, namely speech correction, intention recognition and automated assessment and analysis technologies.

These R&D efforts also help us maintain the advantages of the System and facilitate the development of other products and product candidates. In particular, these efforts (i) will enable us to expand the use of the System to other indications, thereby increasing the versatility of the System compared to other cognitive DTx products; and (ii) have the potential to improve the user experience of our products by facilitating more genuine human-machine interactions, more accurate assessment and more personalized intervention, thereby helping us to maintain the System’s advantage and facilitate further expansion of our product pipelines.

Our exceptional R&D capability has earned the recognition of various industry authorities. For example, in January 2024, the Chinese Medical Association (中華醫學會) awarded us the 2023 Chinese Medical Science and Technology Prize-First Place (2023年中華醫學科技獎-一等獎) a prestigious award that recognizes advances in various categories of medical science and technology for innovation related to our System. For a list of our other awards, see “Business—Awards and Recognitions.”

SUMMARY

SALES AND MARKETING

We had commercialized our System for eight indications and obtained regulatory approvals for three additional products as of the Latest Practicable Date. For details of our commercialized products, see “Business—Our Product Pipeline.”

Our Marketing Model

We focus our selling and distribution efforts on establishing relationships with hospitals, which were our primary customers during the Track Record Period. We seek to raise the profile of our technologies and products in the medical community and encourage their adoption, primarily through (i) collaborations with top hospitals and research institutions; (ii) collaborations with key opinion leader(s) (the “KOL(s)”); (iii) regular organization and participation in various academic conferences and (iv) promotional efforts to individual patients who have experienced our products in hospitals and may wish to continue purchasing our products for use in their homes. We did not engage distributors for the selling and distributions of our services and products during the Track Record Period. For additional details of our marketing model, see “Business—Sales and Marketing—Our Marketing Model.”

Pricing

The prices we charge hospitals for provision of the System integral software solutions in hospitals are primarily determined by the pricing based on negotiations between the hospitals and us with reference to the relevant provincial health insurance reimbursement lists. We invoice the hospitals periodically based on the number of times our products are used by these hospitals to assess and treat patients during the period. As of the Latest Practicable Date, our System had been included in the health insurance reimbursement lists in 30 provinces in China. For patients who purchase our System integral software solutions out of hospitals, we charge a subscription fee which enables them to access and train with our System and receive related support services for a certain period of time from the comfort of their own homes. As of the Latest Practicable Date, the price for cognitive training in hospitals ranges from approximately RMB10.0 to RMB930.0 per session, depending on the training content and number of training sessions actually received by the patient. The prices for out-of-hospital subscription range from approximately RMB480.0 to RMB5,600.0 with subscription periods of one month to one year. For our research projects services, we charge our customers on a cost-plus basis, taking into account the amount of staff resources and other costs of providing data analytics and system development services, plus a margin determined on an individual basis depending on characteristics of each project, such as (i) the degree to which our customers rely on our System to conduct research projects; (ii) the level of labor intensity of a project; and (iii) case-by-case negotiations with customers. Due to the tailored nature of research project services, the price we charge for research project services can range from approximately RMB50,000 to RMB10.0 million. For our sale of integrated equipment and user accounts, the typical selling price for each equipment alone was approximately RMB3,000, and the typical selling price for each user account is approximately RMB1,000, which is primarily determined by costs plus a reasonable margin acceptable to customers. For our training facilitation service, we charge approximately RMB2,000 to RMB3,000 service fee per attendee based on the type of training attendees when they sign up for the training.

SUMMARY

CUSTOMERS

Our customers primarily include (i) hospitals from which we generate revenue for provision of the System integral software solutions in hospitals; (ii) individual patients from whom we generate revenue for provision of the System integral software solutions out of hospitals; and (iii) hospitals, universities, and other research institutions from which we generate research project revenue. See “Financial Information—Description of Selected Components of Statements of Profit or Loss—Revenue” for more details. As of the Latest Practicable Date, we had generated sales revenue for the System from 173 hospitals. The total revenue generated from our top five customers was RMB1.6 million, RMB8.3 million, RMB50.8 million, and RMB28.9 million in 2021, 2022, 2023, and the six months ended June 30, 2024, respectively, accounting for 70.1%, 73.1%, 75.6%, and 55.6%, respectively, of our total revenue during the same periods. Revenue from our largest customer was RMB0.8 million, RMB4.4 million, RMB26.8 million, and RMB14.5 million in 2021, 2022, 2023, and the six months ended June 30, 2024, respectively, accounting for 35.5%, 39.1%, 39.9%, and 28.0%, respectively, of our total revenue during the same periods.

SUPPLIERS

Our major suppliers primarily provide us (i) certain research and development services; (ii) operational support provided to cognitive centers on our behalf; (iii) suppliers of certain hardware on which our products run; and (iv) marketing and promotion service providers. Our suppliers are primarily located in China. We have established stable relationships with many of our key suppliers.

The total purchases from our top five suppliers were RMB36.3 million, RMB13.8 million, RMB39.2 million, and RMB30.2 million in 2021, 2022, 2023, and the six months ended June 30, 2024, respectively, accounting for 80.3%, 46.4%, 43.9%, and 55.5%, respectively, of our total purchases during the same periods. Purchases from our largest supplier were RMB15.0 million, RMB3.8 million, RMB16.7 million, and RMB14.9 million in 2021, 2022, 2023, and the six months ended June 30, 2024, respectively, accounting for 33.2%, 12.7%, 18.7%, and 27.4%, respectively, of our total purchases during the same periods.

