Frontage Holdings Corporation
方達控股公司 *

(Incorporated in the Cayman Islands with limited liability)

Stock Code : 1521

2021 ANNUAL REPORT

* For identification purpose only

CONTENTS

FORWARD-LOOKING STATEMENTS

This annual report contains certain statements that are forward-looking or which use certain forward-looking terminologies. These forward-looking statements are based on the current beliefs, assumptions and expectations of the Board of Directors regarding the industry and markets in which it operates. These forward-looking statements are subject to risks, uncertainties and other factors beyond the Company's control which may cause actual results or performance to differ materially from those expressed or implied in such forward-looking statements.

CORPORATE INFORMATION

BOARD OF DIRECTORS

Executive Directors
Dr. Song Li
(Chief Executive Officer and Chairman)
Dr. Zhihe Li

Non-executive Director
Mr. Jun Gao

Independent Non-executive Directors
Mr. Yifan Li
Mr. Erh Fei Liu
Dr. Jingsong Wang

MEMBERS OF AUDIT AND RISK MANAGEMENT COMMITTEE

Mr. Yifan Li *(Chairman)*
Mr. Erh Fei Liu
Mr. Jun Gao

MEMBERS OF REMUNERATION COMMITTEE

Dr. Jingsong Wang *(Chairman)*
Mr. Yifan Li
Dr. Song Li

MEMBERS OF NOMINATION COMMITTEE

Dr. Jingsong Wang *(Chairman)*
Mr. Erh Fei Liu
Dr. Song Li

COMPANY SECRETARY

Ms. Karen Ying Lung Chang
(Hong Kong Solicitor)

AUTHORISED REPRESENTATIVES

Dr. Zhihe Li
Ms. Karen Ying Lung Chang

AUDITOR

BDO Limited
Certified Public Accountants

PRINCIPAL BANKER

Wells Fargo Bank, N.A.

LEGAL ADVISERS

As to Hong Kong laws:
Morgan, Lewis & Bockius

As to Cayman Islands laws:
Conyers Dill & Pearman

REGISTERED OFFICE

Conyers Trust Company (Cayman) Limited
Cricket Square, Hutchins Drive
P.O. Box 2681
Grand Cayman, KY1-1111
Cayman Islands

HEAD OFFICE

700 Pennsylvania Drive
Exton, PA 19341, USA

PRINCIPAL PLACE OF BUSINESS IN USA

700 Pennsylvania Drive
Exton, PA 19341, USA

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Level 54, Hopewell Centre
183 Queen's Road East
Hong Kong

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Conyers Trust Company (Cayman) Limited
Cricket Square, Hutchins Drive
P.O. Box 2681
Grand Cayman, KY1-1111
Cayman Islands

HONG KONG BRANCH SHARE REGISTRAR AND TRANSFER OFFICE

Tricor Investor Services Limited
Level 54, Hopewell Centre
183 Queen's Road East
Hong Kong

STOCK CODE

1521

COMPANY WEBSITE

www.frontagelab.com

FINANCIAL HIGHLIGHTS

	For the year ended December 31,				
	2017	2018	2019	2020	**2021**
	USD'000	*USD'000*	*USD'000*	*USD'000*	***USD'000***
Operating results					
Revenue	70,245	83,114	100,415	125,811	**184,441**
Gross profit	31,083	33,898	37,291	41,485	**66,701**
Profit before tax	16,132	14,093	20,863	19,522	**25,066**
Net profit	10,165	11,241	18,432	17,415	**18,922**
Adjusted net profit[(1)(2)]	12,708	16,630	21,397	20,346	**32,238**
Profitability					
Gross profit margin (%)	44.2%	40.8%	37.1%	33.0%	**36.2%**
Net profit margin (%)	14.5%	13.5%	18.4%	13.8%	**10.3%**
Adjusted net profit margin (%)	18.1%	20.0%	21.3%	16.2%	**17.5%**

	As at December 31,				
	2017	2018	2019	2020	**2021**
	USD'000	*USD'000*	*USD'000*	*USD'000*	***USD'000***
				(Restated)	
Financial position					
Total assets	57,191	77,464	315,268	382,714	**475,842**
Total equity	30,220	43,634	265,278	288,872	**323,084**
Total liabilities	26,971	33,830	49,990	93,842	**152,758**
Cash and cash equivalents	4,339	16,306	207,752	212,087	**144,629**

(1) Calculation of adjusted net profit is modified and calculated as net profit for the Reporting Period, excluding share-based compensation expenses, amortization of acquired intangible assets from mergers and acquisitions, gain or loss arising from financial liabilities measured as fair value through profit or loss, listing expenses, gain on disposal of associates or subsidiary, bargain purchase gain, impairment of investment in an associate and gain arising from fair value change of previously held interest in an associate to better reflect the Company's current business and operations.

(2) Gain or loss arising from financial liabilities measured as fair value through profit or loss has been included in the reconciliation of adjusted net profit for the year ended December 31, 2021, and the adjusted net profit for the year ended December 31, 2020 was restated to include the same information for comparison purpose.

RECONCILIATION FOR ADJUSTED NET PROFIT

	For the year ended December 31,				
	2017	2018	2019	2020	**2021**
	USD'000	*USD'000*	*USD'000*	*USD'000*	***USD'000***
Adjusted Net Profit Reconciliation					
Net Profit	10,165	11,241	18,432	17,415	**18,922**
Impairment of investment in an associate	1,736	–	–	–	–
Share-based Compensation expenses	807	371	3,269	935	**7,517**
Listing Expenses	–	6,386	1,564	–	–
Gains on disposal of associates	–	(437)	(27)	–	–
Gains on disposal of subsidiaries	–	(143)	–	–	–
Bargain purchase gain	–	(788)	–	–	–
Gain arising from fair value change of previously held interest in an associate	–	–	(1,841)	–	–
Amortization of acquired intangible assets from mergers and acquisitions(1)	–	–	–	2,014	**4,074**
(Gain)/loss arising on financial liabilities measured as fair value through profit or loss(2)	–	–	–	(18)	**1,725**
Adjusted Net Profit	12,708	16,630	21,397	20,346	**32,238**

(1) Amortization of acquired intangible assets from mergers and acquisitions is taken into consideration in the reconciliation of adjusted net profit since the year ended December 31, 2020. Considering such effect was only approximately US$0.2 million for the year ended December 31, 2019, the adjusted basic earnings per share and adjusted diluted earnings per share calculated based on adjusted net profit were not restated.

(2) Gain or loss arising from financial liabilities measured as fair value through profit or loss has been included in the reconciliation of adjusted net profit for the year ended December 31, 2021, and the adjusted net profit for the year ended December 31, 2020 was restated to include the same information for comparison purpose.

NON-IFRS MEASURES

To supplement the Group's consolidated financial statements which are presented in accordance with the IFRSs, the Company has provided adjusted net profit, adjusted net profit margin and adjusted basic and diluted earnings per share (excluding the share-based compensation expenses, amortization of acquired intangible assets from mergers and acquisitions and gain or loss arising from financial liabilities measured as fair value through profit or loss, listing expenses, gain on disposal of associates or subsidiary, bargain purchase gain, impairment of investment in an associate and gain arising from fair value change of previously held interest in an associate) as additional financial measures, which are not required by, or presented in accordance with, the IFRSs. The Company believes that the adjusted financial measures are useful for understanding and assessing underlying business performance and operating trends, and that the Company's management and investors may benefit from referring to these adjusted financial measures in assessing the Group's financial performance by eliminating the impact of certain unusual, non-recurring, non-cash and/or non-operating items that the Group does not consider indicative of the performance of the Group's business. However, the presentation of these non-IFRSs financial measures is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with the IFRSs. The adjusted results should not be viewed on a stand-alone basis or as a substitute for results under IFRSs.

Dear Valued Shareholders,

On behalf of the Board of Directors, I am pleased to present the annual report of the Company and its subsidiaries for the Reporting Period.

2021 was a year of substantial growth and accomplishment for Frontage. Despite the challenging context of the year – inflation, labor shortages and a persistent global pandemic – Frontage has shown exceptional resilience in reaching our goals and in validating our strategy of focusing on client and employee satisfaction, employees' health and safety, operational excellence, organic expansion and acquisitions, and sustainable long-term growth. Through strong execution and the continuous improvement of our operational process, we achieved most of our goals set for the year and enhanced our potential for future growth. Here are some highlights of our achievements:

1. Revenue and Profit: Thanks to the hard work and determination of our management and personnel, we achieved solid revenue and profit growth for each of our business segments. Our new family members, RMI, BRI, Biotranex, ACME, Quintara, Heyan, and Ocean Ridge, have all performed well and made significant contributions to our revenue and profit in 2021. This achievement is the result of our continuing efforts to meet and exceed the increasing demands of our customers for high-quality and value-added services.

2. Capacity Expansion: the renovation of new pharmaceutical analysis and clinical central labs in Exton, PA was completed in the first quarter of 2021. A total of 71,000-square-foot lab space has been fully operational since the second quarter of 2021. In addition, we are in the process of outfitting a new 25,000-square-foot bioanalytical lab in Haywood, CA, which has been operational in the first quarter of 2022. The renovation of our Suzhou preclinical center (215,000-square-foot) and our Shanghai Lingang lab facility (67,000-square-foot) were completed in the third quarter of 2021. The installation and qualification of lab equipment are ongoing in both facilities. These facilities has been operational in the first quarter of 2022. These organic expansions will triple our capacity in China.

3. Mergers and Acquisitions: There are three companies that joined the Frontage family this year – Ocean Ridge (specializes in DNA/RNA sequencing) in April 2021; Quintara (specializes in DMPK and ADME screening) in June 2021; Heyan Biosciences (specializes in discovery and compound screening) in September 2021. In November 2021, we also invested in Chenghong Pharma (Weihai) Co., Ltd. ("**Chenghong Pharma**"), a company that engages in research and development, manufacturing and sales of APIs and advanced pharmaceutical intermediates for innovative and generic drugs. These acquisitions and investments have extended our services into areas of DNA sequencing, drug discovery, and the manufacturing of API/Intermediates. In addition, we signed a purchase agreement with Experimur LLC on December 29, 2021, and closed that acquisition in January 2022, which engages in the provision of full GLP-compliant toxicology and related non-clinical development services. These acquisitions have and will continue to enable us to provide fully integrated preclinical and commercial solutions and expand our global service offerings while also allowing us to achieve significant synergies and cost reductions.

4. Talent Recruitment and Retention: Despite a challenging and competitive labor market for employers in the U.S. and globally for skilled professionals; as of December 31, 2021, we have over 1300 employees in over 22 sites across three countries. Our team of qualified professional, scientific and supporting staff (including human resources, procurement, facility management, and IT) are crucial to maintaining our growth and our high quality of service over time. We continued to maintain robust career path and compensation structure that acknowledges our personnel's performance and development at all levels of the organization.

5. Contributions to Community: Frontage is committed to supporting local and community development and actively seeking ways to contribute to society and to create a positive social impact by giving back to those in need. In Fall 2021, over 50 employees participated in the National Susan G. Komen Breast Cancer Awareness More Than Pink Virtual Walk, walked over 500,000 steps, and raised US$10,000 for breast cancer research. Frontage China also donated one million RMB to Red Cross Society of China Henan Branch to help flood victims in Henan Province.

In 2022, as always, we will remain focused on what matters most: the interests of our key stakeholders. We will remain committed to providing high-quality, science-driven services to our customers, great career opportunities to our employees, and high investment returns to our shareholders. Specifically, we plan to focus on: (1) operational efficiency; (2) integration of newly acquired entities; (3) expanding capacity for our existing services and adding new services through organic expansion and acquisitions; and (4) devoting efforts and resources to support our operations in China.

Again, I would like to take this opportunity to express my appreciation to our employees and management team for their hard work, dedication, and great efforts in helping achieve what has been our most successful year to date. I thank our Shareholders for investing in Frontage, and our Board of Directors for their support and the confidence that they have placed in our management team, our employees and in me. I thank our customers for giving us the opportunity to serve them. I thank each of you for your continued trust and confidence in Frontage.

Dr. Song Li
Chief Executive Office and Chairman

Hong Kong, March 28, 2022

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS REVIEW

Overview

We are a growing CRO engaged in the provision of research, analytical and development services throughout the product discovery and development continuum. We provide integrated, scientifically-driven support that enables biopharmaceutical and life science companies to achieve their product development goals. We have operations in both North America (including the U.S. and Canada) and China, and are well-placed to capture growth opportunities in these markets. In North America and China, the Group provides a comprehensive portfolio of product discovery and development services throughout the discovery and development continuum, which includes preclinical research (comprised of DMPK, safety and toxicology, ADME, and compound screening), laboratory testing (comprised of bioanalytical and biologics, and central laboratory), chemistry, and CMC. In addition, in China, the Group provides a suite of bioequivalence and related services (such as pharmacology, medical writing and regulatory support) to support our customers with regulatory submissions.

We seek to leverage our growing portfolio of expertise and capabilities to become a global CRO providing high-quality services to our customers and rewarding career opportunities for our employees. Our client base includes small, mid-sized, and large biopharmaceutical companies, biotechnology companies, CROs, agricultural and industrial chemical companies, life science companies, contract manufacturing companies, and diagnostic and other commercial entities, as well as hospitals, academic institutions, and government agencies. Additionally, our customer base is geographically diverse with well-established relationships in North America, China, Europe, India, Japan, South Korea and Australia. We currently operate in 20 facilities in three countries and have over 1,300 employees worldwide.

During the Reporting Period, driven by the growing demand for our services as well as the normalization of our global operations at a stable utilization rate, we achieved significant growth in our operations both in North America and China. Revenue of the Group increased by 46.6% from approximately US$125.8 million for the year ended December 31, 2020 to approximately US$184.4 million for the year ended December 31, 2021. The Group's contract future revenue, which represents future service revenues from work not yet completed or performed under all signed contracts or customer's purchase orders in effect at that time, achieved approximately US$241.8 million as at December 31, 2021, representing an increase of 40.6% compared to approximately US$172.0 million as at December 31, 2020.

BUSINESS REVIEW *(Continued)*

Overview *(Continued)*

During the Reporting Period, we continued to enhance our capabilities and expertise in each of our service unit through organic growth and strategic acquisitions in order to provide more comprehensive services for our customers on a global scale.

In China, in addition to enhancing our existing capabilities and expertise in chemistry, CMC, DMPK, and bioequivalence, we are actively engaged in introducing new service offerings such as safety and toxicology and central laboratory to our portfolio of services. Concurrently with our ongoing efforts to expand our bioanalytical and biologics unit, we have worked to develop our drug discovery and development services for innovative drugs. Revenue from projects related to innovative drugs has already contributed over 50% of our revenue for the year ended December 31, 2021 in China, and contract future revenue from innovative drugs contributed over 65% of our total contract future revenue as at December 31, 2021 in China, compared to that of approximately 50% as at December 31, 2020.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE

Preclinical Research

1. *Drug Metabolism and Pharmacokinetics ("**DMPK**")*

   Our DMPK unit operates in six locations, including (i) three in the USA: Exton, Pennsylvania ("**PA**"), Monmouth Junction, New Jersey ("**NJ**") and Secaucus, NJ; (ii) one in Canada: Vancouver; and (iii) two in China: Shanghai and Suzhou.

   During the Reporting Period, our DMPK unit in Exton, PA, in partnership with Frontage Labs' associate, Frontage Clinical Services, Inc. ("**Frontage Clinical**"), announced the availability of full-service human Absorption, Metabolism, and Excretion ("**hAME**") studies with radiolabeled compounds at the clinical site in Secaucus, NJ. A radiolabeled analogue of a drug is used to evaluate the total fate of drug-related material in humans. The hAME study provides data on the pharmacokinetics, mass balance, routes of excretion and metabolic pathways of the parent drug. This study is considered to be one of the most informative studies in the clinical pharmacology package needed to understand the disposition of a new chemical entity in humans. The data gathered from the hAME study are highly informative for developing a cohesive strategy for clinical pharmacology studies and serve as an integral component to a successful New Drug Application ("**NDA**") filing for new therapeutic agents.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Preclinical Research *(Continued)*

1. *Drug Metabolism and Pharmacokinetics ("**DMPK**")* *(Continued)*

Our DMPK unit and Frontage Clinical have obtained full approval from the NJ Department of Environmental Protection to conduct hAME studies in humans. Frontage Clinical, an early phase clinical research organization, is currently recruiting healthy volunteers for the first study scheduled to start by the second quarter of 2022. Frontage Clinical and our DMPK unit also partnered up with each other to conduct its first human absolute bioavailability (ABA) study for the same client, using stable isotope labeled analogue and highly sensitive LC/MS/MS method to quantify this analyte at low picogram/mL levels in human plasma. Bioavailability is a key indicator of drug absorption and represents the administered dose fraction which reaches the systemic circulation when administered orally or through any other extravascular dosing route. Combining ABA and hAME into one single study is appealing to clients as these studies can provide critical information as part of the NDA package to successfully register and market a new therapeutic agent.

The ability to execute the hAME studies at the 160-bed Phase 1 clinical facility complements the Group's extensive experience in conducting radiolabeled studies, including Quantitative Whole-Body Autoradiography ("**QWBA**")/dosimetry, mass balance, metabolite identification and profiling. Frontage Labs, for many years, has been conducting mass balance and metabolite profiling studies for customers who had the in-life portion of the hAME studies performed at other third-party facilities. Now, Frontage Labs can conduct the entire hAME studies, including the prerequisite preclinical mass balance and QWBA studies, allowing us to conveniently provide comprehensive hAME packages to customers in a timely manner.

Our core DMPK strategy centers around the creation of centers of excellence ("**COEs**") in various areas including QWBA, metabolite ID/profiling, mass balance, IND-enabling ADME, Transporters, in vitro ADME screening, and PK studies. Each COE is envisioned as a centralized unit of dedicated scientific talents with a mission to streamline access to scarce, high-demand scientific capabilities and enable rapid growth of the business in each of these respective areas. This model has already proven successful with our established COEs in QWBA, metabolite ID/profiling (through the acquisition of RMI specializing in this area) and transporters (through the acquisition of Biotranex). All of these COEs have performed well during the Reporting Period and are anticipated to grow in the next few years.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Preclinical Research *(Continued)*

1. *Drug Metabolism and Pharmacokinetics (“**DMPK**”)* *(Continued)*

During the Reporting Period, we also expanded our DMPK unit in Shanghai and Suzhou, China, and began providing in vivo and in vitro DMPK research services to our customers. Our DMPK unit in China built a team of more than 30 scientific and technical personnel. Through the newly constructed 215,000-square-foot research facility in Suzhou, we have broadened the scope of our DMPK service offerings to customers in both China and the U.S. There has been a significant influx of large animal PK studies from the U.S. to our DMPK facility in China over the last several months, contributing to significant growth of DMPK business in China. The scarcity (and the high cost) of large animals in the U.S. combined with protracted timelines for these PK studies, have made China an attractive alternative for such large animal PK studies. Several in vitro ADME assays have been cross-validated at the USA-China sites. The same SOPs, as used at US sites, have been implemented in China to ensure that the same quality standards exist at both sites. As part of our business marketing strategy, our service offerings are advertised as part of an integrated seamless global DMPK services at attractive costs, timelines, and quality. This approach has provided additional capacity, accelerated timelines for customers’ studies, as well as an opportunity to grow the DMPK business concurrently both in the USA and China.

2. *Safety and Toxicology*

Our safety and toxicology unit operates in two locations, including Concord, Ohio (“**OH**”), USA and Suzhou, China.

During the Reporting Period, our safety and toxicology unit in our Concord, OH, USA facility continued to develop and broaden our newly established service lines in (i) genetic toxicology which includes bacterial reverse mutation assays (i.e. the Ames assays), in vitro micronucleus assays using human lymphoblastoid cell line TK6, and in vivo micronucleus assays in both mice and rats; and (ii) safety pharmacology service offerings, which include in vivo cardiovascular telemetry in dogs, whole-body plethysmography respiratory studies in rodents, and central nerve system safety assessments in rodents.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Preclinical Research *(Continued)*

2. *Safety and Toxicology (Continued)*

During the Reporting Period, we completed the construction of our 215,000-square-foot research facility in Suzhou, China. In January 2022, the new site was granted an "Experimental Animal Use License" by Jiangsu's Provincial Department of Science and Technology. The custom-designed facility includes a 100-animal-capacity room that can house all major laboratory species (including non-human primates) and possess the technical capabilities to conduct GLP and non-GLP in vivo and in vitro toxicology, safety and drug metabolism studies to support drug and chemical registration in China and globally. The state-of-the-art facility also includes supporting laboratories for bioanalysis, chemistry, clinical pathology, histology, genetic toxicology and safety pharmacology, alongside segregated housing areas for each species.

We plan to launch a program of single and repeat dose validation studies in all major species by the second quarter of 2022 as part of the process to obtain regulatory certification for the conduct of commercial GLP studies in China. In addition, we expect to begin the service offering that involves non-GLP toxicology and drug metabolism studies at the Suzhou site during the first half of 2022.

3. *ADME*

Since its acquisition by Frontage Labs during the Reporting Period, Quintara continues to expand our market share in the growing early stage drug discovery market by expanding its in vitro ADME assays, non-GLP bioanalysis, and de novo bioassay development capabilities. We also increased cross-selling opportunities across the different business units within the Group and we are well positioned to offer a full suite of services across the product development continuum to customers' evolving needs.

4. *Compound Screening*

During the Reporting Period, we added compound screening to our preclinical research service offerings through the acquisition of Heyan Biotech. Heyan Biotech is a CRO that provides target based in vitro pharmacodynamic screening and early pharmacological pharmacodynamic evaluation services in early drug discovery. Its technical capabilities include the screening of various drug targets such as enzymology, GPCR receptor, ion channel, nuclear receptor and others. It also specializes in customized biological assay development and detection service offerings.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Preclinical Research *(Continued)*

4. *Compound Screening (Continued)*

Furthermore, we initiated the construction of a new 34,000-square-foot compound screening facility in Wuhan, China which is expected to be operational in the second half of 2022. The new facility will expand the application of SPR technology, Protac technology, ion channels, GPCR targets, intracellular kinase binding evaluation and high connotation technology detection platform. It will cover a comprehensive field of therapeutic areas including neuropathy, metabolic diseases, inflammation, cancer and safety evaluation targets.

Laboratory Testing

1. *Bioanalytical and Biologics Services*

Our bioanalytical and biologics services unit operates in seven locations, including: (i) four in the USA: Exton, PA, Concord, OH, Hayward, CA, and Deerfield Beach, Florida ("**FL**"); (ii) one in Canada: Vancouver; and (iii) two in China: Shanghai and Suzhou.

During the Reporting Period, in the U.S., we further expanded our service capabilities by relocating our biomarker and biologics services teams from our headquarters located at 700 Pennsylvania Drive, Exton, PA to our new state-of-the-art facility at 760 Pennsylvania Drive, Exton, PA. This relocation is intended to address the growing demand for our services in biologics bioassays, biomarker research, and gene/cell therapy (GCT).

In April 2021, we acquired the genomics business of Ocean Ridge, a biotechnology company located in Deerfield Beach, FL. The acquired genomics service offerings include the development of novel therapeutics, such as services related to biofluid profiling, RNA sequencing, bioinformatics, exosomes, microbiomics, oncopanels, cell-free DNA bisulfite sequencing, gene expression microarray, multiplex protein profiling and formalin-fixed, paraffin embedded tissues. We expect this acquisition to help bolster the Group's current genomic services by enabling us to provide accurate, affordable, and information-rich genomic services to the health care and life science industries and academic institutions. The business we acquired will complement the wide variety of Investigational New Drug ("**IND**")-enabling and clinical-trial related services offered by Frontage Labs, including our services for protein-, oligonucleotide-, gene-, and cell-based therapeutic discovery and development.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Laboratory Testing *(Continued)*

1. *Bioanalytical and Biologics Services (Continued)*

During the Reporting Period, we finalized the design and construction of the 25,000-square- foot facility in Hayward, CA. The Hayward facility will provide our customers with LC-MS bioanalytical, biologics bioassay, and biomarker services and has been operational in March 2022.

During the Reporting Period, we continuously worked to improve the service capacity of bioanalytical and biologics in the U.S. and China, and to integrate our platform for biological and biomarker analysis technology. In terms of technological advancement, we established the capability of providing single-call analysis using the enzyme-linked immunospot (ELISpot) assay which is a sensitive method for quantification of the number of cytokines or proteins secreting cells. We also further expanded our offerings for genomics services and biomarker services in the US and China.

On February 3, 2021, the Group expanded its capacity and capability of bioanalytical and biologics, central laboratory, and DMPK in China by renting a new 67,000-square-foot research facility at No. 356 Zhengbo Road, Lin-Gang Special Area, Shanghai, China. We have completed the construction of the facility, which has been partially operational in the first quarter of 2022.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Laboratory Testing *(Continued)*

2. *Central Laboratory*

Our central laboratory unit operates in three locations: Exton, PA, Secaucus, NJ, US, and Shanghai, China.