MANUFACTURING

We have third-party vendors who manufacture the hardware on which our products run. We do not own or operate any manufacturing facilities.

SUMMARY

INTELLECTUAL PROPERTY

As of the Latest Practicable Date, we had 178 registered trademarks, 40 granted patents, 78 registered software copyrights and filed 70 patent applications in China, as well as nine pending patent applications overseas.

As of the Latest Practicable Date, in relation to the System, we had 30 granted patents and 38 filed patent applications. Our Directors believe that such patent and patent applications have covered all the key characteristics of the System and the possibilities of us failing to operate and commercialize the System in China due to any objection or claim from other market players concerning similar technologies or features underlying their registered patents or patent applications is remote. As of the Latest Practicable Date, to our best knowledge, there was no pending opposition by any third party against, nor any other circumstances which has any material adverse effect on, our patent applications filed in China.

OUR CONTROLLING SHAREHOLDERS

Immediately following the completion of the [REDACTED] and the [REDACTED] (on the basis that all the Preferred Shares are converted into Shares on a one-to-one basis and assuming that the [REDACTED] is not exercised), Mr. Tan and Dr. Wang, acting in concert pursuant to the Offshore AIC Agreement, will, together with their respective close associates, namely ZTan Limited, Wispirits Limited, Wiseforward Limited and Neurobright Limited, control the voting rights of approximately [REDACTED]% of the total issued share capital of our Company, and thus are our Controlling Shareholders. For details of the control of voting rights in our Company by each member of the Controlling Shareholders, see the section headed “Relationship with our Controlling Shareholders”.

For the background of our Controlling Shareholders, see the sections headed “Directors and Senior Management” and “History, Reorganization and Corporate Structure”.

Offshore AIC Agreement

Pursuant to the Offshore AIC Agreement, and not taking into account the voting rights of the Proxy Grantors entrusted through the Voting Proxy Agreements, Mr. Tan and Dr. Wang will together control the voting rights of approximately [REDACTED]% of the total issued share capital of our Company, being the aggregate voting rights controlled by the Offshore AIC Parties immediately after the completion of the [REDACTED] and the [REDACTED] (on the basis that all the Preferred Shares are converted into Shares on a one-to-one basis and assuming the [REDACTED] is not exercised). For the details of the Offshore AIC Agreement, see the section headed “History, Reorganization and Corporate Structure — Acting in Concert Arrangements — Offshore AIC Agreement.”

SUMMARY

Voting Proxy Agreements

Following the initial investments in our Group by the onshore affiliates of the respective Proxy Grantors prior to the Reorganization, and taking into account the increase in the value of their investments thereafter attributable to the sustained business development of the Group, each of the Proxy Grantors, being Healthbloom Limited and Integriness Limited, has developed confidence in the management of the Group under the supervision of Mr. Tan. Accordingly, to (i) further affirm the Proxy Grantors’ support and faith in the commercial direction and guidance of Mr. Tan to act in a manner that is aligned with the interests of our Group (including attaining our long-term business prospects and strategic objectives) and our Shareholders as a whole; (ii) reflect the importance of Mr. Tan’s vision and leadership in our Group’s continued growth; and (iii) enable Mr. Tan to further consolidate his control in our Group and continue to drive the Group’s development, the Proxy Grantors entered into the Voting Proxy Agreements dated August 6, 2023, with Mr. Tan. Pursuant to the Voting Proxy Agreements dated August 6, 2023, Mr. Tan is entitled to exercise, in his sole discretion, all rights as the Shareholders of our Company on behalf of the Proxy Grantors, in relation to the Shares representing approximately [REDACTED]% of the total issued share capital of our Company held by the Proxy Grantors immediately after the completion of the [REDACTED] and the [REDACTED] (on the basis that all the Preferred Shares are converted into Shares on a one-to-one basis and assuming the [REDACTED] is not exercised), according to the applicable laws and rules with respect to corporate governance, including but not limited to the voting rights of Shareholders at shareholder meetings.

The Voting Proxy Agreements took immediate effect upon the date thereof and shall continue in force so long as each of the Proxy Grantors holds any Share in our Company subject to the relevant Voting Proxy Agreement.

As a result of the arrangements set out above, Mr. Tan and Dr. Wang are entitled to control approximately [REDACTED]% in aggregate of the voting rights of our Company, being the aggregate voting rights held by the Proxy Grantors, immediately after the completion of the [REDACTED] and the [REDACTED] (on the basis that all the Preferred Shares are converted into Shares on a one-to-one basis and assuming the [REDACTED] is not exercised).

OUR [REDACTED] INVESTORS

Since the establishment of our Group, we have entered into several rounds of financing agreements with our [REDACTED] Investors, which include professional investors principally engaged in equity investments in the healthcare sector. Among our [REDACTED] Investors, Northern Light Strategic Fund IV L.P., Northern Light Venture Fund IV L.P. and Northern Light Partners Fund IV L.P. are Sophisticated Investors having made meaningful third-party investment in our Company. For further details of the identity and background of our [REDACTED] Investors, and the principal terms of the [REDACTED] Investments, see the section headed “History, Reorganization and Corporate Structure — [REDACTED] Investments.”