During the Reporting Period, our central laboratory unit continued to provide high-quality COVID-19 testing services to the local community and clinical trial sponsors with fast turnaround rates and positive client experience. The central laboratory logistics service has supported many of our customers with services such as lab manuals, kit design and build, site training, kits re-order, sample shipping, tracking, and specimen reconciliation. We also experienced a surge in demand for pathology tissue processing, Hematoxylin and Eosin ("**H&E**") stain, immunohistochemistry ("**IHC**") stain, and pathology diagnostic services. Our central laboratory unit also procured cutting-edge high-throughput equipment and laboratory information systems ("**LIS**") with an emphasis on similar procedures across our central laboratory facilities to ensure laboratory data consistency both worldwide and over time. In the third quarter of 2021, our central laboratory unit completed the acquisition of laboratory instruments to perform the safety and specialty testing services to include hematology, urinalysis, chemistry, coagulation, immunology, allergen and autoimmune, infectious disease, molecular, and diagnostic flow cytometry assays. The cloud-based LIS system has been implemented (with validation ongoing). The LIS system will allow supporting functions such as laboratory workflow, sample management, logistics, data regulatory compliance, and data analysis, including artificial intelligence-guided data mining.

In the latter half of 2021, our central laboratory unit has expanded the safety and specialty testing menu and related validation work, as well as the project management team which adopted a team-based structure (rather than the traditional individual-based structure) to assure project continuity, operational agility, and the highest level of customer satisfaction. The freezer farm at our 760 Pennsylvania Drive site has been built with more than 40 -20°C and -70°C freezers, refrigerators, as well as two liquid nitrogen tanks. The biorepository work has been ongoing including sample storage, aliquots, cell free DNA preparation, and peripheral blood mononuclear cells (PBMC) isolation.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Laboratory Testing *(Continued)*

2. *Central Laboratory* *(Continued)*

During the Reporting Period, we also actively promoted our central laboratory service offerings in China. Our construction of the central laboratory facilities in Zhangheng Road, Pudong New District, Shanghai has been fully completed, and we have provided kits and logistics and sample management services for more than 60 projects. At the same time, we have established detection platforms and methods including blood, biochemical immunity, flow cytometry detection and pathological detection, and completed the installation and verification of relevant equipment and the methodological verification of some detection items. The detectable items include safety evaluation indicators, personalized biomarkers and pathological related markers. It can support the detection of relevant biomarkers of cardiovascular, endocrine, metabolic diseases, immunology, oncology and other research projects. Additionally, pathological and clinical testing service offerings will be available in the first half of 2022. In addition, we plan to further expand our capacity and scale in providing central laboratory services in China once the 67,000-square-foot research facility in Lin-Gang Special Area, Shanghai becomes operational.

CMC

Our CMC unit operates in two locations: Exton, PA, USA and Suzhou, China.

During the Reporting Period, our CMC unit in the U.S. completed the relocation of its analytical services unit from our 75 E. Uwchlan Ave, Exton, PA site to our 760 Pennsylvania Drive, Exton, PA site and added a new microbiology laboratory. Our new microbiology laboratory now offers a comprehensive range of microbiological method development and quality control testing services such as microbial limit, endotoxin, sterility, and environmental monitoring testings for drug products that support all phases of the product and process development. Microbiological testing is a critical component to ensuring the quality and safety of pharmaceutical products. In addition to robust manufacturing processes and controls, our QC testing strategy can provide assurance that products are free of contaminants and are suitable for their intended use.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

CMC *(Continued)*

During the Reporting Period, our CMC unit in China continued to improve its capabilities and quality in formulation R&D services by expanding its team of personnel, upgrading instruments and equipment, and improving its technical service platform. The newly established semi-solid formulation R&D platform and transdermal experimental analysis platform have provided a number of services, such as clinical residual samples detection and data statistical analysis services. We have also continued with the construction of an 89,000-square-foot facility in Suzhou. The facility will expand the manufacturing capacity of CMC and GMP clinical trial samples and will enhance our CMC unit's manufacturing capacity for the production of various dosage forms such as oral solid preparations, injections, lyophilized powder for injections, semi-solid preparations, and eye drops. This facility will also have the manufacturing capacity for hygroscopic/photosensitive sensitive drugs, which can accommodate different types of clinical sample production requirements and help to ensure the quality, efficacy, and safety of the formulated products during manufacture, storage, and use. This facility is expected to be operational by the third quarter of 2022.

Chemistry

Our chemistry unit operates in two locations: Palo Alto, California ("**CA**"), USA, and Shanghai, China.

During the Reporting Period, the demand for our chemistry services continued to grow due to the growing demand for drug discovery services more generally. Our chemistry unit in China developed rapidly with respect to our talent pool and service capability. Our chemistry unit has more than 260 employees in China, with an aggregate experience of more than 25,000 lead compounds synthesis, and possess a series of technology R&D platforms such as small molecule nucleic acid drug, nucleoside analog and boron containing small molecule drug, so as to provide customers with high-quality early drug R&D services.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Chemistry *(Continued)*

The construction of the 7,000-square-foot good manufacturing practice ("**GMP**") kilogram laboratory in Shanghai, which was initiated in January 2021, was completed and put into operation in the second half of the Reporting Period. The new GMP kilogram laboratory will enable us to provide our customers with GMP active pharmaceutical ingredient ("**API**") manufacturing services, enhancing our chemistry unit's discovery expertise from discovery to development, milligram to kilogram and medicinal chemistry to API synthesis. The construction of a 17,000-square-foot medicinal chemistry facility in Shanghai, was completed in the third quarter of 2021 and became operational in the fourth quarter of 2021, further expanding our chemical service capacity in the field of new drug discovery. The new medicinal chemistry laboratory will enhance our current drug discovery experience and scope of capabilities of our chemistry unit. In addition, we plan to establish a drug R&D center with a space of approximately 200,000-square-foot in Wuhan to further expand our capacity and capability in early drug discovery stage.

Bioequivalence

Our bioequivalence service offering in China includes clinical trial services conducted on healthy volunteers in collaboration with public or private hospitals. We also provide bioequivalence and related services (such as pharmacology, medical writing and regulatory support) for international customers seeking to make applications for approval with the FDA, the NMPA and the EMA.

During the Reporting Period, our bioequivalence services included in research projects such as special formulations, transdermal patches, inhalation formulations, injections, enteric solvents formulations and other complex varieties. We also strengthened our capability of developing and providing regulatory dossier to facilitate service for customers developing generic drugs.

Our Growth Strategy

During the Reporting Period, we continued to advance our objective as a value-added partner with a focus on solving our customers' most significant and complex product discovery and development challenges. We believe that our comprehensive services, broad scientific and technical expertise, sophisticated equipment and technology, and experience in global drug development and product launch services, represent our core strengths.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Our Growth Strategy *(Continued)*

We have seen significant progress in all areas of our growth strategy and intend to build on our operational excellence and financial performance by continuing to focus on the following strategies:

- **Scientific Expertise.** We provide a broad spectrum of scientific expertise across the product discovery and development process which may be too costly for our customers to build and/or maintain in-house. We provide essential facilities and capabilities that have high infrastructure costs or are cost-prohibitive for customers to maintain independently. We continue to expand our portfolio in key areas to align with our customers' internal product discovery and development. We also continue to enhance our service offerings portfolio in areas of greatest industry need, where outsourcing provides major benefits for our customers and where we could provide significant benefits given our unique early development portfolio and global footprint. We believe one of the largest opportunities to increase our market share is to broaden and enhance our collaborations with larger biopharmaceutical companies. We expect they will also continue to be conservative in re-building infrastructure and expertise. This should lead to more opportunities for strategic outsourcing as larger pharmaceutical customers choose to utilize external resources rather than invest in internal infrastructure. We believe that the evolving large biopharmaceutical R&D business model will make our essential products and services even more relevant to our customers, and allow them to leverage our integrated offerings and expertise to drive their research development and manufacturing efficiency and cost effectiveness. We also intend to continue to develop and broaden our relationships in the small and mid-sized biopharmaceutical market, which is the fastest growing segment of the market, and we believe there is further opportunity to grow this segment. Our organic growth and acquisitions during the Reporting Period further enhanced our value-added position for serving our customers, diversifying our customer base and expanding support to high-growth emerging biopharmaceutical companies. Small and mid-sized biopharmaceutical companies typically have fewer internal resources, less existing infrastructure, and less clinical development and commercialization experience, the need for a full suite of product development services is particularly strong with small to mid-sized customers.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Our Growth Strategy *(Continued)*

- **Quality and Customer Support.** We maintain scientific rigor and high-quality standards through management of key performance indicators and an intense focus on quality. We will continue to leverage our expertise embedded in our integrated and comprehensive service offering tailored to the specific need for a particular customer. By utilizing our streamlined and efficient facilities, we strive to continue to improve our customer's workload and staffing requirements. This allows our customers to reduce internal capacity and staff while ensuring the conduct of effective quality research for their projects. We intend to provide enhanced value to customers who use us as a preferred full-service CRO partner over a longer period of time.

- **Organic Growth and Targeted Acquisitions.** We intend to continue to deploy capital in investments that enhance the Group's business, which includes pursuing organic expansion and strategic acquisitions to strengthen the Group's scientific capabilities and enhance global product development capabilities.

- **Geographical expansion.** We intend to expand our global commercial presence by continuing to selectively build out our global sales, marketing, and services infrastructure. We have developed a global platform with a presence in all of the major biopharmaceutical markets and intend to further expand our business outside of the North America and China, targeting regions where we are underpenetrated and that offer significant growth opportunities. We have expanded our capabilities, existing relationships, and local regulatory knowledge, which we believe will continue to position us well for new customer wins in a wide array of markets. We may also selectively identify and acquire complementary businesses to enhance our services, capabilities, and geographic presence.

SERVICE OFFERINGS & ENHANCED CAPABILITIES AND EXPERTISE *(Continued)*

Our Growth Strategy *(Continued)*

- **Operational efficiency.** We seek to expand operating margins through capacity utilization and process optimization strategies designed to increase our yields. We plan to invest in systems to support our global operations, optimizing resources across our global footprint to maximize productivity. Furthermore, we intend to engage with our vendors and suppliers in a meaningful way to drive efficiencies within our partnerships which will result in savings, support our growth strategy and position us to withstand external pressures that could interrupt our supply chain. When necessary, we expect to supplement our team via internal and/or external resources to allow us to build the global integrated structure and processes to support our global growth strategy. To meet the demand of our customers' evolving needs for research and development efficiency initiatives, we plan to establish a new dedicated organization within the Group to promote digitalization and laboratory automation in all business segments in an integrated manner.

- **Talent Development.** The success of our business model is heavily dependent on the capabilities of our management team, support functions and scientific experts. As such, we intend to continue to invest in the development and retention of our talent pool by increasing the training and development opportunities for our team to allow career growth and internal advancement. We expect to remain a premier employer with an attractive and competitive total compensation strategy, allowing us to attract and retain top level talent. We will increase our focus on employee engagement, and we plan to implement learning and development initiatives that are focused on enhancing the leadership, technical, and scientific skills of our employees. We are planning an initiative to unite the individual strengths our of employees to create an organization of comprehensive strength, based on the principles of taking initiative, having a sense of duty, and maintaining a collaborative structure.

COVID-19 PANDEMIC AND EFFECTS ON OUR BUSINESS

The COVID-19 pandemic continued in 2021, but the global economy endured the challenges of the pandemic and recovered in many ways, as did biopharmaceutical research activities. Our customers continue to partner with us for our flexible and efficient outsourcing solutions, broad scientific capabilities, and global scale, as well as our resilience throughout the pandemic. The strength of this demand was further reinforced by strong biotech funding and continued scientific innovation, resulting in robust revenue growth across all our reportable segments in fiscal year 2021.

This positively impacted revenue, operating income, operating income margins, and cash flows, which continued throughout the Reporting Period. As a result, our revenue for the Reporting Period of approximately US$184.4 million has significantly increased from approximately US$125.8 million for the same period of 2020.

Many of our pharmaceutical and biotechnology customers intensified their use of strategic outsourcing during Reporting Period to move their early-stage research programs forward in an efficient and cost-effective manner. Small and mid-sized biotechnology customers continued to be a driver of revenue growth as these customers benefited from the sustained strength of the biotechnology funding environment during the Reporting Period. Many of our large biopharmaceutical customers have continued to increase investments in their drug discovery and early-stage development efforts and have strengthened their relationships with CROs and biotechnology companies to assist them in bringing new drugs to market. Customers continue to seek to outsource larger portions of their early-stage drug research programs to us, which is leading to new business opportunities as customers adopt more flexible and efficient research and development models.

During the Reporting Period, we continued to rely on our COVID-19 task force to navigate our organizational response to COVID-19, focusing on (i) the safety and well-being of our employees, customers and partners; (ii) the continuity of our business operations; and (iii) preserving the integrity of the work we do for our customers, including participating in related research projects to ease the challenges presented by the evolving COVID-19 pandemic. Additionally, we have continued to employ various mitigation measures to minimize the adverse impacts of the COVID-19 pandemic on our ongoing projects, customer relationships, and procurement of supplies. We have witnessed a basically normal operation in all of our business units during the Reporting Period.

COVID-19 PANDEMIC AND EFFECTS ON OUR BUSINESS *(Continued)*

The extent to which COVID-19 pandemic impacts our future results will depend on future developments. National, state, and local governments may impose, and have imposed additional restrictions in certain areas, or may extend the restrictions already in place if the pandemic continues or if new waves of infection occur. The continuing spread of COVID-19 and the related safety and business operating restrictions could result in a number of adverse impacts to our business, including, but not limited to, additional disruption to the economy and our customers, additional work restrictions, and supply chains being interrupted or slowed. Also, governments may impose other laws, policies, regulations, or taxes that could adversely impact our business, financial condition, or results of operations. Depending on the extent to which our customers continue to be affected, they could further delay or reduce purchases of services we provide. The effects of the COVID-19 pandemic also could impact us in a number of other ways including, but not limited to, additional reductions to our business revenue and profitability, fluctuations in foreign currency markets, the availability of future borrowings, the cost of borrowings, credit risks of our customers and counterparties, and potential impairment of the carrying amount of goodwill or other long-lived assets.

THE GROUP’S FACILITIES

As of December 31, 2021, the Group had ten (10) facilities in North America, consisting of:

- three (3) facilities in Exton, PA, USA;
- two (2) facilities in Hayward, CA, USA;
- one (1) facility in Concord, OH, USA;
- one (1) facility in Monmouth Junction, NJ, USA;
- one (1) facility in Deerfield, FL, USA;
- one (1) facility in Palo Alto, CA, USA; and
- one (1) facility in Vancouver, Canada.

THE GROUP'S FACILITIES *(Continued)*

In addition, as of December 31, 2021, the Group had ten (10) facilities in China, consisting of:

- four (4) facilities in Shanghai;
- four (4) facilities in Suzhou, Jiangsu Province;
- one (1) facility in Zhengzhou, Henan Province; and
- one (1) facility in Wuhan, Hubei Province.

QUALITY ASSURANCE

The Group's quality compliance programs are managed by a dedicated group responsible for quality compliance. Our independent quality units have overseen and also implemented the quality management systems, including global computer system validation. Within each regulated business segment, we have established quality assurance units responsible for risk-based internal audit programs to manage regulatory requirements and customer expectations. The quality assurance units operate independently from those individuals that direct and conduct studies, manufacturing or analytical testing. Our quality assurance team works closely with study teams to ensure compliance with protocols, SOPs and regulatory guidelines to ultimately protect research subject safety as well as the integrity and validity of study data. Our quality assurance team also provides services including regulatory training, internal system audits, SOP oversight, hosting of client audits and regulatory inspections, as well as performs third party audits of critical vendors and investigative sites on behalf of our customers.

Virtually all facets of the Group's service offerings are subject to quality programs and procedures, including accuracy and reproducibility of tests, turnaround time, customer service, and data integrity. This includes licensing, credentialing, training and competency of professional and technical staff, and internal auditing. In addition to the Group's internal quality programs, our laboratories, facilities, and processes are subject to on-site regulatory agency inspections and accreditation evaluations, as applicable, by local or national government agencies, and inspections and audits by customers and vendors.

During the Reporting Period, we continued to maintain a strong track record of successful regulatory inspections; namely, in June 2021, our safety and toxicology unit hosted a successful AAALAC (Association for Assessment and Accreditation of Laboratory Animal Care) audit in our Concord, OH facility. Our CMC facilities in Exton, PA were inspected by the DEA (Drug Enforcement Administration) and FDA.

Our facilities in Shanghai and Suzhou were also inspected over 20 times by the NMPA and none of the inspections resulted in any materially adverse issues being identified.

QUALITY ASSURANCE *(Continued)*

Animal Welfare

We focus on animal welfare issues in our business operations and are committed to following strict procedures in upholding animal rights. According to the Guide of the Care and Use of Laboratory Animals and all relevant laws and regulations, we implement our SOPs and quality animal care program to treat animals humanely. As responsible researchers, we have established plans and procedures on the living environment, animal facility control, back-up veterinary care plan, transferal, and termination/euthanasia procedures. We regularly monitor animal conditions and assess the adequacy of our existing protocols, as well as keeping abreast of recent scientific developments in this area. Training and education are also provided to the responsible people for carrying out their duties. During the Reporting Period, we did not receive any non-compliance reports from the United States Department of Agriculture and FDA.

BUSINESS DEVELOPMENT & MARKETING

Business Development

Our Group's global business development team manages global commercial activities through creating relationships with prospective customers and growing relationships with our existing customers. We rely heavily on our past project performance, trusting relationships with our customers, experienced teams, new capabilities, in securing and developing new business opportunities. Our business development representatives collaborate closely with our seasoned scientific experts and operational leaders from the beginning of the sales process to ensure proposals meet customers' needs in a strategic and solution-based manner. Our business development remains embedded throughout the life of the project by partnering with project managers and strategic alliance executives to optimize timely completion of the projects and foster long-term relationships with the customers.

The specific role of the business development team is to grow the business across all service areas across the entire continuum of drug development. Our global business development team is strategically dispersed across the United States, China, Europe, and Canada and is responsible for managing all accounts within their geographical territory. In addition to significant client engagement and key account development experience, many of our project managers possess advanced scientific and technical degrees to support our customers' complex product development endeavors and challenges within various market segments (global biopharmaceutical, small and mid-sized pharmaceutical and biotechnology companies, and academic and government institutions). This enhances our ability to meet client needs by offering customized, tailored solutions across our entire portfolio.

BUSINESS DEVELOPMENT & MARKETING *(Continued)*

Marketing

Our Group's marketing team is focused on building global brand awareness, trust and driving deeper client engagement through demand generation initiatives. The marketing team leverages several key channels including digital marketing, conferences and events, and high-profile publications. Potential customers are driven to our website where they can access a wide range of scientific content including whitepapers, video material, webinars, case studies, scientific posters, and other resources.

Our core marketing strategy continues to center around driving long-term client engagement and stimulating demand for our entire services portfolio. We believe that our ability to provide comprehensive solutions that address all aspects of our customers' research and development needs are increasingly attractive to our customers, and we continue to design and market our commercial activities to deliver flexible, customized programs designed by segment to meet our customers' global and site-specific needs. During the Reporting Period, the continuing COVID-19 pandemic challenged us to modify the channels and platforms used to meet our objectives. As several in- person conferences and face-to-face activities have either been cancelled or moved to virtual platforms, we have increased our use of digital marketing, such as webinars, podcasts, virtual tours, and targeted email campaigns to reach our customers and still meet business needs.

Group Awards

During the Reporting Period, Frontage Labs has been selected as a winner of a 2021 CRO Leadership Award in multiple categories (Capabilities, Compatibility, Expertise, Reliability and Quality) issued by the magazines *Life Science Leader and Clinical Leader.*

Life Science Leader and Clinical Leader have once again teamed up with the Industry Standard Research ("**ISR**") to determine the award recipients. They assessed sixty CROs on over 20 performance metrics in ISR's annual CRO quality benchmarking survey. Survey participants were recruited from pharma and biopharma companies of all sizes and were screened for decision- making influence related to working with contract research organizations. Respondents only evaluate companies with which they have worked on an outsourced project within the past 18 months. This level of qualification ensures that survey responses are based on actual involvement with CROs and clear experiential data. There are five core categories: Capabilities, Compatibility, Expertise, Quality, and Reliability. Winners in these categories are judged by their customers as meeting or exceeding expectations. CROs can win each category in up to three groups of outsourcing respondents – Big Pharma, Small Pharma, and Overall (combined Big and Small Pharma).

BUSINESS DEVELOPMENT & MARKETING *(Continued)*

Group Awards *(Continued)*

Frontage Labs has won the 2021 CRO Leadership Award in the following categories:

- Capabilities (Overall, Big Pharma)
- Compatibility (Overall, Big Pharma, Small Pharma)
- Expertise (Overall, Big Pharma, Small Pharma)
- Reliability (Overall, Big Pharma, Small Pharma)
- Quality (Overall, Small Pharma)

We are pleased to have been recognized with the CRO Leadership Awards. These awards were awarded in recognition of Frontage Labs' diverse, high-quality service offerings that allow our customers, peers, partners, and investors to gain insights into our impressive performance on a granular level.

In 2021, Frontage Shanghai was named as a *Top 20 Chinese R&D CRO Enterprise* in the 2021 Conference on High Quality Development of Healthcare Industry.

MATERIAL ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES

During the Reporting Period, we continued to make strategic acquisitions designed to expand our portfolio of services and strengthen our value proposition to customers. Our recent acquisitions are set forth below:

1. **Acquisition of Ocean Ridge Biosciences, Inc.**

   On April 13, 2021 (New York time), Frontage Labs, Ocean Ridge, a biotechnology company located in Deerfield Beach, FL, and its controlling shareholder, entered into business acquisition agreement, pursuant to which Frontage Labs agreed to, among other things, acquire Ocean Ridge's genomics business at the consideration of US$1,000,000. The aforesaid business included, among others, genomics service offerings, such as services related to biofluid profiling, RNA sequencing, bioinformatics, exosomes, microbiomics, oncopanels, cell-free DNA bisulfite sequencing, gene expression microarray, multiplex protein profiling and formalin-fixed, paraffin embedded tissues.

MATERIAL ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES *(Continued)*

1. Acquisition of Ocean Ridge Biosciences, Inc. *(Continued)*

We expect this acquisition to bolster the Group's current genomic services by enabling us to provide accurate, affordable, and information-rich genomic services to the health care and life science industries and academic institutions. The business we acquired will complement the wide variety of IND-enabling and clinical-trial related services offered by Frontage Labs, including our services for protein-, oligonucleotide-, gene-, and cell-based therapeutic discovery and development.

2. Acquisition of Quintara Discovery, Inc.

On June 26, 2021 (Hong Kong time), Frontage Labs entered into an Agreement and Plan of Merger (the "**Merger Agreement**") by and among Frontage CA Merger Sub, Inc., a wholly-owned subsidiary of Frontage Labs ("**Merger Sub**"), Quintara, the shareholders of Quintara and the shareholders' representative, pursuant to which the parties agreed, among other things, to effect a reverse triangular merger in accordance with the California Corporation Code. Pursuant to the terms and conditions of the Merger Agreement, upon the closing, Merger Sub shall be merged with and into Quintara (the "**Merger**" and, collectively with the other transactions contemplated by the Merger Agreement, the "**Transactions**"), whereupon the separate corporate existence of Merger Sub shall cease and Quintara shall be the surviving entity in the Merger and continue as a wholly-owned subsidiary of Frontage Labs. The consideration of the Merger is up to US$72,000,000 in cash (equivalent to approximately HK$559,174,000 and consisting of (i) closing base amount of US$44,100,000 in cash (equivalent to approximately HK$342,494,000) payable upon the closing; (ii) Earnout Consideration of US$18,900,000 in cash (equivalent to approximately HK$146,783,000); and (iii) contingent bonus payment at the maximum of US$9,000,000 (equivalent to approximately HK$69,897,000) in cash to be payable subject to the satisfaction of certain performance targets for the three years after the closing date as set out in the Merger Agreement). Quintara provides contract research organization services, including in vitro ADME profiling, bioanalysis services, assay development and compound screening services, to the pharmaceutical, biotechnology, medical device or diagnostic industries. The Merger will expand the Group's capabilities in providing ADME profiling services. It will enable the Group to capture growth opportunities on the west coast of the U.S., where the Company currently has limited market coverage. The Board believes that the business outlook and prospects in the U.S. are positive and that the acquisition will also potentially accelerate the Group's market penetration on the west coast of the U.S., potentially resulting in a strong presence of the Group in that region. For further details, please refer to the Company's announcements dated June 28, 2021 and July 29, 2021.