SUMMARY

SUMMARY OF KEY FINANCIAL INFORMATION

This summary historical data of financial information set forth below have been derived from, and should be read in conjunction with, our consolidated financial statements, including the accompanying notes, set forth in the Accountants’ Report set out in Appendix I to this Document, as well as the information set forth in “Financial Information” of this Document. Our financial information was prepared in accordance with IFRS.

Description of Selected Components of Statements of Profit or Loss

The following table sets forth our consolidated statements of profit or loss and other comprehensive income with line items in absolute amounts and as percentages of our revenue for the periods indicated, which are derived from our consolidated statements of profit or loss and other comprehensive income set out in the Accountants’ Report included in Appendix I to this Document:

	For the year ended December 31,			For the six months ended June 30,	
	2021	2022	2023	2023	2024
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
				<i>(Unaudited)</i>	
Revenue	2,299	11,291	67,200	24,412	51,887
Cost of sales	(995)	(7,994)	(35,136)	(12,309)	(27,367)
Gross profit	1,304	3,297	32,064	12,103	24,520
Other income	1,478	3,915	2,079	1,692	582
Other gains and losses, net	(3)	3,098	2,318	2,139	2,135
Fair value loss of financial liabilities at fair value through profit or loss (“FVTPL”)	(623,764)	(385,886)	(165,216)	(163,543)	(243)
Impairment loss under expected credit loss (“ECL”) model, net of reversal	(13)	(50)	(848)	(248)	(4,142)
Selling and distribution expenses	(10,813)	(11,928)	(38,399)	(17,024)	(25,376)
Administrative expenses	(26,782)	(27,762)	(54,398)	(15,047)	(28,138)
Research and development expenses	(32,760)	(67,627)	(90,733)	(34,371)	(64,231)
Finance costs	(6,391)	(19,223)	(20,216)	(9,962)	(10,904)
[REDACTED] expenses	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other expenses	(94)	(295)	–	–	–
Loss before tax	(697,838)	(502,461)	(359,116)	(234,570)	(114,389)
Income tax expense	–	–	–	–	–
Loss and total comprehensive expense for the year/period	(697,838)	(502,461)	(359,116)	(234,570)	(114,389)
(Loss) profit for the year/period attributable to:					
Owners of the Company	(697,837)	(502,452)	(359,083)	(234,597)	(114,328)
Non-controlling interests	(1)	(9)	(33)	27	(61)

SUMMARY

Non-IFRS Measures

To supplement our consolidated statements of profit or loss and other comprehensive income, which are presented in accordance with IFRS, we also use adjusted net loss (non-IFRS measure) as an additional financial measure, which is not required by, or presented in accordance with, IFRS. We believe this non-IFRS measure facilitates comparisons of operating performance from period to period and company to company by eliminating potential impacts of certain items. We believe this measure provides useful information to [REDACTED] and others in understanding and evaluating our consolidated results of operations in the same manner as they help our management in assessing our results of operations. The fair value loss of financial liabilities at FVTPL is adjusted because it will cease upon the completion of this [REDACTED]; share-based payments are adjusted because they are non-cash in nature. However, our non-IFRS measure does not have a standardized meaning prescribed by IFRS, and our adjusted net loss (non-IFRS measure) may not be comparable to similarly titled measures presented by other companies. The use of this non-IFRS measure has limitations as an analytical tool, and you should not consider it in isolation from, or as a substitute for an analysis of, our results of operations or financial condition as reported under IFRS.

We define adjusted net loss (non-IFRS measure) as loss and total comprehensive expense for the year adjusted by adding back fair value loss of financial liabilities at FVTPL and share-based payments, both being non-cash in nature.

The following table reconciles adjusted net loss (non-IFRS measure) for the years/periods indicated to the nearest financial measure calculated and presented in accordance with IFRS, which is loss and total comprehensive expense for the year:

	For the year ended December 31,			For the six months ended June 30,	
	2021	2022	2023	2023	2024
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
Reconciliation of loss and total comprehensive expense for the year to adjusted net loss (non-IFRS measure)					
Loss and total comprehensive expense for the year/period	(697,838)	(502,461)	(359,116)	(234,570)	(114,389)
Add:					
Fair value loss of financial liabilities at FVTPL	623,764	385,886	165,216	163,543	243
Share-based payments	19,370	–	44,873	–	35,304
Adjusted net loss (non-IFRS measure)	(54,704)	(116,575)	(149,027)	(71,027)	(78,842)

SUMMARY

The following table sets forth a breakdown of our revenue, gross profit and gross margin by types of solutions and services during the periods indicated.