MATERIAL ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES *(Continued)*

2. Acquisition of Quintara Discovery, Inc. *(Continued)*

We believe that we will continue to realize strategic benefits from the acquisitions we have completed, resulting in additional revenue growth and margin improvements. We also believe that our strategic acquisitions are complementary to our customer base and expect to generate incremental revenue growth by cross selling our full set of services to our existing and new customers, thereby expanding the scope of our customer relationships and generating additional revenue.

3. Acquisition of Heyan Biotech

On August 31, 2021, the Group entered into a subscription and share purchase agreement to subscribe and acquire 70% of the enlarged equity interests in Heyan Biotech for a cash consideration of RMB41,067,000 (equivalent to approximately US$6,349,000) (the "**Heyan Biotech Acquisition**"). Heyan Biotech and its subsidiary is principally engaged in providing drug discovery services such as drug activity screening and kinase function test. In completing the Heyan Biotech Acquisition, it can enhance the Group's one-stop service capacity and capability in the field of drug discovery and development.

4. Investment in Chenghong Pharma (Weihai) Co., Ltd.

On November 18, 2021, the Group has entered into a share subscription agreement with two independent parties to form a joint venture named Chenghong Pharma and to subscribe 48.57% shares with a cash consideration of RMB34,000,000 (equivalent to approximately US$5,333,000). By December 21, 2021, cash consideration has been fully paid and the Group holds 48.57% equity of Chenghong Pharma.

Chenghong Pharma, based in Weihai, Shandong Province, China, mainly engages in R&D, manufacturing and sales of APIs and advanced pharmaceutical intermediates for innovative and generic drugs. We believe our investment in Chenghong Pharma will expand our capabilities from drug discovery and development services into API commercial manufacturing, which will enable the Group to provide more integrated services for customers.

MATERIAL ACQUISITIONS AND DISPOSALS OF SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES *(Continued)*

5. Acquisition of Experimur LLC, Experimur Intermediate LLC and Experimur Properties LLC

On December 29, 2021 (New York time), Frontage Labs entered into a Membership Interest Purchase Agreement (the "**Agreement**") with Experimur LLC, Experimur Intermediate LLC and Experimur Properties LLC (collectively, the "**Targets**"), Experimur Holdings, Inc., the shareholders of Targets and the shareholders' representative for acquisition of the membership interests in Targets (the "**Experimur Acquisition**"), pursuant to which the shareholders of Targets agreed to sell and Frontage Labs agreed to purchase 100% of the membership interests in Targets for a cash consideration of up to USD76,000,000. Experimur LLC provides toxicology testing, research, and laboratory services for biopharmaceutical companies specializing in drug discovery and development. The Experimur Acquisition was completed on January 10, 2022 (New York time). For further details, please refer to the Company's announcements dated December 30, 2021 and January 11, 2022.

We believe that the Experimur Acquisition will expand the Group's capabilities in pharmacological safety assessment, toxicology services, and other ancillary drug discovery and development services and will increase the Group's capacity to provide such services through additional scientists, equipment and facilities. We also believe that it has the potential to increase the Group's revenue base and strengthen the Group's position as a global leader in the CRO industry.

Save as disclosed above, during the Reporting Period, we did not conduct any material acquisitions or disposals of subsidiaries and affiliated companies.

FUTURE PLANS FOR MATERIAL INVESTMENTS AND CAPITAL ASSETS

As of December 31, 2021, save as disclosed above, we did not have other plans for material investments and capital assets.

SIGNIFICANT INVESTMENTS HELD BY THE GROUP

As of December 31, 2021, save as disclosed above, there was no significant investment held by the Group.

EVENTS AFTER THE REPORTING PERIOD

In addition to acquisition of Experimur LLC, Experimur Intermediate LLC and Experimur Properties LLC as disclosed above, on February 23, 2022, the Group expanded its capacity and capability of early drug discovery stage in China by way of renting a new laboratory facility of approximately 200,000-square-feet. The new laboratory is located at Building 6, Life and Healthcare Industrial Park, East Lake Science City, Wuhan, China. It will be mainly used to provide one-stop pharmaceutical R&D services shop for small molecule innovative drugs, from target screening to preclinical pharmaceutical research.

PROSPECTS

As the global COVID-19 pandemic enters its third year, the life sciences innovation system is setting new records in the level of investment, activity, and scientific progress, in addition to the number and range of new medicines reaching patients around the world. Beyond the ground- breaking contributions to COVID-19 in the form of vaccines and therapeutics, this sector has also succeeded in adapting and re-focusing to a remarkable extent, overcoming the many operational and organizational challenges facing those leading biopharmaceutical innovation. The COVID-19 pandemic has shone a light on the biopharmaceutical industry essential role played in combating this public health crisis through its expertise, innovation, and resources.

According to the IQVIA Institute, currently, the life sciences industry that invests in and advances the R&D pipeline comprises over 3,000 companies or organizations around the world. The U.S. share of the global R&D pipeline has remained relatively stable, at above 40% over the past 15 years. Products from China-headquartered companies now represent 12% of the R&D pipeline, up from 4% five years ago and 2% in 2006, reflecting recent significant investments made in the life sciences there.

Chinese biopharmaceutical companies have also actively increased investment in innovation under the guidance from authorities. The number of domestic IND applications and clinical trials have continued to increase in China. As a partner in the drug R&D process of biopharmaceutical companies, we firmly believe that the global and Chinese CRO market will sustain long-term and rapid growth.

Looking forward, we will adhere to the implementation of the integrated service strategy based on our existing advantages, targeting to build up a one-stop business platform with high quality covering from early drug discovery to support drug development services, so as to provide customers with comprehensive drug R&D services to the greatest extent. At the same time, we will continue to improve our unique internationalization strategy represented by the same quality system standards between China and the United States, fully taking advantage of our business layouts in both North America and China, sharing of cutting-edge technology, project experience, quality system and other positive resources on the basis of independent operations in the two areas, so as to improve customers' satisfaction and make us the preferred partner for biopharmaceutical companies all over the world.

FINANCIAL REVIEW

Revenue

The revenue of the Group increased by 46.6% from approximately US$125.8 million for the year ended December 31, 2020 to approximately US$184.4 million for the year ended December 31, 2021.

Revenue from operations in North America increased by 42.5% from approximately US$87.9 million for the year ended December 31, 2020 to approximately US$125.3 million for the year ended December 31 2021. Excluding the impact of currency translation, the revenue from operations in China increased by 46.8% from approximately RMB259.9 million (equivalent to approximately US$37.9 million) for the year ended December 31, 2020 to approximately RMB381.5 million (equivalent to approximately US$59.1 million) for the year ended December 31, 2021. The growth of revenue from operations in North America was mainly attributable to (i) marketing efforts made by the Group, resulting in robust marketing performance in North America; (ii) recovery of the market demand from the COVID-19 pandemic; and (iii) revenue contributed by Quintara Discovery Inc., a pre-clinical research organization acquired during the second half of year 2021. The revenue increase in the operations in China was mainly due to (i) the thriving chemistry, bioanalytical and biologics services in China; and (ii) the expansion of CMC capabilities and businesses in China.

The following table sets forth a breakdown of our revenue by type of service during the Reporting Period:

	For the year ended December 31,	
	2021	2020
	US$'000	*US$'000*
		(Restated)
Laboratory testing	**82,612**	61,916
CMC	**28,052**	22,576
Preclinical research	**47,090**	27,366
Bioequivalence	**10,737**	7,531
Chemistry	**15,950**	6,422
	184,441	125,811

FINANCIAL REVIEW *(Continued)*

Revenue *(Continued)*

An analysis of the Group's revenue from external customers, analyzed by the customers' respective countries/regions of operation, is presented below:

	For the year ended December 31,			
	2021		2020	
	US$'000	*%*	*US$'000*	*%*
Revenue				
– USA	**115,007**	**62.3%**	78,082	62.1%
– China	**51,401**	**27.9%**	33,984	27.0%
– Rest of the world[(Note)]	**18,033**	**9.8%**	13,745	10.9%
Total	**184,441**	**100%**	125,811	100%

Note: Rest of the world primarily includes Europe, India, Japan, South Korea and Australia.

Top 5 customers' revenue increased by 21.3% from approximately US$33.4 million for the year ended December 31, 2020 to approximately US$40.5 million for the year ended December 31, 2021, accounting for 22.0% of total revenue for the year ended December 31, 2021 as compared to 26.6% for the year ended December 31, 2020.

Top 10 customers' revenue increased by 19.5% from approximately US$41.5 million for the year ended December 31, 2020 to approximately US$49.6 million for the year ended December 31, 2021, accounting for 26.9% of total revenue for the year ended December 31, 2021, as compared to 33.0% for the year ended December 31, 2020.

Cost of Services

Associated with the revenue growth, the cost of services of the Group increased by 39.6% from approximately US$84.3 million for the year ended December 31, 2020 to approximately US$117.7 million for the year ended December 31, 2021. The increase of the cost of services was also attributed to the expansion of our capacity in North America and China which led to an increase in depreciation and employee compensation as more scientists were hired due to our enlarged operations.

FINANCIAL REVIEW *(Continued)*

Cost of Services *(Continued)*

The cost of services of the Group consists of direct labor costs, cost of raw materials and overhead. Direct labor costs primarily consist of salaries, bonuses and social security costs for the employees in the Group's business units. Cost of raw materials primarily consists of costs incurred for the purchase of raw materials used in rendering the Group's services. Overhead primarily consists of depreciation charges of the facilities and equipment used in rendering the Group's services, utilities and maintenance.

Gross Profit and Gross Profit Margin

The gross profit of the Group increased by 60.7% from approximately US$41.5 million for the year ended December 31, 2020 to approximately US$66.7 million for the year ended December 31, 2021. The Group's gross profit margin increased from approximately 33.0% for the year ended December 31, 2020 to approximately 36.2% for the year ended December 31, 2021, which was primarily due to the recovery from the COVID-19 pandemic and the successful implementation of the Company's strategies to extend the range of its services to offer its customers more integrated solutions through organic growth and strategic acquisition. In particular, gross profit margin in North America increased from approximately 29.5% for the year ended December 31, 2020 to approximately 35.5% for the year ended December 31, 2021. Whereas gross profit margin in China decreased from approximately 41.0% for the year ended December 31, 2020 to approximately 37.5% for the year ended December 31, 2021, effected by (i) a relatively lower gross profit margin contributed by the Group's newly acquired chemistry service in the second half of 2020; (ii) the expansion of our capacity in both our professional teams and our new lab facilities; and (iii) the investment in establishing our preclinical research and central laboratory business in China.

Other Income

The Group's other income decreased by 27.0% from approximately US$6.3 million for the year ended December 31, 2020 to approximately US$4.6 million for the year ended December 31, 2021, primarily due to a decreased interest income as a result of the Group's active utilization of proceeds from the Global Offering and internal resources to finance our expansion, investment and business operation.

FINANCIAL REVIEW *(Continued)*

Other Gains and Losses

The Group's net other losses increased from approximately US$0.1 million for the year ended December 31, 2020 to approximately US$2.0 million for the year ended December 31, 2021, primarily due to loss arising from financial liabilities measured as fair value through profit or loss during the Reporting Period.

Impairment Losses Under Expected Credit Loss Model, Net of Reversal

Impairment losses and net of reversal represent the loss allowance on the Group's financial assets (including trade and other receivables and unbilled revenue). The Group has recorded the net impairment losses of approximately US$0.8 million for the year ended December 31, 2021, compared to approximately US$0.09 million for the year ended December 31, 2020. The change of the net impairment losses was mainly due to the increased trade receivable and unbilled revenue balance as a result of the growth of the Group's business.

Selling and Marketing Expenses

Selling and marketing expenses of the Group increased by 11.8% from approximately US$5.1 million for the year ended December 31, 2020 to approximately US$5.7 million for the year ended December 31, 2021, which demonstrated our continuous efforts in the capability enhancement in business development to capture the blooming demand in the CRO industry.

Administrative Expenses

The Group's administrative expenses increased by 73.9% from approximately US$18.8 million for the year ended December 31, 2020 to approximately US$32.7 million for the year ended December 31, 2021. Excluding share-based compensation expenses and amortization of intangible assets acquired from mergers and acquisitions, the Group's administrative expenses increased by 32.7% from approximately US$15.9 million for the year ended December 31, 2020 to approximately US$21.1 million for the year ended December 31, 2021, primarily due to (i) workforce expansion to facilitate smooth operations and support the Group's growing business and its long-term development; and (ii) an increase in office administration costs and other operational costs, which are in line with the Group's business growth and headcount growth.

FINANCIAL REVIEW *(Continued)*

Research and Development Expenses

Our R&D activities mainly focused on (i) developing technologies and methodologies to continue to enhance our services; and (ii) improving the quality and efficiency of our services.

The Group's R&D expenses increased by 33.3% from approximately US$1.8 million for the year ended December 31, 2020 to approximately US$2.4 million for the year ended December 31, 2021, primarily due to our efforts in enhancing investment in new technologies and platforms.

Finance Costs

The Group's finance costs increased by 18.2% from approximately US$2.2 million for the year ended December 31, 2020 to approximately US$2.6 million for the year ended December 31, 2021, primarily due to interest expenses on lease liabilities, as a result of expansion of leased space during the Reporting Period.

Income Tax Expense

The income tax expense of the Group increased by 190.5% from approximately US$2.1 million for the year ended December 31, 2020 to approximately US$6.1 million for the year ended December 31, 2021, primarily due to a combined increase in pretax income and effective tax rate. The Company's effective income tax rate was 24.5% and 10.8% for the year ended December 31, 2021 and 2020, respectively. The increase in the effective tax rate for the year ended December 31, 2021 was primarily due to book compensation on share-based awards exceeding the expected tax deduction based on current market value and the absence of excess tax benefits from stock-based compensation reflected in the prior year.

On March 27, 2020, the U.S. government passed the Coronavirus Aid, Relief and Economic Security Act (the "**CARES Act**") in response to the COVID-19 pandemic. The CARES Act provides wide-ranging economic relief, including significant changes to U.S. business tax provisions. These changes include, in summary, (i) modifications to limitations on the deductibility of net operating losses, (ii) modifications to limitations on the deductibility of business interest, (iii) alternative minimum tax credit acceleration and (iv) the expensing of qualified improvement property. The most significant impact to the Company from the CARES Act relates to the modification to limitations on the deductibility of business interest, and the expensing of qualified improvement property. The Company continues to assess the income tax impact of the CARES Act and other legislative changes enacted and being considered by governments around the world in response to the COVID-19 pandemic.

FINANCIAL REVIEW *(Continued)*

Net Profit and Net Profit Margin

The net profit of the Group increased by 8.6% from approximately US$17.4 million for the year ended December 31, 2020 to approximately US$18.9 million for the year ended December 31, 2021. The net profit margin of the Group for the year ended December 31, 2021 was 10.3%, compared to 13.8% for the year ended December 31, 2020. The lower net profit margin compared to the year ended December 31, 2020 was primarily due to the increase in administrative expenses as a result of share-based compensation expense and amortization of acquired intangible assets from mergers and acquisitions.

Adjusted Net Profit

The following table presents a reconciliation of adjusted net profit to the net profit for the years, the most directly comparable IFRS measure, for each of the years indicated:

	For the year ended December 31,	
	2021	2020
	US$'000	*US$'000*
		(Restated)
Net Profit	**18,922**	17,415
Add: Share-based compensation expense	**7,517**	935
Loss/(gain) arising on financial liabilities measured as fair value through profit or loss *(Note)*	**1,725**	(18)
Amortization of acquired intangible assets from mergers and acquisitions	**4,074**	2,014
Adjusted Net Profit	**32,238**	20,346
Adjusted Net Profit Margin	**17.5%**	16.2%

Note: Gain or loss arising from financial liabilities measured as fair value through profit or loss has been included in the reconciliation of adjusted net profit for the year ended December 31, 2021, and the adjusted net profit for the year ended December 31, 2020 was restated to include the same information for comparison purpose.

FINANCIAL REVIEW *(Continued)*

Adjusted Net Profit *(Continued)*

The adjusted net profit of the Group increased by 58.6% from approximately US$20.3 million for the year ended December 31, 2020 to approximately US$32.2 million for the year ended December 31, 2021. The adjusted net profit margin of the Group for the year ended December 31, 2021 was 17.5%, compared to 16.2% for the year ended December 31, 2020. The higher adjusted net profit margin of the Group for the year ended December 31, 2021 was primarily due to the solid revenue growth as a result of the Group's continuing position as a leader in the CRO industry and competitive execution track record, coupled with efficiency in business operations and enhanced capacity utilization.

EBITDA

The EBITDA[1] of the Group increased by 51.8% from approximately US$34.0 million for the year ended December 31, 2020 to approximately US$51.6 million for the year ended December 31, 2021. The EBITDA margin of the Group for the year ended December 31, 2021 was 28.0%, compared to 27.1% for the year ended December 31, 2020. The improved EBITDA margin of the Group for the year ended December 31, 2021 was primarily due to the revenue growth, improvement of the operation efficiency, which partially offset by increasing administrative expenses mainly due to the share-based compensation expense increase.

Adjusted EBITDA

The adjusted EBITDA[2] of the Group increased by 73.7% from approximately US$35.0 million for the year ended December 31, 2020 to approximately US$60.8 million for the year ended December 31, 2021. The adjusted EBITDA margin of the Group increased from 27.8% for the year ended December 31, 2020 to 33.0% for the year ended December 31, 2021. The increase of the adjusted EBITDA margin mainly driven by the revenue growth as well as the improved operation efficiency.

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1 EBITDA represents net profit before (i) interest expenses; (ii) income tax expenses; and (iii) amortization and depreciation.

2 Calculation of adjusted EBITDA is modified and calculated as EBITDA for the Reporting Period, excluding the share-based compensation expenses, and gain or loss arising from financial liabilities measured as fair value through profit or loss to better reflect the Company's current business and operations.

FINANCIAL REVIEW *(Continued)*

Basic and Diluted Earnings Per Share

The basic earnings per share of the Group increased by 5.9% from US$0.0085 for the year ended December 31, 2020 to US$0.0090 for the year ended December 31, 2021. The diluted earnings per share of the Group increased by 4.8% from US$0.0083 for the year ended December 31, 2020 to US$0.0087 for the year ended December 31, 2021. The increase in the basic and diluted earnings per share was primarily due to the increase in the net profit as discussed above.

The adjusted basic earnings per share for the year ended December 31, 2021 amounted to US$0.0155, representing an increase of 55.0% as compared with that of US$0.0100 for the year ended December 31, 2020. The adjusted diluted earnings per share for the year ended December 31, 2021 amounted to US$0.0150, representing an increase of 54.6% as compared with that of US$0.0097 for the year ended December 31, 2020. The increase in both the adjusted basic and the adjusted diluted earnings per share was primarily due to the increase in the adjusted net profit as discussed in the above section headed "Net Profit and Net Profit Margin".

Non-IFRS Measures

To supplement the Group's consolidated financial statements which are presented in accordance with the IFRSs, the Company has provided adjusted net profit, adjusted net profit margin and adjusted basic and diluted earnings per share (excluding the share-based compensation expenses, amortization of acquired intangible assets from mergers and acquisitions and gain or loss arising from financial liabilities measured as fair value through profit or loss) as additional financial measures, which are not required by, or presented in accordance with, the IFRSs. The Company believes that the adjusted financial measures are useful for understanding and assessing underlying business performance and operating trends, and that the Company's management and investors may benefit from referring to these adjusted financial measures in assessing the Group's financial performance by eliminating the impact of certain unusual, non-recurring, non-cash and/or non- operating items that the Group does not consider indicative of the performance of the Group's business. However, the presentation of these non-IFRSs financial measures is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with the IFRSs. The adjusted results should not be viewed on a stand-alone basis or as a substitute for results under IFRSs.

FINANCIAL REVIEW *(Continued)*

Property, Plant and Equipment

The property, plant and equipment of the Group increased by 113.9% from approximately US$42.4 million as at December 31, 2020 to approximately US$90.7 million as at December 31, 2021, primarily as a result of the expansion of research, development and manufacturing capacities.

Right-of-Use Assets

The Group recorded approximately US$55.5 million right-of-use assets as at December 31, 2021, which increased by 39.4% from approximately US$39.8 million as at December 31, 2020. The increase was mainly due to the entering into of new leases in order to support business growth.

Goodwill

The goodwill of the Group increased by 187.1% from approximately US$24.9 million as at December 31, 2020 to approximately US$71.5 million as at December 31, 2021, which was primarily due to the goodwill arising from the acquisitions of Quintara, Heyan, and Ocean Ridge. No impairment of goodwill was recorded upon the management's assessment.

Intangible Assets

The Group recorded approximately US$31.7 million intangible assets by the year ended December 31, 2021, compared to US$14.8 million by the end of December 31, 2020, primarily consisting of customer relationship and non-competition clause acquired through business combinations.

Trade and Other Receivables and Prepayments

Trade and other receivables and prepayments of the Group increased by 55.7% from approximately US$27.3 million as at December 31, 2020 to approximately US$42.5 million as at December 31, 2021, primarily due to the growth of the Group's business.

FINANCIAL REVIEW (Continued)

Unbilled Revenue

The Group recorded 59.7% increase in unbilled revenue from approximately US$7.7 million as at December 31, 2020 to approximately US$12.3 million as at December 31, 2021, primarily due to the growth of the Group's business.

Structured Deposits

As at December 31, 2021, the Group recorded approximately US$4.1 million structured deposits to improve the return of available cash balance.

Trade and Other Payables

The trade and other payables of the Group increased by 89.4% from approximately US$19.8 million as at December 31, 2020 to approximately US$37.5 million as at December 31, 2021, primarily due to increases in (i) trade payables to third parties along with its business growth; (ii) salary and bonus payables in line with the expansion of the work force; and (iii) contingent consideration payables due to the acquisition of Quintara.

Advances from Customers

The Group has recorded 31.8% increase in advance from customers along with its business growth and improved credit control.

Liquidity and Capital Resources

The Group's bank balances and cash amounted to approximately US$144.6 million in total as at December 31, 2021, as compared to approximately US$212.1 million as at December 31, 2020, as a result of payments for purchase of property, plant and equipment and payments related to acquisition of subsidiaries, plus cash inflow from operating activities. The cash and cash equivalents held by the Company are composed of RMB, HK$, CAD and US$. Currently, the Group follows a set of funding and treasury policies to manage its capital resources and prevent risks involved.

FINANCIAL REVIEW *(Continued)*

Liquidity and Capital Resources *(Continued)*

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

	For the year ended December 31,	
	2021	2020
	US$'000	*US$'000*
Net cash generated from operating activities	**44,549**	31,654
Net cash used in investing activities	**(107,443)**	(25,892)
Net cash used in financing activities	**(5,544)**	(2,913)
Net (decrease)/increase in cash and cash equivalents	**(68,438)**	2,849
Cash and cash equivalents at the beginning of the year	**212,087**	207,752
Effect of exchange rate changes	**980**	1,486
Cash and cash equivalents at the end of the year	**144,629**	212,087

Capital Expenditures

Our principal capital expenditures relate primarily to purchases of property, plant and equipment, and intangible assets in relation to the expansion and enhancement of our facilities and purchases of equipment and intangible assets used in providing our services. US$50.6 million capital expenditures were incurred for the year ended December 31, 2021, which increased by 235.1% when compared to US$15.1 million for the year ended December 31, 2020, primarily due to the expansion and enhancement of our facilities and purchases of laboratory equipment to support our services.

Indebtedness

Borrowings

As at December 31, 2021, the Group did not have material borrowings.

FINANCIAL REVIEW *(Continued)*

Indebtedness *(Continued)*

Lease Liabilities

The Group leased some of our equipment and facilities under lease agreements with lease terms of three to twenty five years and right-of-use assets agreements. The Group recorded approximately US$57.8 million lease liabilities as at December 31, 2021, compared to approximately US$40.6 million as at December 31, 2020 due to entering into new leases in order to support business growth.

Contingent Liabilities and Guarantees

As at December 31, 2021, the Group did not have material contingent liabilities nor guarantees.

Currency Risk

The functional currency of the Company and the operating subsidiaries incorporated in the USA is US$. The functional currency of the PRC operating subsidiaries is RMB. The functional currency of the operating subsidiary incorporated in Canada is CAD. Particularly, the PRC operating subsidiaries have foreign currency sales and purchases, which expose the Group to foreign currency risk.

The PRC operating subsidiaries are mainly exposed to foreign currencies of US$ and Euro. The Group does not use any derivative contracts to hedge against its exposure to currency risk. The Group seeks to limit its exposure to foreign currency risk by closely monitoring and minimizing its net foreign currency position.

Gearing Ratio

Gearing ratio is calculated using interest-bearing borrowings less cash and cash equivalents and structured deposits, divided by total equity and multiplied by 100%. The gearing ratios were -28.1% and -60.2% as at December 31, 2021 and 2020, respectively. Our gearing ratios were negative as of December 31, 2021 and December 31, 2020, because our cash and cash equivalents and structured deposits exceeded our interest-bearing borrowings.

FINANCIAL REVIEW *(Continued)*

Employees and Remuneration Policies

As at December 31, 2021, the Group had a total of 1,322 employees, of whom 567 were located in North America and 755 were located in China; 1,076 were scientific and technical support staff and 246 were sales, general & administrative staff. Approximately 85% of employees hold a bachelor's degree or above, and we have 469 employees that hold an advanced degree (a master's level degree or higher such as Ph.D, M.D. or other doctorate level degrees).

The staff costs, including Directors' emoluments but excluding any contributions to retirement benefit scheme contributions and share-based compensation expenses, were approximately US$73.7 million for the year ended December 31, 2021, as compared to approximately US$49.8 million for the year ended December 31, 2020. The remuneration packages of employees generally include salary and bonus elements. In general, the Group determines the remuneration packages based on the qualifications, position and performance of its employees. The Group also makes contributions to pension schemes, social insurance funds, including basic pension insurance, medical insurance, unemployment insurance, childbirth insurance, work-related injury insurance funds, and housing reserve fund as applicable to the countries where the Group operates.

As at the date of this report, the Group has adopted the Pre-IPO Share Incentive Plans, the 2018 Share Incentive Plan and the 2021 Share Award Scheme to provide incentives or rewards to eligible participants for their contribution or potential contribution to the Group.

In addition, the Group has training systems, including orientation and on-the-job training for all staff, to accelerate the learning progress and improve the knowledge and skill levels of its workforce. The Group also has a training program for senior management that focuses on management skills, conflict resolution and effective communication skills and sessions on how to recruit and retain talent. The orientation process covers corporate culture and policies, work ethics, introduction to the drugs development process, quality management and occupational safety. The periodic on-the-job training covers certain technical aspects of the Group's services, environmental, health and safety management systems and mandatory training required by applicable laws and regulations.

Biographical details of the Directors and senior management of the Group are set out as follows:

DIRECTORS

Executive Directors

Dr. Song Li ("**Dr. Song Li**"), aged 64, was appointed as the Chief Executive Officer of the Company and a Director and designated as an executive Director and Chairman on February 10, 2021. He is also a member of the Remuneration Committee and Nomination Committee.

In 2001, he founded Frontage Labs and has been the chief executive officer of Frontage Labs ever since and remains a driving force behind the Group's strategic, technical and commercial success. His visionary leadership of Frontage Labs has earned him widespread respect in the industry and within the Group.

Prior to joining the Group, Dr. Song Li held management positions at Great Valley Pharmaceuticals and Wyeth. During that period of time, he led numerous projects related to the development of pharmaceutical products. Dr. Song Li was formerly a director in the second session and the third session of the board of directors of Hangzhou Tigermed, a company listed on the Shenzhen Stock Exchange under stock code 300347 and on the Stock Exchange under stock code 3347, from August 2014 to April 2018.

Dr. Song Li has authored more than 15 scientific publications spanning a wide range of topics, including chiral separations, drug-protein interactions, pharmacokinetics, and analytical chemistry. Dr. Song Li has been the recipient of numerous awards, most recently the Healthcare CEO award from Philadelphia Alliance for Capital and Technologies, the Ernst & Young Entrepreneur of the Year Award, the "Realizing the American Dream" award from the Pennsylvania Welcoming Society, and the Outstanding 50 Asian Americans in Business Award from the Asian American Business Development Center.

Dr. Song Li received his PhD degree in analytical chemistry from McGill University, Canada in 1992 and a Bachelor of Science in chemistry from Zhengzhou University, China.

Dr. Zhihe Li ("**Dr. Li**"), aged 67, was appointed as a Director on April 16, 2018 and designated as an executive Director on June 20, 2018. Dr. Li resigned as the chairman and Chief Executive Officer of the Company and ceased to be a member of the Remuneration Committee and Nomination Committee with effect from February 10, 2021.

DIRECTORS *(Continued)*

Executive Directors *(Continued)*

Dr. Li served as the Chief Executive Officer of the Company from April 17, 2018 to February 10, 2021. He has also served as the senior vice president of Frontage Labs since April 2007, responsible for its China operations. Before joining Frontage Labs, he worked at Scios Inc. (subsequently acquired by Johnson & Johnson in 2003) as a group leader. Prior to that, he worked at Megabios Corporation (Valentis, Inc.) as a scientist.

Dr. Li also possesses extensive academic experience. He was a scientist at the National Institutes of Health, United States. Dr. Li received his M.D. degree majoring in medicine from Norman Bethune University of Medical Sciences, China in August 1978 and his PhD degree from McGill University, Canada in May 1993. He received the Merit Award for Outstanding Research from the National Institutes of Health, United States, in September 1995. He is an owner of two medical patents and has contributed to many scientific publications.

Non-executive Director

Mr. Jun Gao ("**Mr. Gao**"), aged 46, was appointed as a Director on April 17, 2018 and designated as a non-executive Director on June 20, 2018. He is a member of the Audit and Risk Management Committee.

Mr. Gao has been the chief financial officer of Shanghai Duoning Biotechnology Co., Ltd. ("**Shanghai Duoning**") since September 2021. He is responsible for the overall leadership, direction and management of Shanghai Duoning's financial operations. From November 2016 to September 2021, Mr. Gao worked at Hangzhou Tigermed as the board secretary, deputy general manager and chief financial officer, primarily responsible for its overall financial management, disclosure control and investor relations. Prior to this and until October 2016, he was the chief financial officer and board secretary of Shanghai Xiaoi Robot Technology Corporation Limited, a company that was listed on the National Equities Exchange and Quotations in the PRC with stock code 834869. From May 2011 to December 2015, he was the chief financial officer and board secretary of McWong Environmental Technology Corporation Limited. Prior to that, Mr. Gao held various positions in Hong Kong Shanghai Alliance Holdings Limited, formerly known as Van Shun Chong Holdings Limited, a company listed on the Hong Kong Stock Exchange with stock code 1001, City North Infrastructure Pty Ltd., Rio Tinto Group, a company listed on the London Stock Exchange, Australian Securities Exchange and New York Stock Exchange with stock code RIO, and Felix Resources Ltd, a company that was listed on the Australian Securities Exchange with stock code FLX. From May 2001 to June 2007, he worked at Foster Wheeler AG, a company listed on NASDAQ with stock code FWLT, taking up different roles including the China finance manager, chief compliance officer and project control director. Prior to that, he worked in the business assurance and advisory section of PricewaterhouseCoopers Business Consulting (Shanghai) Co., Limited.

DIRECTORS *(Continued)*

Non-executive Director *(Continued)*

Mr. Gao received his bachelor's degree from Shanghai University of Finance & Economics, China in June 1997, majoring in international accounting. He is a Certified Public Accountant in China, an internationally accredited Certified Internal Auditor, an Associate of the Chartered Institute of Management Accountants (UK), a member of the Association of International Certified Professional Accountants (US & UK) and a Fellow of the Association of Chartered Certified Accountants (UK).

Independent Non-executive Directors

Mr. Yifan Li ("**Mr. Li**"), aged 54, was appointed as an independent non-executive Director on April 17, 2018. He is the chairman of the Audit and Risk Management Committee and a member of the Remuneration Committee.

Mr. Li has extensive experience in corporate financial management. His experience spans across various industries such as automotive, insurance, port operations, environmental services, online financing and real estate development and management in both United States and China.

Mr. Li has been the chief financial officer of Human Horizons Group Inc. since April 2021 and the vice president of Zhejiang Geely Holding Group ("**Geely**") since October 2013, responsible for the strategic investments and new business. Prior to joining Geely, he had held the role of chief financial officer in China Zenix Auto International Limited (stock code: ZXAIY) from December 2010 to February 2014, which is a company listed on the New York Stock Exchange. Mr. Li was also a director of Zhejiang Qianjiang Motorcycle Co., Ltd. (stock code: 000913) from November 2016 to April 2018 and an independent non-executive Director of Zhejiang Tiantie Industry Co., Ltd. (stock code: 300587) from December 2017 to April 2021, both listed on the Shenzhen Stock Exchange, an independent director of Heilongjiang Interchina Water Treatment Co., Ltd. (stock code: 600187) from May 2015 to April 2021 and Shanghai International Port Group Co., Ltd. (stock code: 600018) from September 2015 to September 2021, both listed on the Shanghai Stock Exchange and an independent non-executive director of ZhongAn Online P & C Insurance Co., Ltd. (stock code: 6060) from December 2016 to July 2021, a company listed on the Hong Kong Stock Exchange.

Mr. Li received his MBA from the University of Chicago Booth School of Business, United States, in June 2000, his Master of Science in Accounting from University of Texas at Dallas, United States, in May 1994, and his Bachelor of Economics in World Economy from Fudan University, China, in July 1989.

DIRECTORS *(Continued)*

Independent Non-executive Directors *(Continued)*

Mr. Li has been an independent non-executive director of Everest Medicines Limited (stock code: 1952) since September 2020 and Xinyuan Property Management Service (Cayman) Ltd. (stock code: 1895) since September 2019 (which are companies listed on the Hong Kong Stock Exchange), Shanghai Jinqiao Export Processing Zone Development Co., Ltd. (stock codes: 600639 (A shares), 900911 (B shares)) since June 2019 (which is a company listed on the Shanghai Stock Exchange), 36Kr Holdings Inc. (stock code: KRKR) since November 2019 (which is a company listed on NASDAQ), Sunlands Technology Group (stock code: STG) since July 2019, Qudian Inc. (stock code: QD) since October 2017 and Xinyuan Real Estate Co., Ltd. (stock code: XIN) since February 2017, which are companies listed on the New York Stock Exchange.

Notwithstanding Mr. Li's directorship in seven other listed companies, all such directorships are non-executive in nature. Mr. Li has maintained his professionalism in various directorships of listed companies he has served and has actively participated in Board meetings and Audit and Risk Management Committee meetings during the Reporting Period. Accordingly, the Board is of the view that he is able to devote sufficient time and attention to perform his duties as an independent non-executive Director.

Mr. Erh Fei Liu ("**Mr. Liu**"), aged 63, was appointed as an independent non-executive Director on April 17, 2018. He is a member of each of the Audit and Risk Management Committee and Nomination Committee.

Mr. Liu is currently a founding partner and chief executive officer of Asian Investment Capital. He was a co-founder of Cindat Capital Management Limited ("**Cindat**"), a global real estate investment platform. Prior to founding Cindat, he was an investment banker. From December 1999 to July 2012, he was the Managing Director of Merrill Lynch, based in Hong Kong. He was awarded the Asian Banker Skills-based Achievements Award in investment banking in 2006 by The Asian Banker.

From 1992 to 1994, he worked at Goldman Sachs Group, Inc. as the head of investment banking for China. From May 1987 to March 1990, he worked as an associate at Goldman Sachs Group, Inc's New York and Tokyo offices.

Mr. Liu graduated from Harvard Business School, United States, in June 1987 with a master's degree in business administration, from Brandeis University, United States, in May 1984 with a Bachelor of Arts degree in economics and from the Beijing Foreign Studies University, China, in 1981.

DIRECTORS *(Continued)*

Independent Non-executive Directors *(Continued)*

Mr. Liu has been an independent non-executive director of Qingling Motors Company Limited since May 2015 (which is listed on the Hong Kong Stock Exchange with stock code 1122), Jiangxi Copper Company Limited since July 2016 (which is a company listed on the Hong Kong Stock Exchange with stock code 0358 and listed on the Shanghai Stock Exchange with Stock code 600362), and 21Vianet Group, Inc. (stock code: VNET) since May 2015 (which is listed on NASDAQ). Mr. Liu was an independent non-executive director of Fortunet e-Commerce Group Limited (now known as Changyou Alliance Group Limited), a company listed on the Hong Kong Stock Exchange with stock code 1039, from March 2015 to April 2017.

Dr. Jingsong Wang ("**Dr. Wang**"), aged 57, was appointed as an independent non-executive Director on April 17, 2018. He is the chairman of each of the Remuneration Committee and Nomination Committee.

Dr. Wang is the chief executive officer of Harbour BioMed Shanghai Co., Ltd. since December 2016, a global biotech company specializing in developing biological therapeutics in the areas of immunology and inflammatory diseases with operations in Boston, Rotterdam and Shanghai. From November 2011 to December 2015, he was the Head of China R&D of Sanofi (China) Investment Co., Ltd. Dr. Wang has been an executive director, the chief executive officer and chairman of the board of HBM Holdings Limited since July 2016 (which is a company listed on the Hong Kong Stock Exchange with stock code 2142).

Dr. Wang received his PhD degree from China Pharmaceutical University in June 2011, majoring in microbiology and biochemical pharmacy. Dr. Wang was a medical physician and surgeon in Pennsylvania, United States.

Dr. Wang has published in numerous leading scientific journals related to inflammation, autoimmune diseases and translational medicine.

Dr. Wang currently serves on the board of directors of Silicon Therapeutics LLC, a Boston based biotech company focusing on the design of novel small molecule therapeutics in highly unmet disease areas since August 2016.

SENIOR MANAGEMENT

Mr. Jianmin (Andrew) Wang ("**Mr. Wang**"), aged 51, has been the chief financial officer of the Company and Frontage Labs since October 2020, responsible for the management of all aspects of the Group's finance and treasury matters. Prior to joining the Company, Mr. Wang was the chief financial officer of Frontida BioPharm, Inc., a contract development and manufacturing organization in the United States of America. Previously, he was the chief financial officer and the director of the board of Sky Solar Holdings, Ltd. (stock code: SKYS), a NASDAQ listed company, from May 2011 to September 2018. Before that, he served as finance director or controller in different multinational companies, mainly in the Asia Pacific area.

Mr. Wang received his bachelor's degree in accounting from University of Shanghai for Science and Technology in July 1993 and an executive master of business administration from Washington University in St. Louis in December 2004. Mr. Wang is a professional accountant, having been a member of the China Institute of Certified Public Accountant since August 1995.

Dr. Zhongping (John) Lin ("**Dr. Lin**"), aged 58, has been an executive vice president of the Company and Frontage Labs since 2017, responsible for bioanalytical and biologics services. From 2007 to 2017, he was a senior vice president of Frontage Labs, responsible for bioanalytical and biologics services. Before joining Frontage Labs, he worked at AstraZeneca Pharmaceuticals LP as a scientist and later on was responsible for global DMPK business. Prior to this, he worked at Avantix Laboratories, Inc. as a senior research scientist and a manager of bioanalytical chemistry from 2000 to 2005.

Dr. Lin also has extensive research and academic experience. He was a research associate at the James Cancer Hospital and Research Institute, Ohio State University, United States. From 1998 to 1999, he was a postdoctoral fellow at the Institute of Ocean Sciences, the Department of Fisheries and Oceans, Canada. Previously, he was a research and teaching assistant at Dalhousie University, United States. From 1987 to 1993, he was an analytical chemist and director at the Modern Instrumental Analysis Laboratory, Yunnan University.

Dr. Lin received his bachelor's degree majoring in chemistry from Fuzhou Teacher's College (now known as Minjian University), China in August 1982, his master's degree majoring in analytical chemistry from Yunnan University, China, in October 1987, and his PhD degree majoring in chemistry from Dalhousie University, Canada, in May 1998. He has also completed post-doctoral research in pharmacokinetics and metabolism at the College of Pharmacy and the Comprehensive Cancer Center of the Ohio State University. He is a member of the American Chemical Society in 2005 and a member of the American Association of Pharmaceutical Scientists. In addition, he is an author of numerous scientific publications.

SENIOR MANAGEMENT *(Continued)*

Dr. Dongmei Wang ("**Dr. Wang**"), (with former name as 王東梅), aged 58, has been an executive vice president of the Company and Frontage Labs since June 2017, being responsible for global CMC services. She has been working at Frontage Labs since February 2007. From February 2007 to May 2010, she was the vice president, responsible for analytical R&D and project management. From May 2010 to June 2017, she was the senior vice president and general manager, responsible for CMC services. Prior to joining the Group, she worked at NovaDel Pharma Inc. as the director of analytical chemistry.

Dr. Wang received her bachelor's degree in Chemistry from Peking University, China, in July 1984, her master's degree in nuclear chemical engineering from the China Institute of Atomic Energy, China, in July 1987, and her PhD degree in inorganic chemistry from Iowa State University, United States in May 1995. In addition, she has obtained the research excellence award from Iowa State University in May 1995.

Dr. Abdul Ezaz Mutlib ("**Dr. Mutlib**"), aged 61, has been an executive vice president of the Company and Frontage Labs since June 2017, being responsible for our DMPK services. From February 2010 to December 2017, he was the vice president of Frontage Labs. Before joining the Group, he was a director of Wyeth Pharmaceuticals, Inc/Pfizer Inc. Prior to that, he was an associate director of Pfizer Global Research and Development Ann Arbor Laboratories, United States, a senior research associate of DuPont Pharmaceuticals and a research associate of Hoechst-Roussell Pharmaceuticals Company.

Dr. Mutlib received his bachelor's degree in pharmacy and his PhD degree in pharmaceutical chemistry from the University of Sydney, Australia in 1983 and 1987, respectively. He has also completed post-doctoral fellowships at the University of Washington and the University of British Columbia, Canada.

Dr. Mutlib has been a member of the American Society for Mass Spectrometry since 1990. He has also received numerous awards, including the DuPont Merck Summit Award in 1997, and the Wyeth Team of the Year Award (Quantitative NMR Leader) in 2009. He is also an author of numerous scientific articles and an owner of four patents.

SENIOR MANAGEMENT *(Continued)*

Mr. Glenn Washer ("**Mr. Washer**"), aged 56, was appointed as the president of North American operations in February 2021 and is responsible for overall operations support of the Group's North American businesses, leading development and implementation of short-term and long-term strategic initiatives, establishing and tracking business Key Performance Indicator (KPI), guiding continuous improvement initiatives, resource management, allocation & prioritization, and regulatory compliance. From March 2020 to January 2021, Mr. Washer was the executive vice president for Global Safety and Toxicology of Frontage Labs. Mr. Washer has more than 35 years of experience in increasingly responsible roles within the realm of Safety and Toxicology at various companies. Prior to joining Frontage Labs, Mr. Washer served as the president of Charles River Laboratories, Montreal, Canada and as the corporate senior vice president, for Charles River's North America Safety Assessment sites. He brings a wealth of knowledge and experience to his new role, including extensive executive management experience and profit and loss (P&L) responsibility in regulated contract research and biopharmaceuticals industries with emphasis on multi-site, multi-national CRO management and research and development. Mr. Washer has in-depth knowledge and experience in operations management, merger and acquisition due diligence, integration of new acquisitions, organizational restructuring, and strategic planning. Mr. Washer graduated from McGill University in 1989 with a bachelor's degree in physiology and was certified in General Toxicology by the American Board of Toxicology in 1999.

Mr. Yining Qi ("**Mr. Qi**"), aged 59, appointed as the president of China operations in August 2020, is responsible for overall operations and support of Frontage's operations in China. Mr. Qi joined Frontage in August 2020, and has brought extensive experience in drug development and management served in executive roles with CrownBio, Wuxi AppTec, Merck, Becton Dickinson and other highly regarded organizations. Mr. Qi received a Master of Business Administration in Pharmaceutical Management from Rutgers University in 2007, a Master of Science in Computer Science from Southeastern University in 1999, a Master of Public Health from Shanxi Medical University in 1991, and a Bachelor of Medicine (M.D. equivalent) from Shanxi Medical University in 1984.

Mr. Matt Vaneman ("**Mr. Vaneman**"), aged 47, appointed as the senior vice president, Operational Excellence & Procurement of Frontage Labs in August 2020, is responsible for identifying and implementing operational efficiencies and best practices across the business units and for oversight of Frontage Labs' purchasing and procurement. Mr. Vaneman has more than 20 years of demonstrated success leveraging strategic leadership vision while developing, mentoring, and leading highly skilled, cross-functional teams for productivity, compliance, safety, and operational excellence. His most recent position was with Charles River Laboratories as the vice president of Operational Excellence, a position which included the oversight of multiple Charles River sites and post-acquisition integration teams. Mr. Vaneman received his bachelor of science in biology from Philadelphia College of Pharmacy and Science.

SENIOR MANAGEMENT *(Continued)*

Mr. Richard Fischetti ("**Mr. Fischetti**"), aged 39, was appointed as the vice president and general counsel of Frontage Labs in March 2020 and is responsible for all of the Group's legal matters. Mr. Fischetti brings to the Group extensive legal experience, having led numerous strategic transactions for both public and private companies – including mergers & acquisitions, and joint ventures, as well as advising on matters related to corporate governance and shareholder activism. Prior to joining Frontage Labs, Mr. Fischetti was a partner in the Mergers & Acquisitions Group of Shearman & Sterling LLP, a multinational law firm headquartered in New York City, where he practiced for over a decade.

Mr. Fischetti earned his Bachelor of Art and Juris Doctor (JD) from Rutgers University.

COMPANY SECRETARY

Ms. Karen Ying Lung Chang ("**Ms. Chang**"), aged 58, was appointed as the Company Secretary of the Company on June 20, 2018. She has been an associate solicitor at Chiu & Partners since April 2000, a law firm specializing in listings in Hong Kong and other general commercial transactions.

Ms. Chang received her Bachelor of Arts degree from Tamkang University, Taiwan, in June 1988. She then received her Hong Kong Common Professional Examination Certificate in Laws and Post-graduate Certificate in Laws from the University of Hong Kong, Hong Kong, in June 1996 and June 1997, respectively.

REPORT OF DIRECTORS

The Directors are pleased to present to the Shareholders their report and the audited consolidated financial statements of the Group for the year ended December 31, 2021 (the "**Consolidated Financial Statements**").

PRINCIPAL ACTIVITIES

The principal activities of the Group are to provide laboratory and related services to pharmaceutical, biotechnology companies and agrochemical companies as well as bioequivalence studies. During the Reporting Period, there were no significant changes in the nature of the Group's principal activities.

The particulars of the Company's principal subsidiaries are set out in Note 42 to the Consolidated Financial Statements.

BUSINESS REVIEW

A review of the business of the Group including a discussion and analysis of the Group's performance during the Reporting Period and the material factors underlying its financial performance and financial position, events after the Reporting Period as well as an indication of likely future development in the Group's business as required by section 388(2) and Schedule 5 to the Companies Ordinance (Chapter 622 of the Laws of Hong Kong) are included in the sections headed "Chairman's Statement" and "Management Discussion and Analysis" of this annual report, respectively. The future development of the Group's business is discussed in the sections headed "Chairman's Statement" and "Management Discussion and Analysis" of this annual report. In addition, further details regarding the Group's principal risks and uncertainties are included in the section of this annual report. The sections headed "Chairman's Statement" and "Management Discussion and Analysis" form part of this Directors' Report.

RESULTS

The results of the Group for the Reporting Period and the Group's financial position as at December 31, 2021 are set out in the Consolidated Financial Statements and their accompanying notes on pages 113 to 239 of this annual report.

DIVIDEND POLICY

The Company has adopted a dividend policy, which sets out the approach in recommending dividends, to allow the Shareholders to participate in the Company's profits and enable the Company to retain adequate reserves for future growth. Before declaring or recommending dividends, the Board shall take into account, among other things, the financial results, the earnings, losses and distributable reserves, the operations and liquidity requirements, the debt ratio and possible effects on the credit lines, and the current and future development plans of the Company. The form, frequency and amount of dividend payment by the Company are subject to any restrictions under the memorandum and articles of association of the Company, the applicable laws and regulations of Hong Kong and the Cayman Islands and any other laws and regulations applicable to the Company.

The Board has resolved not to recommend payment of any final dividend for the Reporting Period.

ANNUAL GENERAL MEETING

The annual general meeting ("**AGM**") of the Company is scheduled to be held on Thursday, May 26, 2022. A notice convening the AGM will be published and dispatched to the Shareholders in due course.

CLOSURE OF REGISTER MEMBERS

For determining the entitlement to attend and vote at the AGM, the register of members of the Company will be closed from Monday, May 23, 2022 to Thursday, May 26, 2022, both dates inclusive, during which period no transfer of Shares will be registered. In order to be eligible to attend and vote at the AGM, all share transfer forms accompanied by the relevant share certificates must be lodged with the Company's branch share registrar and transfer office in Hong Kong, Tricor Investor Services Limited, at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong, for registration not later than 4:30 p.m. on Friday, May 20, 2022.

FINANCIAL SUMMARY

A summary of the published results and the assets and liabilities of the Group in the form of a comparative table for the last five financial years is set out in the section headed "Financial Highlights" of this annual report. This summary does not form part of the Consolidated Financial Statements.

PROPERTY, PLANT AND EQUIPMENT

Details of movements in property, plant and equipment of the Group during the Reporting Period are set out in Note 16 to the Consolidated Financial Statements.

SHARE CAPITAL

Details of the movements in the share capital of the Company are set out in Note 33 to the Consolidated Financial Statements.