	For the year ended December 31,				For the six months ended June 30,							
	2021		2022		2023		2024					
	Revenue RMB'000	Gross profit margin %	Revenue RMB'000	Gross profit margin %	Revenue RMB'000	Gross profit margin %	Revenue RMB'000	Gross profit margin %				
Provision of the System integral software solutions												
In hospitals	967	54.6	4,075	16.8	41,224	20,399	15,216	7,198	47.3	35,282	16,495	46.8
Out of hospitals	240	45.8	1,095	42.9	5,723	3,333	1,901	1,133	59.6	10,544	6,711	63.6
<i>Subtotal</i>	1,207	638	5,170	22.4	46,947	23,732	17,117	8,331	48.7	45,826	23,206	50.6
Research projects	413	37	5,993	2,035	14,290	4,784	5,119	2,563	50.1	5,914	1,167	19.7
Training facilitation	-	-	-	-	5,085	2,891	1,324	578	43.7	53	-	-
Others	679	629	128	106	878	657	852	631	74.1	94	147	100.0
Total/overall	2,299	1,304	11,291	3,297	67,200	32,064	24,412	12,103	49.6	51,887	24,520	47.3

SUMMARY

The increase in our revenue and gross profit from 2021 to 2022 was primarily due to (i) an increase in the number of hospitals to which we provided the System integral software solutions; (ii) an increase in the number of times the System integral software solution was utilized by patients in hospitals and out of hospitals; (iii) an increase in the number of projects and project sizes we undertook. The decrease in our gross profit margin from 2021 to 2022 was primarily due to an one-time retrospective fee rate adjustment with respect to a service provider in September 2022 from floating rates (based on sales volume) to a fixed rate at the high end of the previously floating rate range, which contributed to the higher fee rate and the resulting lower gross profit margin in 2022.

The increases in our revenue and gross profit from 2022 to 2023 are primarily due to (i) an increase in the number of hospitals to which we provided the System integral software solutions, as well as the number of times the System integral software solution was utilized by patients in hospitals and out of hospitals; (ii) an increase in research projects we undertook; and (iii) our launch of training facilitation service in 2023. The increase in our gross profit margin from 2022 to 2023 was primarily because the above-mentioned retrospective fee rate adjustment for periods prior to 2022 was all recorded in 2022 resulting in lower gross profit margin in 2022.

The increase in our revenue and gross profit from the six months ended June 30, 2023 to the six months ended June 30, 2024 was primarily due to (i) an increase in the number of hospitals to which we provided the System integral software solutions; (ii) an increase in the number of times the System integral software solution was utilized by patients in hospitals and out of hospitals; and (iii) an increase in the average project sizes we undertook. The decrease in gross profit margin during the same periods was primarily due to a decrease in the gross profit margin of our research projects services.

See “Financial Information—Period-to-Period Comparison” for an explanation of fluctuations of our revenue, gross profit and gross margin, among other items.

Our loss and total comprehensive expense for the year decreased from RMB697.8 million in 2021 to RMB502.5 million in 2022, primarily due to an RMB237.9 million decrease in fair value loss of financial liabilities at FVTPL, partially offset by an increase in operating expenses and finance costs as we expanded the scale of our operations. Our loss and total comprehensive expense for the year decreased from RMB502.5 million in 2022 to RMB359.1 million in 2023, primarily due to an RMB220.7 million decrease in fair value loss of financial liabilities at FVTPL, partially offset by an increase in operating expenses and finance costs as we expanded the scale of our operations. We expect to remain at a net loss position in 2024, primarily due to expected significant spending on operating expenses in order to carry out research and development of our products for more indications, to establish sales relationship with more hospitals and expand sales volume, to manage our growth, and to complete this [REDACTED].

SUMMARY

Description of Selected Components of Statements of Financial Position

The following table sets forth selected information from our consolidated statements of financial position as of the dates indicated, which have been extracted from the Accountants’ Report set out in Appendix I to this Document:

	As of December 31,			As of
	2021	2022	2023	June 30,
	<i>RMB’000</i>	<i>RMB’000</i>	<i>RMB’000</i>	2024
Total non-current assets	30,598	110,914	92,130	39,072
Total current assets	340,700	307,174	302,724	279,855
Total assets	371,298	418,088	394,854	318,927
Total current liabilities	176,939	35,621	392,844	391,120
Net current assets/(liabilities)	163,761	271,553	(90,120)	(111,265)
Total non-current liabilities	875,641	1,476,710	334,191	339,073
Total liabilities	1,052,580	1,512,331	727,035	730,193
Net liabilities	(681,282)	(1,094,243)	(332,181)	(411,266)
Non-controlling interest	(1)	(10)	(43)	(104)

The following table sets forth our current assets and current liabilities as of the dates indicated:

	As of			As of	As of
	December 31,			June 30,	August 31
	2021	2022	2023	2024	2024
	<i>RMB’000</i>	<i>RMB’000</i>	<i>RMB’000</i>	<i>RMB’000</i>	<i>RMB’000</i>
Current assets					
Contract costs	457	251	4,094	884	989
Trade and other receivables and prepayments	16,474	19,674	76,053	103,644	121,893
Amounts due from related parties	29	29	–	–	–
Financial assets at FVTPL	–	228,789	–	–	–
Restricted bank deposit	–	–	165,000	119,421	119,421
Term deposits	–	30,180	–	–	–
Bank balances and cash	323,740	28,251	57,577	55,906	11,704
Total current assets	340,700	307,174	302,724	279,855	254,007

SUMMARY

	As of December 31,			As of	As of
	2021	2022	2023	June 30, 2024	August 31 2024
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
Current liabilities					
Trade and other payables	13,974	17,746	43,261	46,842	45,382
Contract liabilities	450	1,023	3,804	5,837	10,966
Amounts due to related parties	2,364	2,364	–	–	–
Lease liabilities	6,686	7,523	7,927	5,534	7,175
Bank and other borrowings	–	6,965	22,083	16,127	7,112
Deferred income	–	–	225	993	717
Financial liabilities at FVTPL	153,465	–	315,544	315,787	315,787
Total current liabilities	176,939	35,621	392,844	391,120	387,139
Net current assets/(liabilities)	163,761	271,553	(90,120)	(111,265)	(133,132)

Our net current assets increased from RMB163.8 million as of December 31, 2021 to RMB271.6 million as of December 31, 2022, primarily due to (i) an RMB228.8 million increase in financial assets at FVTPL; (ii) an RMB153.5 million settlement of financial liabilities at FVTPL; and (iii) an RMB30.2 million increase in term deposits; partially offset by (i) an RMB295.5 million decrease in bank balances and cash; and (ii) an RMB7.0 million increase in other borrowing.