RESERVES

Details of movements in the reserves of the Company and the Group during the Reporting Period are set out in the section headed "Consolidated Statement of Changes in Equity" in the Consolidated Financial Statements.

DISTRIBUTABLE RESERVES

As at December 31, 2021, the aggregate amount of reserves available for distribution to the Shareholders, as calculated under the Companies Law of the Cayman Islands, was approximately US$72 million.

TAX RELIEF AND EXEMPTION

The Company is not aware of any tax relief and exemption available to the Shareholders by reason of their holding of the Shares.

BANK BORROWINGS

Particulars of the bank borrowings of the Group as at December 31, 2021 are set out in Note 29 to the Consolidated Financial Statements

CHARITABLE CONTRIBUTIONS

During the Reporting Period, the Group made charitable contributions totalling approximately US$0.2 million (2020: approximately US$0.5 million).

MAJOR CUSTOMERS AND SUPPLIERS

Sales to the Group's five largest customers accounted for approximately 22.0% of the total revenue of the Group for the Reporting Period whilst sales to the largest customer accounted for approximately 14.1% of the total revenue of the Group for the Reporting Period.

Purchases from the Group's five largest suppliers accounted for approximately 20.1% of the Group's total purchases during the Reporting Period whilst purchases from the largest supplier accounted for approximately 5.6% of the total purchases of the Group for the Reporting Period.

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

DIRECTORS

The Directors during the Reporting Period and up to the date of this annual report were:

Executive Directors
Dr. Song Li, Chairman and Chief Executive Officer (appointed on February 10, 2021)
Dr. Zhihe Li

Non-executive Director
Mr. Jun Gao

Independent Non-executive Directors
Mr. Yifan Li
Mr. Erh Fei Liu
Dr. Jingsong Wang

DIRECTORS *(Continued)*

Pursuant to Article 84(1) of the Articles of Association, at each annual general meeting, one-third of the Directors for the time being (or, if their number is not a multiple of three, the number nearest to but not less than one-third) shall retire from office by rotation provided that every Director shall be subject to retirement at an annual general meeting at least once every three years. Pursuant to Article 84(2) of the Articles of Association, a retiring Director shall be eligible for re-election and shall continue to act as a Director throughout the meeting at which he retires and any Director appointed by the Board pursuant to Article 83(3) shall not be taken into account in determining which particular Directors or the number of Directors who are to retire by rotation. The Directors to retire by rotation shall include (so far as necessary to ascertain the number of directors to retire by rotation) any Director who wishes to retire and not to offer himself for re-election. Any further Directors so to retire shall be those of the other Directors subject to retirement by rotation who have been longest in office since their last re-election or appointment and so that as between persons who became or were last re-elected Directors on the same day those to retire shall (unless they otherwise agree among themselves) be determined by lot.

Accordingly, pursuant to Article 84 of the Articles of Association, Mr. Erh Fei Liu and Dr. Jingsong Wang will retire from office at the forthcoming AGM and, being eligible, will offer themselves for re-election at the AGM.

DIRECTORS' AND SENIOR MANAGEMENT'S BIOGRAPHIES

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

CHANGES IN DIRECTORS' BIOGRAPHICAL DETAILS

Changes in information of the Directors since the publication of the interim report of the Company for the six months ended June 30, 2021, which is required to be disclosed pursuant to Rule 13.51B(1) of the Listing Rules, are set out below:

- Mr. Yifan Li, an independent non-executive Director of the Company, has resigned as an independent director of Shanghai International Port Group Co., Ltd. (Stock Code: 600018), a company listed on the Shanghai Stock Exchange since September 2021.

Save for the information disclosed above, there is no other information required to be disclosed pursuant to Rule 13.51B(1) of the Listing Rules.

INDEPENDENCE OF THE INDEPENDENT NON-EXECUTIVE DIRECTORS

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

DIRECTORS' SERVICE AGREEMENT

Each Director is appointed under a letter of appointment for a term of three years from his respective date of appointment which is terminable by either party by giving three months' written notice to the other party.

None of the Directors proposed for re-election at the AGM has an unexpired letter of appointment which is not determinable by the Company or any of its subsidiaries within one year without payment of compensation, other than statutory compensation.

DIRECTORS' REMUNERATION

The Directors' fees and other emoluments are supervised by the Remuneration Committee and determined by the Board with reference to the Directors' duties, responsibilities and performance and the results of the Company as well as the prevailing market conditions.

The Company was not aware of any arrangement under which a Director has waived or agreed to waive any emoluments. Details of the remuneration of the Directors and the Group's five highest-paid individuals are set out in Note 12 and Note 13 to the Consolidated Financial Statements of this annual report, respectively.

DIRECTORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS

Save as disclosed in Note 40 to the Consolidated Financial Statements and in the section headed "Connected Transactions" below, no Director nor an entity connected with a Director had a material interest, either directly or indirectly, in any transaction, arrangement or contract of significance to the business of the Group to which the Company's holding company, or any of its subsidiaries or fellow subsidiaries was a party during or at the end of the Reporting Period.

MANAGEMENT CONTRACTS

During the Reporting Period, the Company has not entered into any contract with any individuals, firm or body corporate to manage or administer the whole or any substantial part of any business of the Group

CONTRACTS WITH CONTROLLING SHAREHOLDERS

No contract of significance has been entered into among the Company or any of its subsidiaries and the Controlling Shareholders during the Reporting Period.

PERMITTED INDEMNITY PROVISION AND DIRECTORS' AND OFFICERS' LIABILITY INSURANCE

The Articles of Association provide that the Directors or other officers of the Company are entitled to be indemnified and secured harmless out of the assets and profits of the Company from and against all actions, costs, charges, losses, damages and expenses which they or any of them shall or may incur or sustain by or by reason of any act done, concurred in or omitted in or about the execution of their duty, or supposed duty, in their respective offices.

The Company has arranged appropriate Directors' and officers' liability insurance coverage for the Directors and officers of the Company during the Reporting Period.

DIRECTORS TO ACQUIRE SHARES OR DEBENTURES

At no time during the Reporting Period was the Company or any of its subsidiaries, the holding company, a party to any arrangement to enable a Director to acquire benefits by means of the acquisition of Shares in, or debentures of, the Company or any other body corporate.

DIRECTORS' INTERESTS IN COMPETING BUSINESSES

During the Reporting Period, none of the Directors is considered to have interests in businesses which compete or are likely to compete, either directly or indirectly, with the businesses of the Group pursuant to the Listing Rules.

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES OR DEBENTURES

As at December 31, 2021, the interests or short positions of the Directors and chief executives of the Company in the Shares, underlying Shares and debentures of the Company or any associated corporation (within the meaning of Part XV of the SFO), which (a) were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which he/she was taken or deemed to have under such provisions of the SFO); or (b) were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein; or (c) were required to be notified to the Company and the Stock Exchange pursuant to the Model Code, were as follows:

Long Positions in the Shares and underlying Shares

Name of Director	Capacity/Nature of Interest	Number of Shares and underlying shares[3]	Approximate percentage of shareholding interest[4]
Dr. Song Li[1]	Beneficial owner/Trustee	168,441,320	8.21%
Dr. Zhihe Li[2]	Beneficial owner	21,833,187	1.06%
Mr. Jun Gao[2]	Beneficial owner	2,000,000	0.10%

Notes:

1. Dr. Song Li was granted 4,700,000 share options pursuant to the 2015 Share Incentive Plan on February 28, 2019 and 1,850,000 Awarded Shares pursuant to the 2021 Share Award Scheme on January 25, 2021. As at December 31, 2021, Dr. Song Li is the beneficial owner of 25,083,050 Shares and is the founder and a trustee of each of The Linna Li GST Exempt Trust, The Wendy Li GST Exempt Trust and The Yue Monica Li GST Exempt Trust, which, as at December 31, 2021, hold 45,600,090 Shares, 45,602,090 Shares and 45,606,090 Shares respectively.

2. Dr. Zhihe Li was granted 4,500,000 share options pursuant to the 2015 Share Incentive Plan on February 28, 2019 and 1,250,000 Awarded Shares pursuant to the 2021 Share Award Scheme on January 25, 2021.

3. Mr. Jun Gao was granted 2,000,000 share options pursuant to the 2015 Share Incentive Plan on February 28, 2019.

4. The percentage is for illustrative purpose only, subject to rounding error, and is calculated based on the number of 2,051,455,410 Shares in issue as at December 31, 2021.

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES OR DEBENTURES *(Continued)*

Save as disclosed above and to the best knowledge of the Directors, as at December 31, 2021, none of the Directors or the chief executives of the Company had any interests and/or short positions in the Shares, underlying Shares or debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which 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 which were required, pursuant to the Model Code, to be notified to the Company and the Stock Exchange.

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

As at December 31, 2021, so far as the Directors are aware, the following persons (other than a Director or chief executive of the Company) and entities had interests or short positions in the Shares and underlying Shares of the Company 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 recorded in the register required to be kept by the Company under section 336 of the SFO:

Interests and Long Positions in Shares

Name of substantial Shareholder	Capacity/Nature of Interest	Number of Shares	Approximate percentage of shareholding interest[(2)]
Hongkong Tigermed	Beneficial owner	1,032,964,090	50.35%
Hangzhou Tigermed[(1)]	Interest of controlled corporation	1,032,964,090	50.35%

Notes:

1. Hangzhou Tigermed is deemed to be interested in the 1,032,964,090 Shares which Hongkong Tigermed, its wholly-owned subsidiary, is interested in as beneficial owner as Hongkong Tigermed.

2. The percentage is for illustrative purpose only, subject to rounding error, and is calculated based on the number of 2,051,455,410 Shares in issue as at December 31, 2021.

SUBSTANTIAL SHAREHOLDERS' INTERESTS IN SHARES AND UNDERLYING SHARES OF THE COMPANY *(Continued)*

Save as disclosed above and to the best knowledge of the Directors, as at December 31, 2021, no other persons (other than a Director or chief executive of the Company) or entities had any interests or short positions in the Shares or underlying Shares of the Company, 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 recorded in the register required to be kept by the Company under section 336 of the SFO.

SHARE OPTION SCHEMES

Details of the Company's Share Option Schemes are set out in Note 33 and Note 34 to the Consolidated Financial Statement.

Pre-IPO Share Incentive Plans

Frontage Labs has adopted the Pre-IPO Share Incentive Plans for the primary purpose of attracting, retaining and motivating the directors of Frontage Labs and employees of the Group. Under such plans, the directors of Frontage Labs may grant up to 9,434,434 share options under the 2008 Share Incentive Plan and 12,000,000 share options under the 2015 Share Incentive Plan to eligible employees, including the directors of Frontage Labs and employees of the Group, to subscribe for shares in Frontage Labs. Each option granted has a contractual term of 5 to 10 years and vests on one calendar year after the grant date.

On April 17, 2018, Frontage Labs assigned and the Company assumed and adopted the rights and obligations of Frontage Labs under the Pre-IPO Share Incentive Plans. The total outstanding share options under Pre-IPO Share Incentive Plans as at December 31, 2018 were 4,035,000 shares.

On February 28, 2019, the Company granted a total of 7,990,000 share options under the 2015 Share Incentive Plan to the eligible employees at an exercise price of US$2.00.

On May 11, 2019, upon the completion of the Capitalization Issue, the number of options granted to an eligible employee under the Pre-IPO Share Incentive Plans were adjusted to ten times of the original number of options held by that grantee. Accordingly, the exercise price was adjusted to 10% of the original exercise price.

SHARE OPTION SCHEMES *(Continued)*

Pre-IPO Share Incentive Plans *(Continued)*

Set out below are details of the movements of the outstanding options granted during the Reporting Period:

Category of participants	Date of grant	Exercise price per Share (US$)	Outstanding as at January 1, 2021	Granted during the Reporting Period	Exercised during the Reporting Period	Forfeited during the Reporting Period	Lapsed during the Reporting Period	Outstanding as at December 31, 2021	Vesting period
Directors									
Dr. Song Li	February 28, 2019	0.200	4,700,000	–	–	–	–	4,700,000	• 50% on December 31, 2019; • 25% on December 31, 2020; and • 25% on December 31, 2021[1]
Dr. Zhihe Li	February 28, 2019	0.200	4,500,000	–	–	–	–	4,500,000	• 50% on December 31, 2019; • 25% on December 31, 2020; and • 25% on December 31, 2021[1]
Mr. Gao Jun	February 28, 2019	0.200	2,000,000	–	–	–	–	2,000,000	• 50% on December 31, 2019; • 25% on December 31, 2020; and • 25% on December 31, 2021[1]
Senior management and other employees	March 31, 2010	0.016	–	–	–	–	–	–	March 31, 2011 (at 20%) and then at 5% on June 30, September 30, December 31 and March 31 of each year until options are fully exercisable[2]
	September 30, 2010	0.016	–	–	–	–	–	–	exercisable at any time[2]
	January 21, 2014	0.016	130,000	–	–	–	–	130,000	exercisable at any time[2]
	June 16, 2016	0.049	7,550,000	–	900,000	–	–	6,650,000	exercisable at any time[2]
	September 14, 2017	0.057	13,584,000	–	3,234,000	–	–	10,350,000	one-third in each of 2017, 2018 and 2019[2]
	February 28, 2019	0.200	48,999,000	–	9,843,500	487,500	–	38,668,000	• 50% on December 31, 2019; • 25% on December 31, 2020; and • 25% on December 31, 2021[1]
Total			81,463,000	–	13,977,500	487,500	–	66,998,000	

Notes:

(1) The option exercise period is five years from the date of grant.

(2) The option exercise period is ten years from the date of grant.

SHARE OPTION SCHEMES *(Continued)*

Pre-IPO Share Incentive Plans *(Continued)*

The exercise price of options outstanding ranges from US$0.016 to US$0.200.

The estimated fair value of the share options granted under the 2015 Share Incentive Plan in 2021 was approximately US$5,001,000. The fair value was calculated using the Black-Scholes model. There were no share options issued during the year ended December 31, 2021 and no more options may be granted under the Pre-IPO Share Incentive Plans upon the Listing of the Company. The equity-settled share based compensation recognised during the Reporting Period are as follow:

	The year ended December 31,	
	2020	**2021**
	US$	***US$***
Directors	95,000	**1,211,000**
Senior management and other employees	840,000	**6,306,000**

The major inputs into the model are as follows:

Grant date	**As at February 28, 2019**
Share price (US$)	0.22
Exercise price (US$)	0.20
Expected volatility	30.0%
Expected life (years)	5
Risk-free interest rate	2.5%
Expected dividend yield	–

Share price is determined as the total fair value of the Company's equity divided by the total number of shares. To determine the fair value of the Company's equity value as of grant date, the Group used primarily the discounted cash flow method under the income approach, using cash flow projections based on financial forecasts approved by management covering a five-year period as appropriate and a discount rate of 18% for the options granted on February 28, 2019. Management's assessment is that the Group will arrive at a stable growth stage after a five-year period. Cash flow beyond that five-year period has been extrapolated using a steady 3% growth rate. This growth rate does not exceed the long-term average growth rate for the market in which the Group operates. The result from the income approach was cross checked with the market approach, which incorporates certain assumptions, including the market performance of comparable listed companies, as well as the financial results and growth trends of the Group, to derive the total equity of the Group.

SHARE OPTION SCHEMES *(Continued)*

Pre-IPO Share Incentive Plans *(Continued)*

The risk-free interest rate was based on the market yield rate of U.S. government bonds with the term corresponding to the contractual life of the options. Expected volatility was determined by using the historical volatility of the comparable companies.

Changes in variables and assumptions may result in changes in the fair values of the share options.

The Group recognized total expenses of approximately US$7,517,000 for the Reporting Period (2020: approximately US$935,000) in relation to share options granted by the Company.

2018 SHARE INCENTIVE PLAN

On May 11, 2019, for the primary purpose of attracting, retaining and motivating the personnel of the Group, the Board of Directors approved a post-IPO incentive plan to grant share options, restricted share units and any other types of award to eligible employees, including the Directors and the employees of the Group. The total number of shares in respect of which the awards may be granted pursuant to the 2018 Share Incentive Plan and any other equity-based incentive plans of the Company is 200,764,091, being 9.79% of the Shares in issue as at the date of this annual report. No awards have been granted under the 2018 Share Incentive Plan as at December 31, 2021.

2021 SHARE AWARD SCHEME

The Company adopted the 2021 Share Award Scheme on January 22, 2021. The purposes of the 2021 Share Award Scheme are to recognize the contributions by certain employees of the Company, to give incentives thereto in order to retain them for the continual operation and development of the Group and to attract suitable personnel for further development of the Group. The 2021 Share Award Scheme does not constitute a share option scheme or an arrangement analogous to a share option scheme for the purpose of Chapter 17 of the Listing Rules and is a discretionary scheme of the Company. No Shareholders' approval is required for the adoption of the 2021 Share Award Scheme.

The total number of the Shares to be awarded pursuant to the 2021 Share Award Scheme shall not exceed 204,782,591 Shares, being 10% of the total issued share capital of the Company as at its adoption date. The maximum number of Shares which may be awarded to a selected grantee shall not in aggregate exceed 1% of the issued share capital of the Company as at the adoption date. Details of the 2021 Share Award Scheme are set out in the announcement of the Company dated January 22, 2021.

2021 SHARE AWARD SCHEME *(Continued)*

On January 25, 2021, the Board resolved to grant a total of 22,950,500 Awarded Shares to 184 Award Participants pursuant to the terms of the 2021 Share Award Scheme. Of the 22,950,500 Awarded Shares, (i)19,850,500 Awarded Shares were granted to 182 Non-connected Award Participants, all being employees of the Group who are not connected persons of the Company; and (ii) 3,100,000 Awarded Shares were granted to two Connected Award Participants, namely Dr. Zhihe Li and Dr. Song Li and were approved by the independent Shareholders at the 2021 AGM (as defined below). Please refer to the announcements of the Company dated January 26, 2021 and May 27, 2021 for further details.

The table below shows the details of movements of the awarded shares granted under the 2021 Share Award Scheme during the Reporting Period:

		Number of awarded shares					
Category of Participants	Date of Grant	As at January 1, 2021	Granted during the Reporting Period	Vested during the Reporting Period	Forfeited during the Reporting Period	As at December 31, 2021	Vesting Period
Directors							
Dr. Song Li	January 25, 2021	–	1,850,000	–	–	1,850,000	25% on January 24, 2022, 25% on January 24, 2023, 25% on January 24, 2024, and 25% on January 24, 2025
Dr. Zhihe Li	January 25, 2021	–	1,250,000	–	–	1,250,000	25% on January 24, 2022, 25% on January 24, 2023, 25% on January 24, 2024, and 25% on January 24, 2025
Other grantees							
182 employees	January 25, 2021	–	19,850,500	–	1,461,000	18,389,500	25% on January 24, 2022, 25% on January 24, 2023, 25% on January 24, 2024, and 25% on January 24, 2025
		–	22,950,500	–	1,461,000	21,489,500	

EQUITY-LINKED AGREEMENTS

Save for the Share Option Schemes, no equity-linked agreements were entered into by the Company during the Reporting Period

PRINCIPAL RISKS AND UNCERTAINTIES

The principal risks and uncertainties that may cause the Group's financial conditions or results to be materially different from the expected or historical results are described below:

(i) Operational Risks

The Group's operation is subject to its customers' demand for its outsourcing services which is subject to, among other things, their own financial performance, their decisions to acquire or develop in-house research and development capacity, their spending priorities, their budgetary policies and practices, the regulatory environment, and their desire to develop new products. In addition, changes in government policy may affect our customers' research and development spending, which in turn could have an impact on their demand for CRO services. Any reduction in research and development spending, or any substantial shift in our customers' research and development spending to projects which we are not competitive for, may adversely impact the demand for our services.

(ii) Business and Economic Risks

- The potential loss, delay or non-renewal of our contracts, or the non-payment by our customers for services that we have performed, could adversely affect our results.
- Our backlog may not convert to net revenue at our historical conversion rates.
- Our operating margins could decrease due to increased pricing pressure or other pressures, if we are unable to either achieve efficiencies in our operating expenses or grow revenues at a rate faster than expenses.
- We bear financial risk if we underprice our fixed-fee contracts or overrun cost estimates, and our financial results can also be adversely affected by failure to receive approval for change orders or delays in documenting change orders.
- If we are unable to successfully execute our growth strategies or manage our growth effectively, our results of operations or financial condition could be adversely affected.

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

(ii) Business and Economic Risks *(Continued)*

- Our success substantially depends on the collective performance, contributions, and expertise of our senior management team and other key personnel including qualified management, professional, scientific, and technical operating staff, and business development personnel. The departure of any key personnel or our inability to continue to identify, attract and retain qualified personnel or replace any departed personnel in a timely fashion, might impact our ability to grow our business and compete effectively in our industry and might negatively affect our business, financial condition, results of operations, cash flows, or reputation.

- Our acquisition strategy may present additional risks, including the risk that we may be unable to fully realize the competitive and operating synergies projected to be achieved through any specific acquisition. Acquisitions involve numerous risks, including the following: ability to identify suitable acquisition opportunities or obtain any necessary financing on commercially acceptable terms; increased risk to our financial position and liquidity through changes to our capital structure and assumption of acquired liabilities, including any indebtedness incurred to finance the acquisitions and related interest expense; assumption of liabilities and exposure to unforeseen liabilities of acquired companies; inability to achieve identified operating and financial synergies and other benefits anticipated to result from an acquisition; and difficulties retaining and integrating acquired personnel and distinct cultures into our business.

- The failure of third parties to provide us critical support services could materially adversely affect our business, financial condition, results of operations, cash flows or reputation.

(iii) International Risks

The Group's international operations are subject to international economic, political and other risks that could negatively affect our results of operations and financial condition.

The Group may be exposed to liabilities from failure to comply with foreign laws and regulations that differ from those under which the Group operates in North America and China, and any allegation or determination that we violated these laws could have a material adverse effect on our business.

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

(iii) International Risks *(Continued)*

Our Group may be adversely affected by other risks of expanded operations in foreign countries, including, but not limited to, including:

- the U.S. or other countries could enact legislation or impose regulations or other restrictions, including unfavourable labor regulations, tax policies, data protection regulations or economic sanctions, which could have an adverse effect on our ability to conduct business in or expatriate profits from the countries in which we operate;

- changes in reimbursement by foreign governments for services provided by the Group;

- compliance with export controls and trade regulations;

- changes in tax policies or other foreign laws; compliance with foreign labor and employee relations laws and regulations;

- restrictions on currency repatriation;

- judicial systems that less strictly enforce contractual rights; countries that do not have clear or well-established laws and regulations concerning issues relating to drug development services; countries that provide less protection for intellectual property rights;

- procedures and actions affecting approval, production, pricing, reimbursement and marketing of products and services. Further, international operations could subject the Group to additional expenses that the Group may not fully anticipate, including those related to enhanced time and resources necessary to comply with foreign laws and regulations, difficulty in collecting accounts receivable and longer collection periods, and difficulties and costs of staffing and managing foreign operations;

- the regulatory or judicial authorities of foreign countries might not enforce legal rights and recognize business procedures in a manner in which we are accustomed or would reasonably expect;

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

(iii) International Risks *(Continued)*

- changes in political and economic conditions, including the UK's withdrawal from the European Union and the policies of the current U.S. presidential administration, may lead to changes in the business environment in which we operate, as well as changes in inflation and foreign currency exchange rates;

- natural disasters, pandemics, or international conflict, including terrorist acts, could interrupt our services, endanger our personnel, or cause project delays or loss of clinical trial materials or results;

- political unrest, such as the current situation with Ukraine and Russia, could delay or disrupt our customer's ability to conduct clinical trials or other business, and if such political unrest escalates or spills over to or otherwise impacts additional regions it could heighten many of the other risk factors included in this section.

These risks and uncertainties could negatively impact our ability to, among other things, perform large, global projects for our customers. Furthermore, our ability to deal with these issues could be affected by applicable U.S. laws. Any such risks could have an adverse impact on our business, financial condition, results of operations, cash flows, or reputation.

(iv) Currency Risks

The Group principally operates in the U.S. with most of its transactions being settled in US$, which is the functional currency of most of the Group's entities. The Group also has certain entities that have RMB and EUR sales and purchases, expenses, assets and liabilities and net investments, which expose the Group to foreign currency risks. The Group seeks to limit its exposure to foreign currency risks by closely monitoring and minimizing its net foreign currency position. During the Reporting Period, the Group had not used any derivative contracts to hedge against its exposure to currency risks.

(v) Cybersecurity Risks

Our business depends on the continued effectiveness and availability of our information systems, including the information systems we use to provide our services to our customers and failures of these systems may materially limit our operations.

If the security of confidential information used in connection with our services is breached or otherwise subject to unauthorized access, our reputation and business may be materially harmed.