Our net current assets of RMB271.6 million as of December 31, 2022 changed to net current liabilities of RMB90.1 million as of December 31, 2023. The change was primarily due to (i) an RMB315.5 million increase in current portion of financial liabilities at FVTPL in relation to the issuance of Series A-1 Preferred Shares in July 2023 in exchange for termination of preferential rights of certain investor; and (ii) an RMB228.8 million decrease in financial assets at FVTPL resulting from our redemption of financial products; partially offset by an RMB165.0 million increase in restricted bank deposits.

Our net current liabilities increased to RMB111.3 million as of June 30, 2024 and further increased to RMB133.1 million as of August 31, 2024. The change was primarily due to decreases in our restricted bank deposit and bank balances and cash, partially offset by an increase in trade and other receivables and prepayments. We expect that the automatic conversion of financial liabilities into ordinary shares at [REDACTED] and the [REDACTED] from this [REDACTED] will turn our net current liabilities position into net current asset position.

SUMMARY

Net Liabilities

Our net liabilities increased from RMB681.3 million as of December 31, 2021 to RMB1,094.2 million as of December 31, 2022, primarily due to an RMB502.5 million loss and total comprehensive expense for the year in 2022, partially offset by an RMB89.5 million capital injection from our financing transactions.

Our net liabilities decreased from RMB1,094.2 million as of December 31, 2022 to RMB332.2 million as of December 31, 2023, primarily due to (i) an RMB1,012.3 million reclassification from financial liabilities at FVTPL to equity when preferential rights for certain [REDACTED] investors were terminated; and (ii) an RMB64.0 million capital injection from our financing transactions in 2023, which is partially offset by an RMB359.1 million in loss and total comprehensive expense for the year.

Our net liabilities increased from RMB332.2 million as of December 31, 2023 to RMB411.3 million as of June 30, 2024, primarily due to an RMB114.4 million loss and total comprehensive expense for the period, partially offset by an RMB35.3 million recognition of equity settled shared-based payments.

Upon [REDACTED], our preferred shares will be re-designated from liabilities to equity as a result of the automatic conversion into ordinary shares at [REDACTED]. Further, we expect this [REDACTED] (including the [REDACTED] received therefrom and equity issued) to contribute to the conversion from net liabilities position into net assets position.

Selected Data of Consolidated Statements of Cash Flows

The following table sets forth selected data from our consolidated statements of our cash flows for the periods indicated:

	For the year ended December 31,			For the six months ended June 30,	
	2021	2022	2023	2023	2024
	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>	<i>RMB'000</i>
Net cash used in operating activities	(49,206)	(100,680)	(136,872)	(66,006)	(75,527)
Net cash (used in)/from investing activities	(21,476)	(334,462)	102,553	11,166	86,002
Net cash from/(used in) financing activities	393,609	139,647	63,527	57,199	(12,190)
Net increase/(decrease) in cash and cash equivalents	322,927	(295,495)	29,208	2,359	(1,715)
Cash and cash equivalents at the beginning of the year/period	813	323,740	28,251	28,251	57,577
Cash and cash equivalents at the end of the year/period	323,740	28,251	57,577	30,871	55,906

SUMMARY

In the six months ended June 30, 2024, our net cash used in operating activities was RMB75.5 million, which was primarily attributable to loss before tax of RMB114.4 million, adjusted for non-cash and non-operating items. Positive adjustments for non-cash and non-operating items primarily include recognition of equity settled share-based payments of RMB35.3 million; finance costs of RMB10.9 million, and depreciation of property, plant and equipment of RMB8.6 million; and negative adjustments for non-cash and non-operating items primarily include gain on re-estimated repayments of long-term bond of RMB2.2 million and interest income of RMB0.4 million. The amount was then adjusted by changes in working capital, primarily including increase in trade and other receivables and prepayments of RMB30.1 million and increase in trade and other payables of RMB1.3 million.

In 2023, our net cash used in operating activities was RMB136.9 million, which was primarily attributable to loss before tax of RMB359.1 million, adjusted for non-cash and non-operating items. Positive adjustments for non-cash and non-operating items primarily include fair value loss of financial liabilities at FVTPL of RMB165.2 million, recognition of equity-settled share-based payments of RMB44.9 million, finance costs of RMB20.2 million, depreciation of property, plant and equipment of RMB13.8 million and depreciation of right-of-use assets of RMB7.0 million; and negative adjustments for non-cash and non-operating items include fair value gains on financial assets at FVTPL of RMB2.7 million and interest income of RMB2.1 million. The amount was then adjusted by changes in working capital, primarily including increase in trade and other receivables and prepayments of RMB48.0 million and an increase in trade and other payables of RMB23.4 million.

In 2022, our net cash used in operating activities was RMB100.7 million, which was primarily attributable to loss before tax of RMB502.5 million, adjusted for non-cash and non-operating item. Positive adjustments for non-cash and non-operating items primarily include fair value loss of financial liabilities at FVTPL of RMB385.9 million, finance costs of RMB19.2 million, depreciation of right-of-use assets of RMB6.6 million, and depreciation of property, plant and equipment of RMB5.7 million; and negative adjustments for non-cash and non-operating items include interest income of RMB3.9 million and fair value gains on financial assets at FVTPL of RMB3.2 million. The amount was then adjusted by changes in working capital, primarily including increase in trade and other receivables and prepayments of RMB11.8 million and increase in trade and other payables of RMB2.1 million.

In 2021, our net cash used in operating activities was RMB49.2 million, which was primarily attributable to loss before tax of RMB697.8 million, adjusted for non-cash and non-operating item. Positive adjustments for non-cash and non-operating items primarily include fair value loss of financial liabilities at FVTPL of RMB623.8 million, recognition of equity-settled share-based payment of RMB19.4 million, and finance costs of RMB6.4 million and negative adjustments for non-cash and non-operating items include interest income of RMB1.3 million. The amount was then adjusted by changes in working capital, primarily including increase in trade and other receivables and prepayments of RMB6.0 million and increase in trade and other payables of RMB4.9 million.

SUMMARY

WORKING CAPITAL

The Directors are of the opinion that, taking into account of the following financial resources available to us described below, we have sufficient working capital to cover at least 125% of our costs, including R&D expenses, selling and distribution expenses, administrative expenses, finance costs and other expenses for at least the next 12 months from the date of this Document:

- our future operating cash flows;
- our cash and cash equivalents as of the Latest Practicable Date;
- available equity and debt financing; and
- the estimated net [REDACTED] from the [REDACTED].

Our cash burn rate refers to the average monthly (i) net cash used in operating activities, which includes research and development expenses, and (ii) capital expenditures. We had bank balances and cash of RMB55.9 million as of June 30, 2024. We estimate that we will receive net [REDACTED] of approximately HK\$[REDACTED] million after deducting the [REDACTED] fees and expenses payable by us in the [REDACTED], assuming no [REDACTED] is exercised and assuming an [REDACTED] of HK\$[REDACTED] per [REDACTED], being the mid-point of the indicative [REDACTED] range of HK\$[REDACTED] to HK\$[REDACTED] per [REDACTED] in this Document. Assuming an average cash burn rate going forward of two times the level in 2023, we estimate that our cash and cash equivalents, the current portion of restricted bank deposits and the current portion of financial assets as of June 30, 2024 will be able to maintain our financial viability for at least [REDACTED] or, if we also take into account the estimated net [REDACTED] from the [REDACTED], for at least [REDACTED]. We will continue to monitor our cash flows from operations closely and expect to raise our next round of financing.

KEY FINANCIAL RATIOS

The following table sets forth the key financial ratios of our Group for the periods or as of the dates indicated:

	For the year ended/ As of December 31,			For the six months ended/As of June 30,
	2021	2022	2023	2024
Gross margin	56.7%	29.2%	47.7%	47.3%
Current ratio ⁽¹⁾	1.9	8.6	0.8	0.7

SUMMARY

	For the year ended/ As of December 31,			For the six months ended/As of June 30,
	2021	2022	2023	2024
Average trade payables turnover days ⁽²⁾	29.1	43.8	52.0	52.3
Average trade receivables turnover days ⁽³⁾	114.6	153.3	160.7	227.2

Notes:

- (1) *Current ratio equals current assets divided by current liabilities as of the end of the year/period.*
- (2) *Trade payable turnover days for a period equals the arithmetic mean of the beginning and ending trade payables balances divided by cost of sales for that period and multiplied by the number of days in that period.*
- (3) *Trade receivable turnover days for a period equals the arithmetic mean of the beginning and ending trade receivable balances divided by revenue for that period and multiplied by the number of days in that period.*

Our gross margin was 56.7%, 29.2%, 47.7%, and 47.3% in 2021, 2022, 2023, and the six months ended June 30, 2024, respectively. See “Financial Information—Period-to-Period Comparison” for more details.

Our current ratio increased from 1.9 as of December 31, 2021 to 8.6 as of December 31, 2022, primarily due to the significant decrease of the current portion of the financial liabilities at FVTPL. Our current ratio decreased significantly from 8.6 as of December 31, 2022 to 0.8 as of December 31, 2023 and remained relatively stable at 0.7 as of June 30, 2024, primarily due to the significant increase of the current portion of the financial liabilities at FVTPL. See “Financial Information—Net Current Assets” for further detailed explanations on current assets and current liabilities.

The average trade payables turnover days were 29.1 days in 2021, 43.8 days in 2022 and 52.0 days in 2023. The increase in average trade payables turnover days from 2021 to 2023 was primarily due to longer payment settlement periods with respect to suppliers. The average trade payables turnover days remained relatively stable at 52.3 days for the six months ended June 30, 2024.