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

(v) Cybersecurity Risks *(Continued)*

We operate large and complex computer systems that contain significant amounts of the data of our Group, our employee, and customer. As a routine element of our business, we collect, process, analyze, and retain substantial amounts of data pertaining to the studies we conduct for our customers. Security breaches and unauthorized access to the Group's or its customers' data could harm our reputation and adversely affect our business. During the Reporting Period, we continued to make investments in state-of-the art technology to proactively identify and protect against potential information system disruptions and breaches; to monitor, test and secure key networks and services; and to facilitate prompt resumption of operations if a breach or interruption should occur. Additional resources will continue to be dedicated to expanding the Group's ability to investigate and remediate any cybersecurity vulnerabilities in the context of the ever-evolving cyber liability landscape.

We believe that we have taken appropriate measures to protect them from intrusion, and we will continue to improve and enhance our systems in this regard, but in the event that our efforts are unsuccessful, we could suffer significant harm. In addition, as cyber threats continue to evolve, the Group may be required to expend additional resources to continue to enhance the Group's information security measures or to investigate and remediate any information security vulnerabilities. Our remediation efforts may not be successful and could result in interruptions, delays or cessation of service. This could also impact the cost and availability of cyber liability insurance to the Group. Breaches of our security measures and the unauthorized dissemination of personal, proprietary or confidential information about the Group or its customers or other third parties could expose customers' confidential and proprietary information. Such breaches could expose customers to the risk of financial or medical identity theft or expose the Group or other third parties to a risk of loss or misuse of this information, result in litigation and potential liability for the Group, damage the Group's brand and reputation or otherwise harm the Group's business. Any of these disruptions or breaches of security could have a material adverse effect on the Group's business, regulatory compliance, financial condition and results of operations.

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

(vi) Data Privacy and Protection Risks

The legislative and regulatory landscape for privacy and data protection is complex and continually evolving. Data protection regulations have been enacted or updated in regions (i.e. North America, Asia, and Europe) where the Company has operations in or does business in. We are required to comply with the data privacy and security laws in these jurisdictions. Laws and regulations regarding the protection of personal data could result in increased risks of liability or increased cost to us or could limit our service offerings. Failure to comply with these regulations may result in, among other things, civil, criminal and contractual liability, fines, regulatory sanctions and damage to the Company's reputation and may have a significant adverse effect on our business and operations. We have made changes to our business practices and will continue to invest in additional resources to attain compliance with these evolving and complex regulations.

(vii) Natural Disasters, Public Health Crises, and Political Crises Risks

We conduct our activities in our facilities located in Exton, Pennsylvania, North Wales, Pennsylvania, Concord, Ohio, USA; Vancouver, Canada; Shanghai, Zhengzhou, Henan, and Suzhou, Jiangsu, China. We depend on these facilities for continued business operations.

Our facilities could be damaged or disrupted by natural disasters, such as earthquakes, tsunamis, power shortages or outages, floods or monsoons, public health crises, such as pandemics and epidemics, political crises, such as terrorism, war, political instability or other conflict, or other events outside of our control. The occurrence of any of these disruptions or other events outside of our control (particularly involving locations in which the Company has operations) could cause significant delays in shipments of our deliverables, reduce our capacity to provide services, eradicate unique manufacturing capabilities and, ultimately, result in material adverse effect on our financial position, results of operations, and cash flows.

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

(viii) COVID-19 Pandemic

The COVID-19 pandemic is dynamic and expanding. The continuation of this outbreak may have, and the emergence of other epidemic or pandemic crises could have, material adverse effects on our business, results of operations, or financial conditions.

On March 11, 2020, the World Health Organization declared the outbreak of a strain of novel coronavirus disease, COVID-19, a global pandemic. The COVID-19 pandemic is dynamic and expanding, and its ultimate scope, duration and effects are uncertain. This pandemic has and continues to result in, and any future epidemic or pandemic crises may potentially result in, direct and indirect adverse effects on our industry and customers, which in turn has (with respect to COVID-19) and may (with respect to future epidemics or crises) impact our business, results of operations and financial conditions.

As a result of the COVID-19 pandemic, in particular the outburst of COVID-19 variants such as delta and omicron, we have experienced, and expect to potentially experience, disruptions that have severely impacted, and are expected to impact, our business and our operations, including:

- deterioration of worldwide, regional or national economic conditions and activities, which adversely affects global demand for our products and services;

- disruptions to our operations as a result of the potential health impact on our employees, and on the workforces of our customers and business partners;

- temporary and/or partial closures of our facilities or the facilities of our customers and third-party service providers or business partners;

- interruption of the operations of global supply chains and those of our suppliers;

- disruptions to our business from, or additional costs related to, new regulations, directives or practices implemented in response to the pandemic, such as travel restrictions, shelter in place/stay in place/work from home orders, increased inspection regimes, hygiene measures (such as quarantining and physical distancing) or increased implementation of remote working arrangements;

- impacts from prolonged remote work arrangements, such as strains on our business continuity plans, cybersecurity risks, and inability of certain employees to perform their work remotely;

PRINCIPAL RISKS AND UNCERTAINTIES *(Continued)*

(viii) COVID-19 Pandemic *(Continued)*

- reduced cash flows and financial conditions, including potential liquidity constraints;

- reduced access to capital, including the ability to refinance any existing obligations, as a result of any credit tightening generally or due to declines in global financial markets, including to the prices of publicly-traded equity securities of us, our peers and of listed companies generally;

- disruption and volatility in the global capital markets, which increases the cost of, and adversely impacts access to, capital and increases economic uncertainty. This volatility and uncertainty adversely affected our stock price, and may again adversely affect our stock price in the future;

- deterioration in the financial conditions and prospects of our customers or attempts by customers, suppliers or service providers to invoke force majeure contractual clauses, or the legal doctrines of impossibility or impracticability (or other similar doctrines) as a result of delays or other disruptions; and

- delays in the commencement of, or the suspension or cancellation of, customer studies.

The COVID-19 pandemic has caused us to modify our business practices, including but not limited to health management of employees, customers and suppliers, compensation practices and capital expenditure planning. We have formed a tiered structure of designated COVID-19 task force teams throughout our organization to identify, implement and monitor such actions as required by the dynamic exigencies arising from the pandemic. Such measures and others may not be sufficient to mitigate all the risks posed by COVID-19, and our ability to perform critical functions could be materially adversely affected.

Although disruption and effects from the COVID-19 pandemic may be temporary, given the dynamic nature of these circumstances and the nature of our worldwide business and operations, the duration of any business disruption and the related financial impact to us cannot be reasonably estimated at this time but could materially affect our business, results of operations and financial conditions.

USE OF PROCEEDS FROM LISTING

The total proceeds from the issue of new Shares by the Company in its Listing (after deducting the underwriting fees and related Listing expenses) amounted to approximately US$193.2 million, and the balance of unutilized net proceeds was approximately US$55.7 million as at December 31, 2021.

The net proceeds from the Listing (adjusted on a pro rata basis based on the actual net proceeds) have been and will be utilized in accordance with the purposes set out in the Prospectus. The table below sets out the planned applications of the net proceeds and actual usage up to December 31, 2021:

Use of proceeds	Adjusted on a pro rata basis based on the actual net proceeds *(US$ million)*	Percentage of total net proceeds	Actual use of proceeds as at December 31, 2021 *(US$ million)*	Net proceeds brought forward for the Reporting Period *(US$ million)*	Unutilized net proceeds as at December 31, 2021 *(US$ million)*	Expected timeline of utilizing the utilized proceeds
Expand and enhance existing capacities to meet anticipated increased demand for services	38.6	20%	32.1	24.0	6.5	On or before December 31, 2022
Expand and broaden range of capabilities and services organically	77.3	40%	35.0	74.8	42.3	On or before December 31, 2022
Expand capacity and/or capabilities through potential acquisitions	58.0	30%	58.0	24.8	–	
Working capital and general corporate purposes	19.3	10%	12.4	16.8	6.9	On or before December 31, 2022
Total	193.2	100%	137.5	140.4	55.7	

CONNECTED TRANSACTIONS

Details on related party transactions for the year ended December 31, 2021 are set out in Note 40 to the Consolidated Financial Statements. Among the related party transactions, the provision of administrative services to Frontida BioPharm, Inc. is regarded as fully exempted continuing connected transactions under Chapter 14A of the Listing Rules. Details of related party transactions which also constitute connected transactions or continuing connected transactions not fully exempted under Rule 14A.73 of the Listing Rules are disclosed below.

NON-EXEMPT CONTINUING CONNECTED TRANSACTIONS

On May 11, 2019, the Company entered into a number of non-exempt continuing connected transactions. These connected transactions of the Company are also related party transactions, which are disclosed in Note 40 to the Consolidated Financial Statements in this annual report.

The table below set out the annual caps and the actual transaction amount of such continuing connected transactions for the year ended December 31, 2021:

Continuing Connected Transactions	Connected Person	Description	Pricing Policy	Annual cap for the year ended December 31, 2021 *(USD '000)*	Actual transaction for the year ended December 31, 2021 *(USD '000)*
Service Framework Agreement	Hangzhou Tigermed, one of the controlling shareholders	Revenue received from providing laboratory and bioequivalence studies services to the Tigermed Group	Service fee determined through arm's length negotiation	5,100	465
		Fees paid for biometrics services, electronic data capture software services and clinical site management organization services provided by the Tigermed Group	Service fee determined through arm's length negotiation	470	437

The pricing basis for the relevant services provided and received by the Group under the Services Framework Agreement is as follows:

The fees for the laboratory and bioequivalence studies services provided by the Group to the Tigermed Group are agreed and set out in the relevant service agreements which will be determined based on arm's length negotiations after taking into account various factors including (1) the actual cost and expenses incurred in providing such services, (2) the types and nature of the services provided, (3) the expected technical complexity of the required services and duration of the project involved, (4) the market rates for providing the relevant services of similar types and nature and (5) the expected commitment of resources required for providing the relevant services.

NON-EXEMPT CONTINUING CONNECTED TRANSACTIONS *(Continued)*

The fees for the biometrics services, electronic data capture software services and clinical site management organization services provided by the Tigermed Group to the Group are agreed and set out in the relevant service agreements which will be determined based on arm's length negotiations after taking into account various factors including (1) the requirements of the ultimate client, (2) the types and nature of the services provided, (3) the expected technical complexity of the required services and duration of the project involved, (4) the market rates for providing the relevant services of similar types and nature and (5) the expected commitment of resources required for providing the relevant services.

For detailed terms of the non-exempt continuing connected transactions mentioned above, please refer to the Prospectus.

The independent non-executive Directors have reviewed each of the above-mentioned continuing connected transactions and confirmed that the transactions have been entered into:

(1) in the ordinary and usual course of business of the Group;

(2) on normal commercial terms or better; and

(3) according to the agreements governing them on terms that are fair and reasonable and in the interests of the Shareholders as a whole.

The non-exempt continuing connected transactions in relation to the Service Framework Agreement (as defined in the Prospectus) dated May 11, 2019 entered into between the Company and Hangzhou Tigermed expired on December 31, 2021 and is automatically renewable for successive periods of three years thereafter, subject to compliance with the then applicable provisions of the Listing Rules, unless terminated earlier by not less than six months' prior written notice or otherwise in accordance with the terms of the Services Framework Agreement.

The auditor of the Company was engaged to report on the Group's above-mentioned continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued an unqualified letter containing the conclusions in respect of the above-mentioned continuing connected transactions in accordance with Rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Company to the Stock Exchange.

NON-EXEMPT CONTINUING CONNECTED TRANSACTIONS *(Continued)*

In respect of the above-mentioned non-exempt connected transactions, the Directors also confirmed that the Company has complied with the disclosure requirements under Chapter 14A of the Listing Rules.

During the Reporting Period, there was no connected transaction of the Group which has to be disclosed in accordance with the Listing Rules, save for the foregoing.

PRE-EMPTIVE RIGHTS

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

PURCHASE, SALE OR REDEMPTION OF COMPANY'S LISTED SECURITIES

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

COMPLIANCE WITH THE RELEVANT LAWS AND REGULATIONS

The Group has compliance policies and procedures in place to ensure adherence to applicable laws, rules and regulations, in particular those have a significant impact on the Group. The Group would seek professional legal advice from its legal advisers to ensure transactions and business to be performed by the Group are in compliance with the applicable laws and regulations. During the Reporting Period, the Group was not aware of any non-compliance with any relevant laws and regulations that had a significant impact on it.

ENVIRONMENTAL POLICIES AND PERFORMANCE

Acting in an environmentally responsible manner, the Group endeavours to comply with laws and regulations regarding environmental protection and to adopt effective measures to achieve efficient use of resources, energy saving and waste reduction and to minimise the operational impact on the environment and natural resources.

The Group will review its environmental practices from time to time and will implement further eco-friendly measures and practices closely to enhance environmental sustainability.

The Group will release the environmental, social and governance ("**ESG**") report as required by the Listing Rules separately on the website of the Stock Exchange in due course. The ESG report will detail the environmental and social performance of the Group during the Reporting Period.

CORPORATE GOVERNANCE

The Company is committed to fulfilling its responsibilities to its Shareholders and protecting and enhancing Shareholders' value through good corporate governance. The Directors recognize that good corporate governance is essential for the Company to achieve its objectives and drive improvement, as well as maintain legal and ethical standing in the eyes of the Shareholders, regulators and the general public. The Company is committed to the view that the Board should include a balanced composition of the executive Director and independent non-executive Directors so that there is a strong independent element on the Board, which can effectively exercise independent judgement.

To the best knowledge of the Board, during the Reporting Period, the Company has complied with all the code provisions of the CG Code, except for code provisions C.2.1 and F.2.2. For details, please refer to the section headed "Corporate Governance Report" of this annual report.

MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS

The Company has adopted the Model Code as its code of conduct regarding securities transactions by the Directors. Having made specific enquiries with all the Directors, all the Directors confirmed that they had complied with the required standard of dealings as set out in the Model Code during the Reporting Period.

RELATIONSHIPS WITH THE GROUP'S EMPLOYEES

The Group believes that employees are important and valuable assets. The Group will provide trainings for employees to enhance their knowledge in corporate values and culture and to implement them thoroughly. Meanwhile, the Group accelerates development of young leaders and nurtures them in establishing study-oriented teams and keeps them abreast of updated knowledge and timely development

The Group also aims to provide competitive and attractive remuneration packages to retain the employees. The management reviews annually the remuneration package offered to employees of the Group. Meanwhile, for the purpose of providing incentives and rewards to eligible participants who contributed to the success of the Group's operations, the Group adopted the Pre-IPO Share Incentive Plans and 2021 Share Award Scheme. Information about these plans is set out in the paragraphs headed "Share Option Schemes" and "2021 Share Award Scheme" in the Directors' Report.

RELATIONSHIPS WITH THE GROUP'S CUSTOMERS AND SUPPLIERS

The Group values long standing relationships with its suppliers and customers. The Group aims at delivering high quality services to its customers and developing mutual trust and enhancing communication and commitment between the Group and its suppliers, especially the commercial banks and financial institutions as the Group's businesses are capital intensive which require on-going funding to maintain sustainable growth.

Relationship with our customers

It is our key focus to ensure our services and deliverables are safe, effective and of high quality to our customers. The Group has specifically put in place an in-house quality management system in this respect. For details, please refer to paragraph headed "Quality Assurance" in the Management Discussion and Analysis.

Multiple communication channels have been established with the view to providing quality services to our customers, acquiring their feedback and solving their inquiries in a more transparent and effective manner. To take our customer relationships to the next level, we maintain a strong track record of regulatory inspections, achieving efficient, flexible and integrated delivery when required by our customers. Coupled with our high-performance management team, we have proven success in growing our customer base and enhancing customer retentions.

Relationship with our suppliers

Given our broad range of services, we procure a wide variety of consumables and equipment, such as test tubes and mass spectrometers. A transparent, responsibility-based procurement policy is put in place to ensure compliance, improve competitiveness of supply chain and hence, promote a sustainable development of supply chain. We have a designated team to oversee supply matters and monitor our suppliers for any incidents or regulatory warnings.

MATERIAL LITIGATION

The Company was not involved in any material litigation or arbitration during the Reporting Period nor were the Directors aware of any material litigation or claims that were pending or threatened against the Company.

SUFFICIENCY OF PUBLIC FLOAT

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

IMPORTANT EVENTS AFTER THE REPORTING PERIOD

Details of the events after the Reporting Period are set out in Note 44 to the Consolidated Financial Statements.

REVIEW OF THE ANNUAL RESULTS BY AUDIT AND RISK MANAGEMENT COMMITTEE

The Audit and Risk Management Committee currently consists of the non-executive Director, namely Mr. Jun Gao, and two independent non-executive Directors, namely Mr. Yifan Li (Chairman) and Mr. Erh Fei Liu.

The Audit and Risk Management Committee, together with the management of the Company, has reviewed this annual report (including the Consolidated Financial Statements) and the annual results announcement of the Company for the Reporting Period and had submitted the same to the Board for approval. The Audit and Risk Management Committee was of the opinion that the Consolidated Financial Statements, the results announcement and this annual report had been prepared in compliance with the applicable accounting standards, requirements and the Listing Rules, and that adequate disclosure had been made.

INDEPENDENT AUDITOR

The Company engaged Deloitte Touche Tohmatsu ("**Deloitte**") as its auditor between 2019 and 2020 until Deloitte resigned as the auditor of the Company with effect from November 25, 2020.

The Consolidated Financial Statements were audited by BDO Limited ("**BDO**"), who will retire and, being eligible, offer itself for re-appointment at the forthcoming AGM. Having been approved by the Board upon the Audit and Risk Management Committee's recommendation, a resolution for the re-appointment of BDO as the independent auditor of the Company for the ensuing year will be put to the forthcoming AGM for Shareholder's approval.

On behalf of the Board

Dr. Song Li
Executive Director, Chief Executive Officer and Chairman

Hong Kong, March 28, 2022

The Board is pleased to present the corporate governance report of the Company for the Reporting Period.

CORPORATE GOVERNANCE PRACTICES

The Company is committed to maintaining high standard of corporate governance practices. The Board believes that good corporate governance standards are essential in providing a framework for the Group to safeguard the interests of Shareholders, enhance corporate value, formulate its business strategies and policies, and enhance its transparency and accountability.

During the Reporting Period, the Company has followed the principles and complied with all code provisions set out in the CG Code, except for the deviation from code provisions C.2.1 and F.2.2 of the CG Code, details of which are explained in the relevant paragraphs of this report.

The Board will continuously review and improve the corporate governance practices and standards of the Company to ensure that business activities and decision-making processes are regulated in a proper and prudent manner.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code as its code of conduct regarding securities transactions by the Directors. Employees of the Group (the "**Relevant Employees**") who, because of their office or employment, are likely to possess inside information in relation to the Company or its securities are also subject to compliance with the Model Code. After having made specific enquiries with all Directors, all Directors have confirmed that they have complied with the required standards set out in the Model Code throughout the Reporting Period. No incident of non-compliance of the Model Code by the Relevant Employees was noted by the Company during the Reporting Period.

BOARD OF DIRECTORS

The Company is headed by an effective Board which oversees the Group's businesses, strategic decisions and performance and takes decisions objectively in the best interests of the Company.

The Board should regularly review the contribution required from a Director to perform his responsibilities to the Company, and whether the Director is spending sufficient time performing them.

BOARD OF DIRECTORS *(Continued)*

Board Composition

The Board of the Company currently comprises six Directors as follows:–

Executive Directors
Dr. Song Li *(Chief Executive Officer and Chairman)*
Dr. Zhihe Li

Non-executive Director
Mr. Jun Gao

Independent Non-executive Directors
Mr. Yifan Li
Mr. Erh Fei Liu
Dr. Jingsong Wang

The biographical information of the Directors is set out in the section headed "Biographical Details of Directors and Senior Management" of this annual report.

Chairman and Chief Executive Officer

Pursuant to code provision C.2.1 of the CG Code (previously known as A.2.1 of the CG Code prior to January 1, 2022), the responsibilities between the chairman and the chief executive officer should be separate and should not be performed by the same individual. However, Dr. Song Li, the executive Director, currently performs these two roles in the Company. The Board believes that Dr. Song Li is a suitable candidate to, in effect, assume the responsibilities and executive roles of the chairman and the chief executive officer of the Company and the above arrangement can help improve the efficiency of the decision-making and execution process of the Company. The Company has put in place an appropriate check-and-balance mechanism through the Board and the independent non-executive Directors. Considering the above, the Board is of the view that the deviation from code provision C.2.1 of the CG Code is appropriate in the circumstances of the Company.

BOARD OF DIRECTORS *(Continued)*

Independent non-executive directors

During the Reporting Period, the Board at all times met the requirements of the Listing Rules relating to the appointment of at least three independent non-executive Directors representing at least one third of the Board with one of whom possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has received written annual confirmation from each of the independent non-executive Directors in respect of his independence in accordance with the independence guidelines as set out in Rule 3.13 of the Listing Rules. The Company considers all independent non-executive Directors to be independent.

Appointment and re-election of Directors

According to code provision B.2.2 of the CG Code (previously known as A.4.1 of the CG Code prior to January 1, 2022), every director, including those appointed for a specific term, should be subject to retirement by rotation at least once every three years.

Each of Dr. Zhihe Li and Dr. Song Li, the executive Directors, was appointed under a letter of appointment for a term of three years from his date of appointment, subject to renewal, which is terminable by either party by giving three months' written notice to the other party. Each of the non-executive Director and the independent non-executive Directors was appointed under a letter of appointment for a term of three years from his date of appointment, subject to renewal, which is terminable by either party giving three months' written notice to the other party.

In accordance with article 83(3) of the Articles of Association, any Director appointed by the Board shall hold office until the first general meeting of the Company after his appointment and be subject to re-election at such meeting, and any Director appointed by the Board as an addition to the existing Board shall hold office only until the next following annual general meeting of the Company and shall then be eligible for re-election. For Directors not appointed by the Board, at each annual general meeting, 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. Such retiring Director shall be eligible for re-election.

BOARD OF DIRECTORS *(Continued)*

Responsibilities, Accountabilities and Contributions of the Board and Management

The Board should assume responsibility for leadership and control of the Company and is collectively responsible for directing and supervising the Company's affairs.

The Board directly, and indirectly through its committees, leads and provides direction to management by laying down strategies and overseeing their implementation, monitors the Group's operational and financial performance, and ensures that sound internal control and risk management systems are in place.

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

All Directors have full and timely access to all the information of the Company and may, upon request, seek independent professional advice in appropriate circumstances, at the Company's expenses for discharging their duties to the Company. The Company has received confirmations from the Directors that they have provided sufficient time and attention to the affairs of the Group.

The Directors shall disclose to the Company their interests as director and other office in other public companies and organizations held by them in a timely manner and have updated the Company on any subsequent changes.

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

The Company has arranged appropriate insurance coverage on Directors' and officers' liabilities in respect of any legal actions taken against Directors and key management arising out of corporate activities. The insurance coverage would be reviewed on an annual basis.

BOARD OF DIRECTORS *(Continued)*

Continuous Professional Development of Directors

Directors shall keep abreast of regulatory developments and changes in order to effectively perform their responsibilities and to ensure that their contribution to the Board remains informed and relevant.

Every newly appointed Director will 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.

Directors should participate in appropriate continuous professional development to develop and refresh their knowledge and skills. Internally-facilitated briefings for Directors are arranged and reading materials on relevant topics will be circulated to the Directors where appropriate so as to ensure that the Directors understand the condition of the Company and the latest policies from regulatory bodies in a timely manner. All Directors are encouraged to attend relevant training courses at the Company's expenses.

During the Reporting Period, the Company organized training sessions conducted by the qualified professionals for all Directors. The training sessions covered a wide range of relevant topics including directors' duties and responsibilities, corporate governance and regulatory updates. In addition, relevant reading materials including compliance manual, legal and regulatory updates and seminar handouts have been provided to the Directors to refresh their knowledge and skills on the roles, functions and duties of a director of listed company.

BOARD OF DIRECTORS *(Continued)*

Continuous Professional Development of Directors *(Continued)*

The Directors are required to provide the Company with details of the continuous professional development trainings undertaken by them from time to time. Based on the details so provided, the training records of the Directors for the Reporting Period are summarized as follows:

	Areas		
	Legal, regulatory and corporate governance	**Businesses of the Group**	**Directors' roles, functions and duties**
Executive Directors			
Dr. Song Li	✓	✓	✓
Dr. Zhihe Li	✓	✓	✓
Non-executive Director			
Mr. Jun Gao	✓	✓	✓
Independent Non-executive Directors			
Mr. Yifan Li	✓	✓	✓
Mr. Erh Fei Liu	✓	✓	✓
Dr. Jingsong Wang	✓	✓	✓

BOARD OF DIRECTORS *(Continued)*

Board Meetings

The Directors are continually updated with the regulatory requirements, business activities and development of the Company to facilitate the discharge of their responsibilities. Through regular Board meetings, all Directors are kept abreast of the conduct, business activities and development of the Company.

Annual meeting schedules and draft agenda of each meeting are normally made available to Directors in advance.

Regular Board meetings should be held at least four times a year at approximately quarterly intervals involving active participation, either in person or through electronic means of communication, of the Directors. Notice of regular Board meetings is served to all Directors at least 14 days before the meeting. For other Board and committee meetings, reasonable notice is generally given.

Board papers together with all appropriate, complete and reliable information are sent to all Directors at least three days before each Board meeting or committee meeting to keep Directors apprised of the latest developments and financial position of the Company and to enable them to make informed decisions. The Board and each Director also have separate and independent access to the senior management where necessary.

Minutes of the Board and committee meetings are prepared and kept by the company secretary of the Group, and are open for inspection by Directors upon request. All Directors have access to the advice and services of the company secretary, and are allowed to seek external professional advice if needed.

Where necessary, the senior management shall attend regular Board meetings and other Board and committee meetings, to advise on business developments, financial and accounting matters, statutory and regulatory compliance, corporate governance and other major aspects of the Company.

BOARD OF DIRECTORS *(Continued)*

Directors' Attendance Records

During the Reporting Period, four Board meetings, two Audit and Risk Management Committee meetings, one Nomination Committee meeting, one Remuneration Committee meeting and one general meeting were held. The attendance of each Director is set out in the table below:

	Attendance/Number of meetings eligible to attend				
Director	Board	Audit and Risk Management Committee	Nomination Committee	Remuneration Committee	General meeting
Executive Directors					
Dr. Song Li[(1)]	3/3	N/A	1/1	1/1	0/1
Dr. Zhihe Li[(2)]	3/4	N/A	N/A	N/A	0/1
Non-executive Director					
Mr. Jun Gao	4/4	2/2	N/A	N/A	1/1
Independent Non-executive Directors					
Mr. Yifan Li	3/4	1/2	N/A	0/1	0/1
Mr. Erh Fei Liu	4/4	2/2	1/1	N/A	0/1
Dr. Jingsong Wang	4/4	N/A	1/1	1/1	0/1

Notes:

(1) Dr. Song Li was appointed as an executive Director and a member of each of the Nomination Committee and the Remuneration Committee with effect from February 10, 2021. Three Board meetings, one Nomination Committee meeting, one Remuneration Committee meeting and one general meeting were held after his appointment.

(2) Dr. Zhihe Li ceased to be a member of the Nomination Committee and the Remuneration Committee with effect from February 10, 2021. No Nomination Committee meeting or Remuneration Committee meeting were held prior to his cessation.

Apart from regular Board meetings, a meeting between the chairman of the Board and independent non-executive Directors without the presence of other Directors was held during the Reporting Period in order to comply with the code provision C.2.7 of the CG Code (previously known as A.2.7 of the CG Code prior to January 1, 2022).

BOARD COMMITTEES

The Board has established three Board committees, namely, the Audit and Risk Management Committee, the Nomination Committee and the Remuneration Committee, for overseeing particular aspects of the Company's affairs. All Board committees of the Company are established with specific written terms of reference which deal clearly with their authority and duties. The terms of reference of the Board committees are published on the Company's website and the Stock Exchange's website and are available to shareholders upon request. The Board committees are provided with sufficient resources to discharge their duties.

Audit and Risk Management Committee

The Audit and Risk Management Committee consists of the non-executive Director and two independent non-executive Directors. The members of the Audit and Risk Management Committee are:

Mr. Yifan Li *(Chairman)*
Mr. Erh Fei Liu
Mr. Jun Gao

Mr. Yifan Li possesses appropriate professional qualifications and accounting and financial management expertise as required under Rule 3.10(2) of the Listing Rules. None of the members of the Audit and Risk Management Committee is a former partner of the existing external auditor of the Company.

The primary duties of the Audit and Risk Management Committee include overseeing the financial reporting system, risk management and internal control systems of the Group and effectiveness of the internal audit function, reviewing and monitoring the integrity of the financial information of the Company and considering issues relating to the external auditor and its appointment.

BOARD COMMITTEES *(Continued)*

Audit and Risk Management Committee *(Continued)*

The following is a summary of the work performed by the Audit and Risk Management Committee during the Reporting Period:

- reviewed and discussed the annual financial statements, results announcements and reports, the related accounting principles and practices adopted by the Group and the relevant audit findings;

- reviewed and reported on continuing connected transactions carried out during the year ended December 31, 2021;

- reviewed and discussed the effectiveness of financial reporting, risk management and internal control systems of the Group; and

- discussed and recommended the re-appointment of external auditor.

Nomination Committee

The Nomination Committee consists of one executive Director and two independent non-executive Directors. The members of the Nomination Committee are:

Dr. Jingsong Wang *(Chairman)*
Mr. Erh Fei Liu
Dr. Song Li

The primary duties of the Nomination Committee include reviewing the structure, size and composition of the Board, developing and formulating relevant procedures for the nomination and appointment of Directors, assessing the independence of the independent non-executive Directors, making recommendations to the Board on the appointment and succession planning of Directors.

The Company recognizes and embraces the benefits of having a diverse Board and sees increasing diversity at the Board level as an essential element in maintaining the Company's competitive advantage and enhancing its ability to attract, retain and motivate employees from the widest possible pool of available talents.

BOARD COMMITTEES *(Continued)*

Nomination Committee *(Continued)*

A Board diversity policy was adopted by the Company, pursuant to which the Nomination Committee is responsible for reviewing the Board composition by considering a number of aspects, including but not limited to gender, age, cultural and educational background, professional qualifications, skills, knowledge, and industry and regional experience. The Nomination Committee would discuss periodically and, where necessary, agree on the measurable objectives for achieving diversity on the Board and recommend them to the Board for adoption. The Company aims to maintain an appropriate balance of diversity perspectives that are relevant to the Company's business growth.

The following is a summary of the work performed by the Nomination Committee during the Reporting Period:

- reviewed the structure, size and composition of the Board and make recommendations to the Board regarding any proposed changes;
- assessed the independence of the independent non-executive Directors;
- made recommendations to the Board on relevant matters relating to the appointment or re-appointment of Directors, including discussion of the policy for nomination of directors; and
- recommended the appointment of Dr. Song Li as a Director to the Board.

Board Diversity Policy

The Company has adopted the board diversity policy which sets out the objective and approach to achieve and maintain diversity of the Board in order to enhance the effectiveness of the Board. Pursuant to the board diversity policy, the Board considers a number of measurable objectives when deciding on appointments to the Board and the continuation of those appointments, including but not limited to professional experience, skills, relevant knowledge, gender, age, cultural and education background, ethnicity and length of service. The Nomination Committee will review the board diversity policy from time to time to ensure its continued effectiveness.

The Board consists of six male members, aging from 46 to 67 years old. Based on the membership and composition of the Board, the Nomination Committee considers that the Board has a balanced mix of experiences, including management and strategic development, finance and accounting experiences in addition to the chemistry, CMC, preclinical research (DMPK, safety and toxicology), laboratory testing, bioanalytical and biologics, and central laboratory businesses. Furthermore, the Board has a good mix of new and experienced Directors, who have valuable knowledge and insights of the Group's business over the years, while the new Directors are expected to bring in fresh ideas and new perspective to the Group.

BOARD COMMITTEES *(Continued)*

Board Diversity Policy *(Continued)*

With regards to gender diversity on the Board, the Company recognizes the particular importance of gender diversity and will continue to promote gender diversity of the Board. To ensure gender diversity of the Board in the long run, the Company will identify and select several female individuals with a diverse range of skills, experience and knowledge in different fields from time to time, and maintain a list of such female individuals, which will be reviewed by the Nomination Committee periodically. The Company also intends to promote gender diversity across workforce when recruiting staff at the mid to senior level so that the Company will have a pipeline of female senior management and potential successors to the Board. The Group plans to offer all-rounded trainings to female employees whom we consider having the suitable experience, skills and knowledge of our operation and business, including but not limited to, business operation, management, accounting and finance, legal and compliance, and research and development. The Group is of the view that such strategy will offer chances for the Board to identify capable female employees to be nominated as a member of the Board in the future. The Company targets to appoint at least one female director of the Company no later than December 31, 2024. The decision will be based on merit and contribution that the selected candidates will bring to our Board.

Director Nomination Policy

The Company has a director nomination policy which sets out the selection criteria and process and the Board succession planning considerations in relation to nomination and appointment of Directors and aims to ensure that the Board has a balance of skills, experience and diversity of perspectives appropriate to the Company and the continuity of the Board and appropriate leadership at Board level.

The Company considered that, in assessing the suitability of a proposed candidate, the Nomination Committee may make reference to certain criteria, including but not limited to, the experience in the Company principal business and/or the industry in which the Company operates, balance of skills, knowledge and experience on the Board, and various aspects set out in the board diversity policy.

The Nomination Committee had reviewed the director nomination policy to ensure its effectiveness and considered that the Board has a balance of expertise, skills and experience required for the business of the Company for the Reporting Period.

BOARD COMMITTEES *(Continued)*

Remuneration Committee

The Remuneration Committee consists of one executive Director and two independent non-executive Directors. The members of the remuneration committee are:

Dr. Jingsong Wang *(Chairman)*
Mr. Yifan Li
Dr. Song Li

The primary functions of the Remuneration Committee include determining, reviewing and making recommendations to the Board on the remuneration packages of individual Directors, the remuneration policy and structure for all Directors; and establishing transparent procedures for developing such remuneration policy and structure to ensure that no Director or any of his associates will participate in deciding his/her own remuneration.

The following is a summary of the work performed by the Remuneration Committee during the Reporting Period:

- assessed the performance of the Directors and the senior management;
- reviewed on the remuneration packages for individual Directors and senior management and made recommendations to the Board;
- reviewed the remuneration package of Dr. Song Li; and
- reviewed and recommended the adoption of the 2021 Share Award Scheme to the Board for approval and the grant of share awards to employees and certain senior management of the Group.

Pursuant to code provision E.1.5 of the CG Code (previously known as B.1.5 of the CG Code prior to January 1, 2022), the annual remuneration (excluding any contributions to retirement benefit scheme contributions and share-based compensation expenses) of the members of the senior management (other than Directors) by bands for the Reporting Period is set out below:

Band of remuneration *(US$)*	**No. of individuals**
Less than 400,000	4
400,000 to 500,000	3
More than 500,000	1

Further details of the remuneration of the Directors and the 5 highest paid employees is set out in Note 12 and Note 13 to the Consolidated Financial Statements, respectively.

BOARD COMMITTEES *(Continued)*

Corporate Governance Functions

The Board is responsible for performing the functions set out in the code provision A.2.1 of the CG Code (previously known as D.3.1 of the CG Code prior to January 1, 2022).

The Board reviewed the Company's corporate governance policies and practices, training and continuous professional development of Directors and senior management, the Company's policies and practices on compliance with legal and regulatory requirements, the compliance of the Model Code and the guidelines, and the Company's compliance with the CG Code and disclosure in this Corporate Governance Report.

DIRECTORS' RESPONSIBILITY IN RESPECT OF THE FINANCIAL REPORT

The Directors acknowledge their responsibility for preparing the financial statements of the Company for the Reporting Period.

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

The statement of the independent auditor of the Company about its reporting responsibilities on the financial statements is set out in the Independent Auditor's Report of this annual report.

EXTERNAL AUDITOR AND AUDITOR'S REMUNERATION

During the Reporting Period, the total fees paid/payable to the external auditor of the Company, BDO, in respect of audit and non-audit services are set out below:

Service Category	Fees Paid/Payable *(US$)*
Audit Services	279,000
Non-audit Services – Taxation and review on interim results	269,000
Total	548,000

RISK MANAGEMENT AND INTERNAL CONTROLS

The Board is responsible for evaluating and determining the nature and extent of the risks (including ESG risks) it is willing to take in achieving the Group's strategic objectives, and ensuring that the Group establishes and maintains appropriate and effective risk management and internal control systems, including material risks relating to ESG. The Board oversees management in the design, implementation and monitoring of the risk management and internal control systems, and management periodically confirms to the Board on the effectiveness of these systems.

The Board oversees the Group's risk management and internal control systems, including material risks relating to ESG, on an ongoing basis, ensuring that a review of the effectiveness of the Group's risk management, internal control and ESG risks systems has been conducted at least annually. Such systems 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 review covers all material controls, including financial, operational and compliance controls.

The Audit and Risk Management Committee assists the Board in leading the management and overseeing their design, implementation and monitoring of the risk management, internal control, and ESG risks systems and they have conducted their annual review on the effectiveness of the Group's risk management, internal control, and ESG risks systems in respect of the Reporting Period.

The Company has developed and adopted various risk management procedures and guidelines with defined authority for implementation by key business processes and office functions, including project management, sales and leasing, financial reporting, human resources and information technology, financial, operational and compliance controls. The Board is satisfied that the Group's risk management, internal control and ESG risks systems including financial, operational and compliance controls and risk management functions as appropriate to the Group have been put in place and considers the risk management, internal control, and ESG risks systems effective and adequate.

RISK MANAGEMENT AND INTERNAL CONTROLS *(Continued)*

Risk Management

The Company recognizes that risk management is critical to the success of our business. We believe that key operational risks faced by us include changes in the general market conditions and the regulatory environment of the global CRO market and our ability to offer quality drug development services, to manage our anticipated growth and execute on our growth strategies and to compete with other CROs and comply with regulations and industry standards. Please refer to "Principal Risks and Uncertainties" under the section headed "Directors' Report" of this annual report for a discussion of various risks and uncertainties we face. We also face various market risks. In particular, we are exposed to credit, liquidity, interest rate and currency risks that arise in the normal course of our business.

In order to meet these challenges, the Audit and Risk Management Committee, which is chaired by Mr. Yifan Li, has responsibility for overseeing and managing the overall risks associated with our business operations from time to time. The Audit and Risk Management Committee (i) reviews and approves our risk management policy to ensure that it is consistent with our corporate objectives; (ii) reviews and approves our corporate risk tolerance; (iii) monitors the most significant risks associated with our business operation and our management's handling of such risks; (iv) reviews our corporate risk in the light of our corporate risk tolerance; and (v) monitors and ensures the appropriate application of our risk management framework across the Group.

Internal Controls

In addition to the arrangements we have put in place pursuant to our risk management framework, we have adopted a series of internal control policies, measures and procedures designed to provide reasonable assurance for achieving objectives, including effective and efficient operations, reliable financial reporting and compliance with applicable laws and regulations. Below is a summary of the internal control policies, measures and procedures we have implemented and/or plan to implement:

- The Board and senior management oversee and manage the overall risks associated with our business operations;

- We engaged an external independent professional firm as our internal audit advisor to assist the Company's chief financial officer in carrying out the internal audit function in the Group and to supervise the implementation of our risk management policy at the corporate level;

RISK MANAGEMENT AND INTERNAL CONTROLS *(Continued)*

Internal Controls *(Continued)*

- We have put a policy in place pursuant to which a working group (consisting of representatives from each of our business units) is responsible for identifying the possibility of competition between us and our Controlling Shareholders based on publicly available information relating to the businesses of our Controlling Shareholders. Any relevant information is brought to the attention of the Audit and Risk Management Committee who may then decide to escalate it to the Company's Board;

- With this policy in place, we expect to be able to monitor the possibility of competition with our Controlling Shareholders and make announcements as required in accordance with the Listing Rules and other applicable laws;

- We have an in-house legal team comprising qualified lawyers in the PRC and the US dedicated to advising the Company on laws and regulations of the relevant jurisdictions, and we also engage external counsels from time to time when we require additional support; and

- We arranged various trainings to be provided by external legal advisors from time to time when necessary and/or any appropriate accredited institution to update the Directors, senior management, and relevant employees on the latest laws and regulations in Hong Kong and other relevant jurisdictions.

The Board has reviewed the effectiveness of the risk management and the internal control systems of the Group, including the adequacy of resources, qualifications and experience of staff in the aforementioned systems and of the Company's accounting, internal audit, financial reporting functions and the adequacy of their training programs and budget, as well as those relating to the Company's ESG performance and reporting.

During the Reporting Period, the Board, through a review covering all material controls, including financial, operational and compliance controls, considered that the risk management and internal control systems of the Group were effective and adequate. The Board will conduct annual review on the risk management and internal control systems of the Group.

HANDLING AND DISSEMINATION OF INSIDE INFORMATION

The Company has put in place a policy on handling and dissemination of inside information which sets out the procedures and internal controls for handling and dissemination of inside information in a timely manner in such a way to avoid placing any person in a privileged dealing position. The inside information policy also provides guidelines to employees of the Group to ensure proper safeguards exist to prevent the Company from breaching the statutory and listing rule disclosure requirements. The Company has appropriate internal control and reporting systems to identify and assess potential inside information. Dissemination of inside information of the Company shall be conducted by publishing the relevant information on the websites of the Stock Exchange and the Company, according to the requirements of the Listing Rules.

COMPANY SECRETARY

Ms. Karen Ying Lung Chang is the company secretary of the Company. She reports directly to the Board and is responsible for, among others, providing updated and timely information to all Directors from time to time. Ms. Chang is nominated by an external service provider to assist in company secretarial affairs of the Company.

During the Reporting Period, Ms. Chang has confirmed that she has taken no less than 15 hours of relevant professional training in compliance with Rule 3.29 of the Listing Rules. Her biographical details are set out in the section headed “Biographical Details of Directors and Senior Management” of this annual report.

SHAREHOLDERS’ RIGHTS

To safeguard shareholders’ interests and rights, a separate resolution should be proposed for each substantially separate issue at general meetings, including the election of individual Director. Except where the Chairman, in good faith, decides to allow a resolution which relates purely to a procedural or administrative matter to be voted on by a show of hands, all resolutions put forward at general meetings shall 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 after each general meeting.

SHAREHOLDERS' RIGHTS *(Continued)*

Convening an Extraordinary General Meeting by Shareholders

Pursuant to article 58 of the Articles of Association, an extraordinary general meeting may be convened by the Board upon requisition of one or more Members holding at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company carrying the right of voting at general meetings of the Company. Such Members shall at all times have the right, by written requisition to the Board or the secretary of the Company, to require an extraordinary general meeting to be called by the Board for the transaction of any business specified in such requisition. Such meeting shall be held within two months after the deposit of such requisition at the Company's Hong Kong office at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong. If within 21 days of such deposit, the Board fails to proceed to convene such meeting, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

Putting Forward Proposals at General Meetings

There are no provisions allowing Shareholders to put forward new resolutions at the general meetings under the Cayman Islands Companies Law (2018 Revision) or the Articles of Association. However, Shareholders who wish to put forward proposal at general meetings may convene an extraordinary general meeting following the procedures set out above.

Putting Forward Enquiries to the Board

For putting forward any enquiries to the Board, Shareholders may send written enquiries to the Company. The Company will not normally deal with verbal or anonymous enquiries.

Contact Details

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

Address:	Building 2, No. 1227 Zhangheng Road, Pudong, Shanghai, China
Tel:	+86 021 50796268 ext. 826
Email:	ir@frontagelab.com.cn

For the avoidance of doubt, Shareholder(s) must deposit and send the original duly signed written requisition, notice or statement, or enquiry (as the case may be) to the above address, apart from the registered office of the Company, and provide their full name, contact details and identification in order to give effect thereto. Shareholders' information may be disclosed as required by law.

COMMUNICATION WITH SHAREHOLDERS AND INVESTOR RELATIONS

The Company considers that effective communication with Shareholders is essential for enhancing investor relations and investors' understanding of the Group's business, performance and strategies. The Company endeavors to maintain an on-going dialogue with shareholders and has adopted a Shareholders' communication policy to ensure that Shareholders' views and concerns are appropriately addressed. Such policy aims at providing the Shareholders and potential investors with ready and timely access to balanced and understandable information of the Company.

The annual general meeting provides an opportunity for shareholders to communicate directly with the Directors. At the annual general meeting, Directors (or their delegates as appropriate) are available to meet Shareholders and answer their enquiries. In respect of each matter to be considered at the annual general meeting and other general meetings, including the re-election of Directors, a separate resolution will be proposed by the chairman of the Board. The chairman of the Board and the chairmen of the Board Committees and, in their absence, other members of the respective committees, will be available at the annual general meeting and the other general meetings to meet with the Shareholders and answer their enquiries. The Company will also invite representatives of the auditor of the Company to attend the annual general meeting of the Company to answer Shareholders' questions about the conduct of the audit, the preparation and content of the auditor's report, the accounting policies and auditor's independence.

Pursuant to code provision F.2.2 of the CG Code (previously known as E.1.2 of the CG Code prior to January 1, 2022), the chairman of the board should attend the annual general meeting. Dr. Song Li, the chairman of the Board, was unable to attend the annual general meeting of the Company held on May 27, 2021 (the "**2021 AGM**") in person due to the quarantine measures implemented by the government of China to control the spread of COVID-19. As such, Mr. Jun Gao, the non-executive Director, took the chair of the 2021 AGM. The Board considered that such arrangement was sufficient to ensure that a member of the Board was available to answer any questions at the 2021 AGM. Barring any extraordinary circumstances or any new restrictions arising from COVID-19, Dr. Song Li will use his best endeavors to attend all future Shareholders' meetings of the Company.

COMMUNICATION WITH SHAREHOLDERS AND INVESTOR RELATIONS *(Continued)*

On top of annual general meetings, the Company has taken a multichannel approach to ensure that shareholders and investors have timely access to the Group's key business development. These communication tools include announcements, press releases, interim and annual reports. To promote effective communication, the Company has also participated in several investment forums and road shows to maintain ongoing communication with investors and shareholders globally. The Company maintains a website at www.frontagelab.com, where information and updates on the Company's business developments and operations, financial information, corporate governance practices and other information are available for public access. The Company has also established a section within the Company's website for investors to make inquiries, and endeavors to ensure timely reply, thus further facilitating a high degree of transparency.

The Company considers the various channels for shareholders and investors to access the company's latest business development and information have been well recognized by the capital market, and will enable shareholders and investors to make informed investment decisions.

CONSTITUTIONAL DOCUMENTS

During the Reporting Period, there had been no significant changes in the constitutional documents of the Company.

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To the Shareholders of Frontage Holdings Corporation
(incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of Frontage Holdings Corporation (the "Company") and its subsidiaries (together the "Group") set out on pages 113 to 239, which comprise the consolidated statement of financial position as at December 31, 2021, and the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") 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 Hong Kong Standards on Auditing ("HKSAs") issued by the Hong Kong Institutes of Certified Public Accountants ("HKICPA"). 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 are independent of the Group in accordance with the HKICPA's "Code of Ethics for Professional Accountants" (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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.

Revenue recognition

We identified revenue recognition of contracts with customers as a key audit matter due to its significance to the consolidated financial statements and the key judgments exercised by the directors in determining whether the performance obligations have been satisfied and the relevant amounts of revenue to be recognized accordingly.

As disclosed in Note 4 to the consolidated financial statements, recognition of service revenue requires key judgments in determining the performance obligations and timing of satisfaction of such performance obligations.

The Group earns services revenues over time by providing bioanalytical services, chemistry, manufacturing and control services, drug metabolism and pharmacokinetic services, safety and toxicology services, bioequivalence services and chemistry services. Also, the selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. Depending on which better depicts the transfer of value to the customers, the Group generally measures its progress using either cost-to-cost (input method) or units produced/services transferred to the customers to date (output method). During the year ended December 31, 2021, service revenue recognized over time by the Group is approximately US$184,441,000.

Our response:

Our procedures in relation to the revenue recognition included:

- Understanding the policies, procedures, methods and related controls for the determination of budgeted revenue and budgeted costs;

- Inquiring of management of the Group and inspecting terms of contract research organization services contracts to evaluate whether accounting policy of the Group complies with IFRS 15 "*Revenue from Contracts with Customers*"; and

- Checking the accuracy and appropriateness of revenue recorded, on a sample basis, by tracing to the services contracts for the key terms of the contracts and obtaining the supporting evidence that prove the performance obligations are satisfied.

KEY AUDIT MATTERS *(Continued)*

Recognition of goodwill and intangible assets arising from acquisitions

We identified the recognition of goodwill and intangible assets arising from the acquisitions of new businesses namely Ocean Ridge Biosciences, LLC ("Ocean Ridge"), Quintara Discovery, Inc. ("Quintara") and Wuhan Heyan Biomedical Technology Co., Ltd. ("Heyan Biotech"), as a key audit matter due to its significance to the consolidated financial statements and key judgment exercised by the directors in estimating the fair value of assets acquired and liabilities assumed and identifying any separately identifiable intangible assets arising from these acquisitions. Key assumptions include discount rate, the long-term sustainable growth rate and market adjustments with historical performance.

As disclosed in Note 41 to the consolidated financial statements, goodwill arising from acquisition of Ocean Ridge, Quintara and Heyan Biotech amounted to approximately US$722,000, US$43,287,000 and US$2,402,000, respectively. Intangible assets, including customer relationship and non-competition clause, arising from these acquisitions amounted to approximately US$20,984,000.