The average trade receivables turnover days were 114.6 days in 2021, 153.3 days in 2022, 160.7 days in 2023 and 227.2 days for the six months ended June 30, 2024. The increase in average trade receivables turnover days from 2021 to the six months ended June 30, 2024 was primarily due to the significant increase in trade receivables as we began serving more cognitive centers and delayed payments from scientific research projects.

SUMMARY

SUBSEQUENT EVENTS

On [●], 2024, our Shareholders resolved to, among other things, conduct the [REDACTED] pursuant to which each share in our then issued and unissued share capital was [REDACTED] into [REDACTED] shares of the corresponding class with nominal value of US\$[REDACTED] each effective upon the conditions of the [REDACTED] being fulfilled. Our Shareholders also resolved to, immediately upon completion of the [REDACTED], automatically convert each issued and unissued Series A Preferred Shares into ordinary Shares on a one-to-one basis by way of re-designation upon [REDACTED].

[REDACTED]

SUMMARY

[REDACTED]

DIVIDEND

No dividend has been proposed, paid or declared by our Company since our incorporation till the Latest Practicable Date. We do not currently have a dividend policy.

We are a holding company incorporated in the Cayman Islands. We may need dividends and other distributions on equity from our PRC subsidiaries to satisfy our liquidity requirements. Current PRC regulations permit our PRC subsidiaries to pay dividends to us only out of their accumulated profits, if any, determined in accordance with PRC accounting standards and regulations. In addition, our PRC subsidiaries are required to set aside at least 10.0% of their respective accumulated profits each year, if any, to fund certain reserve funds until the total amount set aside reaches 50.0% of their respective registered capital. Our PRC subsidiaries may also allocate a portion of its after-tax profits based on PRC accounting standards to employee welfare and bonus funds at their discretion. These reserves are not distributable as cash dividends. Furthermore, if our PRC subsidiaries incur debt on their own behalf in the future, the instruments governing the debt may restrict their ability to pay dividends or make other payments to us.

SUMMARY

We currently expect to retain all future earnings for use in the operation and expansion of our business and do not anticipate paying cash dividends in the foreseeable future. Any declaration and payment as well as the amount of dividends will be subject to our constitutional documents and the Cayman Companies Act. The declaration and payment of any dividends in the future may be determined by our Board as it thinks fit, and will depend on a number of factors, including our earnings, capital requirements, overall financial condition and contractual restrictions. Our shareholders in a general meeting may approve any declaration of dividends, which must not exceed the amount recommended by our Board. As advised by our Cayman counsel, under the Cayman Companies Act a Cayman Islands company may pay a dividend out of either profits or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. In light of our accumulated losses as disclosed in this Document, it is unlikely that we will be eligible to pay a dividend out of our profits in the foreseeable future. We may, however, pay a dividend out of our share premium account unless the payment of such a dividend would result in our Company being unable to pay our debts as they fall due in the ordinary course of business. There is no assurance that dividends of any amount will be declared to be distributed in any year.

FUTURE PLANS AND USE OF [REDACTED]

We estimate that we will receive net [REDACTED] from the [REDACTED] of approximately HK\$[REDACTED] million, after deducting [REDACTED] commissions, fees and estimated expenses payable by us in connection with the [REDACTED], assuming no [REDACTED] is exercised and assuming an [REDACTED] of HK\$[REDACTED] per Share, being the mid-point of the indicative [REDACTED] in this Document. Assuming an [REDACTED] at the mid-point of the indicative [REDACTED] range, we intend to use the net [REDACTED] we will receive from this [REDACTED] for the following purposes, subject to changes in light of our evolving business needs and changing market conditions:

- approximately [REDACTED]% of the net [REDACTED], or approximately HK\$[REDACTED] million, is expected to be used for conducting further research and development activities, advancing clinical trials for more indications, and advancing selling and distribution activities of our Core Product, the System;
- approximately [REDACTED]% of the net [REDACTED], or approximately HK\$[REDACTED] million, is expected to be used for helping establish new cognitive centers for more hospitals across China through which hospitals can use our products to diagnose and treat patients with cognitive impairment and/or other disorders;
- approximately [REDACTED]% of the net [REDACTED], or approximately HK\$[REDACTED] million, is expected to be used for strengthening our capabilities in AI and related technologies;

SUMMARY

- approximately [REDACTED]% of the net [REDACTED], or approximately HK\$[REDACTED] million, is expected to be used for accelerating the research, development and commercialization of other product candidates in and beyond our current product pipeline;
- approximately [REDACTED]% of the net [REDACTED], or approximately HK\$[REDACTED] million, is expected to be used for brain science and DTx research centers in collaboration with academic institutions and hospitals; and
- approximately [REDACTED]% of the net [REDACTED], or approximately HK\$[REDACTED] million, is expected to be used for our working capital and other general corporate purposes.

For further details, see “Future Plans and Use of [REDACTED].”

RISK FACTORS

We believe there are certain risks and uncertainties involved in our operations, some of which are beyond our control. These risks are set out in “Risk Factors” in this Document. Some of the major risks we face include:

- Our future growth depends substantially on the successful development of our product portfolio. If we are unable to successfully complete clinical development, obtain regulatory approval and commercialize our product candidates, or experience significant delays in doing so, our business and financial prospects will be materially adversely affected.
- DTx industry is developing rapidly. If we are not able to develop and release new products that are competitive in the market, or develop successful enhancements or indication expansions of our System or any future products in a timely manner our products may become obsolete and our business, operating results and financial condition could be materially adversely affected.
- Clinical development is a lengthy, expensive and uncertain process, and unsuccessful clinical trials or procedures relating to products and indications under development could have a material adverse effect on our prospects, including incurring additional costs, experiencing delays in completing, or ultimately being unable to complete the development and commercialization of our product if clinical trials fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities.
- Our algorithms and methodologies are complex and may contain errors or may not operate properly, which could adversely affect our business, financial condition and results of operations.

SUMMARY

- Some of our current and future products may be classified or reclassified as Class III medical devices under relevant PRC laws and regulations.
- We have relatively limited experience in marketing and sales of our products, and rely on our in-house marketing force to promote our products. If we are unable to develop and successfully maintain adequate sales and commercial distribution capabilities, our business and results of operations could be adversely affected. If we are unable to maintain and expand our relationships with qualified third-party service providers, or to attract, motivate and retain a sufficient number of qualified personnel to support our selling and distribution efforts, sales volumes or margin of our System and other products may be adversely affected and we may be unable to extend our market coverage and deepen our market penetration as contemplated.
- We mainly derived our revenue from services provided through our System. There is also no assurance that we will be able to maintain our sales, which may be adversely affected by many factors outside of our control, including downward pricing pressure caused by changes in medical insurance coverage, binding pricing guidance, market competition, expiration of patent protection, introduction of substitute products marketed by our competitors, disruptions in sales, issues with respect to product quality or severe adverse events incurred, and disputes over intellectual property or other matters with third parties.
- The regulatory framework for DTx products is constantly evolving. Increasingly stringent regulatory requirements could create barriers to our development and introduction of new products. Conversely, in the event that regulatory requirements are lowered, competitors could potentially enter the DTx market and compete against us more easily.
- We have been in a net loss position since our inception and may continue to incur net losses for the foreseeable future, and you may lose substantially all your [REDACTED] in us given the high risks and uncertainties associated with our business operations and the cognitive impairment DTx industry.
- The permit, filing or other requirements of the CSRC or other PRC government authorities in relation to our proposed [REDACTED] or further capital raising activities may be required under PRC laws. We cannot assure you that we could meet the relevant requirements, obtain necessary permit from the relevant government authorities, or complete such filing in a timely manner or at all.
- Our relationships with customers will be subject to applicable anti-bribery, anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.

SUMMARY

[REDACTED] EXPENSES

The total [REDACTED] expenses payable by our Company are estimated to be approximately RMB[REDACTED] million representing [REDACTED]% of the total gross [REDACTED] from the [REDACTED], assuming the [REDACTED] is not exercised and based on an [REDACTED] of HK\$[REDACTED] (being the mid-point of our [REDACTED] range of HK\$[REDACTED] to HK\$[REDACTED] per [REDACTED]). These [REDACTED] expenses mainly comprise legal and other professional fees paid and payable to the professional parties, commissions payable to the [REDACTED], and printing and other expenses for their services rendered in relation to the [REDACTED] and the [REDACTED].

Approximately RMB[REDACTED] million of such [REDACTED] expenses is expected to be charged to our consolidated statements of profit or loss, and approximately RMB[REDACTED] million of which is expected to be deducted from equity (relating to [REDACTED] expenses directly attributable to the issue of shares). During the Track Record Period, [REDACTED] expenses of RMB[REDACTED] were incurred of which RMB[REDACTED] were charged to our consolidated statements of profit or loss and other comprehensive income and RMB[REDACTED] were recognized to our consolidated statements of financial position. We estimate that we will further incur [REDACTED] expenses of RMB[REDACTED] of which RMB[REDACTED] will be charged to our consolidated statements of comprehensive income and RMB[REDACTED] is expected to be accounted for as a deduction from equity upon completion of the [REDACTED].

The following table sets forth a breakdown of the [REDACTED] expenses for the [REDACTED] based on the mid-point [REDACTED] of HK\$[REDACTED].

[REDACTED] Expenses	Based on an [REDACTED] of HK\$[REDACTED] <i>HK\$ '000</i>
[REDACTED] related expenses	
Legal and audit expenses	[REDACTED]
Other expenses	[REDACTED]
<u>[REDACTED] related expenses</u>	<u>[REDACTED]</u>
<u>Total</u>	<u>[REDACTED]</u>

SUMMARY

During the Track Record Period, the amount of the [REDACTED] expenses charged to our consolidated statements of profit or loss was [REDACTED], [REDACTED], RMB[REDACTED], RMB[REDACTED] and RMB[REDACTED] in 2021, 2022, 2023, and the six months ended June 30, 2023 and 2024, respectively, and the amount of the [REDACTED] expenses recognized to our consolidated statements of financial position which will be deducted in equity upon [REDACTED] was [REDACTED], [REDACTED], RMB[REDACTED], RMB[REDACTED] and RMB[REDACTED] in 2021, 2022, 2023, and the six months ended June 30, 2023 and 2024, respectively.

NO MATERIAL ADVERSE CHANGE

Our Directors confirm that up to the date of this Document, there has been no material adverse change in our financial, operational or trading positions or prospects since June 30, 2024, being the end of the period reported on as set out in the Accountants’ Report included in Appendix I to this Document.