Our response:

Our procedures in relation to the goodwill and intangible assets arising from acquisitions included:

- Inspecting the acquisition agreements in connection with the acquisitions and other relevant documents to identify the key transaction terms and conditions, including the purchase consideration and the completion date which are relevant in considering the accounting treatment for the acquisitions;

- Engaging our internal valuation experts to assist us in evaluating the valuation methodologies used by the directors and the key assumptions adopted in the valuation models, with reference to the requirements of the prevailing accounting standards;

- Challenging the key assumptions adopted in the valuation models for the contingent consideration and intangible assets; and

- Checking the accuracy of the management's calculation of fair values of intangible assets.

KEY AUDIT MATTERS *(Continued)*

Impairment assessment of goodwill

We identified impairment assessment of goodwill as a key audit matter due to the involvement of significant management judgment and assumptions in this assessment.

As disclosed in Note 18 to the consolidated financial statements, the carrying amount of goodwill amounted to approximately US$71,453,000 as at December 31, 2021. For the purpose of assessing impairment, the recoverable amount of certain cash-generating units to which goodwill has been allocated is determined by management based on value-in-use calculations using financial budgets based on past performance and expectation for market development, where the key inputs parameters include growth rates and discount rates.

Based on the management's assessment, there is no impairment of goodwill allocated to any of the cash-generating units based on the calculations of value in use and fair value less costs of disposal.

Our response:

Our procedures in relation to the impairment assessment of goodwill included:

- Assessing the appropriateness of basis of calculation of the value in use and fair value less costs of disposal prepared by management;
- Evaluating the reasonableness of the management's estimate of growth rates and discount rates in determining the value in use with reference to the historical performance and the latest budgets of the Group and market data; and
- Checking the mathematical accuracy of the management's estimates of the recoverable amount.

OTHER INFORMATION IN THE ANNUAL REPORT

The directors are responsible for the other information. The other information comprises the information included in the Company's annual report, but does not include 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.

DIRECTORS' RESPONSIBILITIES FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

The directors are also responsible for overseeing the Group's financial reporting process. The audit and risk management committee of the Company assists the directors in discharging their responsibility in this regard.

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. This report is made solely to you, as a body, in accordance with the terms of our engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs 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 HKSAs, we exercise professional judgment and maintain professional skepticism 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.

AUDITOR’S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS *(Continued)*

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

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

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

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

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

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

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

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS *(Continued)*

From the matters communicated with the directors, 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.

BDO Limited
Certified Public Accountants
Alfred Lee
Practising Certificate no. P04960

Hong Kong, March 28, 2022

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended December 31, 2021

	NOTES	2021 *US$'000*	2020 *US$'000*
Revenue	*5*	**184,441**	125,811
Cost of services		**(117,740)**	(84,326)
Gross profit		**66,701**	41,485
Other income	*7*	**4,561**	6,261
Other gains and losses, net	*8*	**(1,982)**	(139)
Research and development expenses		**(2,434)**	(1,841)
Impairment losses (recognized)/reversal on			
– trade receivables		**(665)**	80
– unbilled revenue		**(108)**	(165)
Selling and marketing expenses		**(5,719)**	(5,066)
Administrative expenses		**(32,718)**	(18,829)
Share of profit/(loss) of associates	*20*	**9**	(68)
Finance costs	*9*	**(2,579)**	(2,196)
Profit before tax	*10*	**25,066**	19,522
Income tax expense	*11*	**(6,144)**	(2,107)
Profit for the year		**18,922**	17,415
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss:			
Exchange differences arising from translation of foreign operations		**1,792**	3,219
Total comprehensive income for the year		**20,714**	20,634

For the year ended December 31, 2021

	NOTES	2021 US$'000	2020 US$'000
Profit for the year attributable to:			
Owners of the Company		18,428	17,150
Non-controlling interests		494	265
		18,922	17,415
Total comprehensive income for the year attributable to:			
Owners of the Company		20,166	20,310
Non-controlling interests		548	324
		20,714	20,634
Earnings per share	*14*		
– Basic (US$)		0.0090	0.0085
– Diluted (US$)		0.0087	0.0083

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at December 31, 2021

	NOTES	2021 US$'000	2020 US$'000 (Restated)
Non-current Assets			
Property, plant and equipment	16	90,715	42,445
Right-of-use assets	17	55,520	39,836
Goodwill	18	71,453	24,907
Intangible assets	19	31,693	14,793
Interests in associates	20	5,342	473
Deferred tax assets	21	7,651	5,154
Financial assets at fair value through profit or loss ("FVTPL")	22	1,568	–
Restricted bank deposits	26	300	300
Other long-term deposits		436	417
Other non-current assets		94	–
		264,772	128,325
Current Assets			
Inventories		946	724
Trade and other receivables and prepayments	23	42,543	27,251
Unbilled revenue	24	12,299	7,736
Structured deposits	25	4,078	2,452
Tax recoverable		5,232	4,131
Restricted bank deposits	26	1,343	8
Cash and cash equivalents	26	144,629	212,087
		211,070	254,389
Current Liabilities			
Trade and other payables	27	37,478	19,781
Advances from customers	28	23,632	17,870
Bank borrowings	29	11	–
Income tax payable		4,373	2,475
Amounts due to shareholders	30	210	210
Lease liabilities	31	7,289	5,191
		72,993	45,527
Net Current Assets		138,077	208,862
Total Assets less Current Liabilities		402,849	337,187

As at December 31, 2021

	NOTES	2021 US$'000	2020 US$'000 (Restated)
Non-current Liabilities			
Deferred tax liabilities	*21*	11,197	3,081
Lease liabilities	*31*	50,550	35,431
Other long-term liabilities	*32*	18,018	9,803
		79,765	48,315
Net Assets		323,084	288,872
Capital and Reserves			
Share capital	*33*	20	20
Reserves		319,822	287,849
Equity attributable to owners of the Company		319,842	287,869
Non-controlling interests		3,242	1,003
Total Equity		323,084	288,872

The consolidated financial statements on pages 113 to 239 were approved and authorized for issue by the board of directors on March 28, 2022 and are signed on its behalf by:

Dr. Song Li, DIRECTOR

Dr. Zhihe Li, DIRECTOR

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended December 31, 2021

	Share capital US$'000	Share premium US$'000	Statutory reserve US$'000 (Note)	Foreign currency translation reserve US$'000	Equity-settled share-based compensation reserve US$'000	Reorganization reserve US$'000	Capital reserve US$'000	Accumulated profit US$'000	Total reserves US$'000	Non-controlling interests US$'000	Total US$'000
		Reserves									
As at January 1, 2020	20	221,614	2,567	(729)	11,645	(9,531)	3,050	35,963	264,579	679	265,278
Profit for the year	–	–	–	–	–	–	–	17,150	17,150	265	17,415
Exchange differences arising from translation of foreign operations	–	–	–	3,160	–	–	–	–	3,160	59	3,219
Total comprehensive income for the year	–	–	–	3,160	–	–	–	17,150	20,310	324	20,634
Transfer from statutory reserve *(Note)*	–	–	5	–	–	–	–	(5)	–	–	–
Exercise of share options *(Note 34)*	–	4,849	–	–	(1,454)	–	–	–	3,395	–	3,395
(Reversal)/recognition of deferred tax assets related to equity-settled share-based compensation *(Note 21)*	–	(2,371)	–	–	1,001	–	–	–	(1,370)	–	(1,370)
Recognition of equity-settled share-based compensation *(Note 34)*	–	–	–	–	935	–	–	–	935	–	935
As at December 31, 2020	20	224,092	2,572	2,431	12,127	(9,531)	3,050	53,108	287,849	1,003	288,872

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY *(Continued)*

For the year ended December 31, 2021

	Share capital US$'000	Reserves								Non-controlling interests US$'000	Total US$'000
		Share premium US$'000	Statutory reserve US$'000 *(Note)*	Foreign currency translation reserve US$'000	Equity-settled share-based compensation reserve US$'000	Reorganization reserve US$'000	Capital reserve US$'000	Accumulated profit US$'000	Total reserves US$'000		
As at January 1, 2021	20	224,092	2,572	2,431	12,127	(9,531)	3,050	53,108	287,849	1,003	288,872
Profit for the year	–	–	–	–	–	–	–	18,428	18,428	494	18,922
Exchange differences arising from translation of foreign operations	–	–	–	1,738	–	–	–	–	1,738	54	1,792
Total comprehensive income for the year	–	–	–	1,738	–	–	–	18,428	20,166	548	20,714
Acquisition of a subsidiary *(Note 41)*	–	–	–	–	–	–	–	–	–	1,691	1,691
Exercise of share options *(Note 34)*	–	3,060	–	–	(808)	–	–	–	2,252	–	2,252
Recognition of deferred tax assets related to equity-settled share-based compensation *(Note 21)*	–	–	–	–	2,038	–	–	–	2,038	–	2,038
Recognition of equity-settled share-based compensation *(Note 34)*	–	–	–	–	7,517	–	–	–	7,517	–	7,517
As at December 31, 2021	20	227,152	2,572	4,169	20,874	(9,531)	3,050	71,536	319,822	3,242	323,084

Note: In accordance with the Articles of Association of all subsidiaries established in the People's Republic of China (the "PRC"), those subsidiaries are required to transfer 10% of the profit after taxation to the statutory reserve until the reserve reaches 50% of the registered capital. Transfer to this reserve must be made before distributing dividends to equity holders. The statutory reserve can be used to make up for previous years' losses, expand the existing operations or convert into additional capital of the subsidiaries.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended December 31, 2021

	2021 *US$'000*	2020 *US$'000*
OPERATING ACTIVITIES		
Profit before tax	25,066	19,522
Adjustments for:		
Depreciation of property, plant and equipment	13,290	5,591
Depreciation of right-of-use assets	6,233	4,313
Amortization of intangible assets	4,387	2,427
Impairment losses recognized/(reversal) on		
– trade receivables	665	(80)
– unbilled revenue	108	165
Share of (profit)/loss of associates	(9)	68
Fair value change on financial liabilities measured at FVTPL	1,725	(18)
Interest income	(1,885)	(4,143)
Finance costs	2,579	2,196
Net foreign exchange loss	127	133
Share-based payment expense	7,517	935
Loss on disposal of property, plant and equipment	2	53
Operating cash flows before movements in working capital	59,805	31,162
Increase in inventories	(222)	(551)
Increase in trade and other receivables and prepayments and unbilled revenue	(17,198)	(2,771)
Increase in trade and other payables and advances from customers	5,103	7,296
Cash generated from operations	47,488	35,136
Income tax paid	(2,939)	(3,482)
NET CASH GENERATED FROM OPERATING ACTIVITIES	44,549	31,654

CONSOLIDATED STATEMENT OF CASH FLOWS *(Continued)*

For the year ended December 31, 2021

	2021 US$'000	2020 US$'000
INVESTING ACTIVITIES		
Net proceeds from disposal of associates	75	–
Settlement of consideration from disposal of associates in prior year	–	3,600
Payment for prior year acquisition of subsidiaries	(3,680)	–
Purchase of property, plant and equipment	(50,380)	(14,576)
Proceeds from disposal of property plant and equipment	142	110
Purchase of intangible assets	(252)	(528)
Interest received	1,938	4,241
Acquisition of subsidiaries, net of cash acquired	(45,499)	(16,731)
Acquisition of an associate	(5,333)	–
Placement of structured deposits	(59,854)	(2,448)
Withdrawal of structured deposits	58,303	–
Purchase of financial assets at FVTPL	(1,568)	–
Placement of restricted bank deposits	(1,335)	–
Withdrawal of restricted bank deposits	–	440
NET CASH USED IN INVESTING ACTIVITIES	(107,443)	(25,892)
FINANCING ACTIVITIES		
Proceeds from bank borrowings	11	–
Repayment of bank borrowings	–	(500)
Interest paid on bank borrowings	–	(6)
Repayment of lease liabilities	(5,228)	(3,612)
Interest paid on lease liabilities	(2,579)	(2,190)
Proceeds from exercise of share options	2,252	3,395
NET CASH USED IN FINANCING ACTIVITIES	(5,544)	(2,913)
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(68,438)	2,849
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE YEAR	212,087	207,752
EFFECT OF EXCHANGE RATE CHANGES	980	1,486
CASH AND CASH EQUIVALENTS AT THE END OF THE YEAR REPRESENTED BY BANK BALANCES AND CASH	144,629	212,087

1. GENERAL INFORMATION

Frontage Holdings Corporation (the "Company") was incorporated in the Cayman Islands as an exempted company with limited liability on April 16, 2018 under the Company Law of the Cayman Islands, and its shares have been listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange") since May 30, 2019 ("Listing Date"). The immediate holding company of the Company is Hongkong Tigermed Co., Limited ("Hongkong Tigermed"), a company incorporated under the laws of Hong Kong with limited liability. The ultimate holding company of the Company is Hangzhou Tigermed Consulting Co., Ltd. ("Hangzhou Tigermed"), a company established in Hangzhou, the PRC and whose shares have been listed on the ChiNext market of the Shenzhen Stock Exchange and the Main Board of The Stock Exchange.

The Company is a holding company. The principal activities of the Company and its subsidiaries (collectively referred to as the "Group") are to provide laboratory and related services to pharmaceutical and agrochemical companies as well as bioequivalence and chemical services. The registered office of the Company is Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111 Cayman Islands. The principal place of business in the United States of America (the "USA") and Hong Kong is 700 Pennsylvania Drive, Exton, PA 19341, USA and Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong, respectively.

The functional currency of the Company and the operating subsidiaries incorporated in the USA is US dollars ("US$"). The functional currency of the PRC operating subsidiaries is Renminbi ("RMB"). The functional currency of the operating subsidiary incorporated in Canada is Canadian dollars ("CAD"). The reporting currency used for the presentation of the consolidated financial statements is US$, which is the same as the functional currency of the Company.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs")

(a) Adoption of new/revised IFRSs – effective January 1, 2021

In the current year, the Group has applied the following amendments to IFRSs issued by the International Accounting Standards Board (the "IASB") for the first time, which are mandatorily effective for the annual period beginning on or after January 1, 2021 for the preparation of the consolidated financial statements:

Amendments to IAS 39, IFRS 4, IFRS 7, IFRS 9 and IFRS 16	Interest Rate Benchmark Reform – Phase 2
Amendments to IFRS 16	COVID-19-Related Rent Concessions

The application of the amendments to IFRSs in the current year has had no material impact on the Group's financial performance and positions for the current and prior years and/or on the disclosures set out in these consolidated financial statements. The Group has not early applied any new or amended IFRSs that is not yet effective for the current accounting year.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(b) New/revised IFRSs that have been issued but are not yet effective

The following new or amended IFRSs, potentially relevant to the Group's consolidated financial statements, have been issued, but are not yet effective and have not been early adopted by the Group. The Group's current intention is to apply these changes on the date they become effective.

Amendments to IAS 1	Classification of Liabilities as Current or Non-current[4]
Amendments to IAS 8	Definition of Accounting Estimates[4]
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction[4]
Amendments to IAS 16	Proceeds before Intended Use[2]
Amendments to IAS 37	Onerous Contracts – Cost of Fulfilling a Contract[2]
Amendments to IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies[4]
Amendments to IFRS 3	Reference to the Conceptual Framework[3]
Amendments to IFRS 10 and IAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[5]
Amendment to IFRS 16	COVID-19-Related Rent Concessions beyond June 30, 2021[1]
IFRS 17 and amendments to IFRS 17	Insurance Contracts[4]
Annual Improvements to IFRSs 2018-2020[2]	

1 Effective for annual periods beginning on or after April 1, 2021.

2 Effective for annual periods beginning on or after January 1, 2022.

3 Effective for business combinations for which the date of acquisition is on or after the beginning of the first annual period beginning on or after January 1, 2022.

4 Effective for annual periods beginning on or after January 1, 2023.

5 The amendments shall be applied prospectively to the sale or contribution of assets occurring in annual periods beginning on or after a date to be determined.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(b) New/revised IFRSs that have been issued but are not yet effective *(Continued)*

Amendments to IAS 1 "Classification of Liabilities as Current or Non-current"

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period, specify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability and explain that rights are in existence if covenants are complied with at the end of the reporting period. The amendments also introduce a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services.

The directors do not anticipate that the application of the amendments and revision in the future will have an impact on the Group's consolidated financial statements.

Amendments to IAS 8 "Definition of Accounting Estimates"

The amendments replace the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty".

The definition of a change in accounting estimates was deleted. However, the IASB retained the concept of changes in accounting estimates in the Standard with the following clarifications:

- A change in accounting estimate that results from new information or new developments is not the correction of an error

- The effects of a change in an input or a measurement technique used to develop an accounting estimate are changes in accounting estimates if they do not result from the correction of prior period errors

The directors do not anticipate that the application of the amendments in the future will have an impact on the Group's consolidated financial statements.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(b) New/revised IFRSs that have been issued but are not yet effective *(Continued)*

Amendments to IAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"

The amendments introduce a further exception from the initial recognition exemption. Under the amendments, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences.

Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting nor taxable profit. For example, this may arise upon recognition of a lease liability and the corresponding right-of-use asset applying IFRS 16 at the commencement date of a lease.

Following the amendments to IAS 12, an entity is required to recognize the related deferred tax asset and liability, with the recognition of any deferred tax asset being subject to the recoverability criteria in IAS 12.

The IASB also adds an illustrative example to IAS 12 that explains how the amendments are applied.

The amendments apply to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period an entity recognizes:

- A deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized) and a deferred tax liability for all deductible and taxable temporary differences associated with:
  - Right-of-use assets and lease liabilities
  - Decommissioning, restoration and similar liabilities and the corresponding amounts recognized as part of the cost of the related asset
- The cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at that date.

The directors are currently assessing the impact that the application of the amendments will have on the Group's consolidated financial statements.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(b) New/revised IFRSs that have been issued but are not yet effective *(Continued)*

Amendments to IAS 16 "Proceeds before Intended Use"

The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, the proceeds from selling such items, and the cost of producing those items, is recognized in profit or loss.

The directors are currently assessing the impact that the application of the amendments will have on the Group's consolidated financial statements.

Amendments to IAS 37 "Onerous Contracts – Cost of Fulfilling a Contract"

The amendments specify that the 'cost of fulfilling' a contract comprises the 'costs that relate directly to the contract'. Costs that relate directly to a contract can either be incremental costs of fulfilling that contract (e.g. direct labor and materials) or an allocation of other costs that relate directly to fulfilling contracts (e.g. the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

The directors are currently assessing the impact that the application of the amendments will have on the Group's consolidated financial statements.

Amendments to IAS 1 and IFRS Practice Statement 2 "Disclosure of Accounting Policies"

The amendments change the requirements in IAS 1 with regard to disclosure of accounting policies. The amendments replace all instances of the term 'significant accounting policies' with 'material accounting policy information'. Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements.

The supporting paragraphs in IAS 1 are also amended to clarify that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. Accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material.

The IASB has also developed guidance and examples to explain and demonstrate the application of the 'four-step materiality process' described in IFRS Practice Statement 2.

The directors are currently assessing the impact that the application of the amendments will have on the Group's consolidated financial statements.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(b) New/revised IFRSs that have been issued but are not yet effective *(Continued)*

Amendments to IFRS 3 "Reference to the Conceptual Framework"

The amendments update IFRS 3 "Business Combinations" so that it refers to the revised Conceptual Framework for Financial Reporting 2018 instead of the version issued in 2010. The amendments add to IFRS 3 a requirement that, for obligations within the scope of IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", an acquirer applies IAS 37 to determine whether at the acquisition date a present obligation exists as a result of past events. For a levy that would be within the scope of IFRIC 21 "Levies", the acquirer applies IFRIC 21 to determine whether the obligating event that gives rise to a liability to pay the levy has occurred by the acquisition date. The amendments also add an explicit statement that an acquirer does not recognize contingent assets acquired in a business combination.

The directors do not anticipate that the application of the amendments in the future will have an impact on the Group's consolidated financial statements.

Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"

The amendments clarify with situations where there is a sale or contribution of assets between an investor and its associate or joint venture. When the transaction with an associate or joint venture that is accounted for using the equity method, any gains or losses resulting from the loss of control of a subsidiary that does not contain a business are recognized in the profit or loss only to the extent of the unrelated investors' interests in that associate or joint venture. Similarly, any gains or losses resulting from the remeasurement of retained interest in any former subsidiary (that has become an associate or a joint venture) to fair value are recognized in the profit or loss only to the extent of the unrelated investors' interests in the new associate or joint venture.

The directors anticipate that the application of these amendments may have an impact on the Group's consolidated financial statements in future periods should such transaction arise.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(b) New/revised IFRSs that have been issued but are not yet effective *(Continued)*

Amendment to IFRS 16 "COVID-19-Related Rent Concessions beyond June 30, 2021"

In March 2021, the IASB amended IFRS 16, extending the practical expedient in order to permit lessees to apply it to rent concessions for which reductions in lease payments affect payments originally due on or before June 30, 2022. This amendment is applicable for annual reporting periods beginning on or after April 1, 2021, with early application permitted, including in financial statements not authorized for issue at April 9, 2021.

The directors are currently assessing the impact that the application of the amendments will have on the Group's consolidated financial statements.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(b) New/revised IFRSs that have been issued but are not yet effective *(Continued)*

IFRS 17 "Insurance Contracts"

The new standard establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4 "Insurance Contracts". The standard outlines a 'General Model', which is modified for insurance contracts with direct participation features, described as the 'Variable Fee Approach'. The General Model is simplified if certain criteria are met by measuring the liability for remaining coverage using the Premium Allocation Approach.

The directors do not anticipate that the application of this standard in the future will have an impact on the Group's consolidated financial statements.

Annual Improvements to IFRSs 2018-2020

The annual improvements amends a number of standards, including:

- IFRS 1 "*First-time Adoption of International Financial Reporting Standards*", which permit a subsidiary that applies paragraph D16(a) of IFRS 1 to measure cumulative translation differences using the amounts reported by its parent, based on the parent's date of transition to IFRSs.

- IFRS 9 "*Financial Instruments*", which clarify the fees included in the '10 per cent' test in paragraph B3.3.6 of IFRS 9 in assessing whether to derecognize a financial liability, explaining that only fees paid or received between the entity and the lender, including fees paid or received by either the entity or the lender on other's behalf are included.

- IFRS 16, which amend Illustrative Example 13 to remove the illustration of reimbursement of leasehold improvements by the lessor in order to resolve any potential confusion regarding the treatment of lease incentives that might arise because of how lease incentives are illustrated in that example.

- IAS 41 "*Agriculture*" which remove the requirement to exclude taxation cash flows when measuring the fair value of a biological asset using a present value technique.

The directors do not anticipate that the application of the amendments in the future will have an impact on the Group's consolidated financial statements.

2. APPLICATION OF NEW AND AMENDMENTS TO INTERNATIONAL FINANCIAL REPORTING STANDARDS ("IFRSs") *(Continued)*

(c) Adjustments to provisional values for business combination in 2020

Pursuant to IFRS 3 "*Business Combinations*", if the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group shall report in its consolidated financial statements provisional amounts for the items for which the accounting is incomplete. As further disclosed in Note 41(e), on July 2, 2020, the Group acquired entire equity interests of Acme Bioscience, Inc. ("Acme") for consideration of US$27,397,000 (the "Acme Acquisition") of which the valuations have not been completed and the respective fair values of the identifiable net assets and goodwill were determined provisionally. During the year ended December 31, 2021 (within measurement period), the Group made certain fair value adjustments, with reference to the finalized independent valuation, to the carrying amounts of the identifiable assets and liabilities of Acme as a result of completing the initial accounting. As at December 31, 2020, the impact arising from the adjustments to the fair values at the acquisition date of the identifiable net assets as if initial accounting had been completed on the acquisition date are as follows:

	As previously reported *US$'000*	**Adjustments** *US$'000*	**As restated** *US$'000*
Goodwill	22,108	2,799	24,907
Intangible assets	14,993	(200)	14,793
Trade and other payables	(19,601)	(180)	(19,781)
Deferred tax liabilities	(3,126)	45	(3,081)
Other long-term liabilities	(7,339)	(2,464)	(9,803)

The amortization of the respective assets subsequent to the Acme Acquisition date was not adjusted as the financial impact is not material. Accordingly no restated retained earnings is presented.

The above restatements relating to the Acme Acquisition were effected during the year ended December 31, 2020 and hence have no financial impact on the consolidated financial position as at January 1, 2020. Accordingly no restated consolidated statement of financial position as at January 1, 2020 is presented.

3. SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in accordance with IFRSs issued by the IASB. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules") and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on historical cost basis except for certain financial instrument that is measured at fair value at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2 "*Share-based Payment*", leasing transactions that are accounted for in accordance with IFRS 16, and measurements that have some similarities to fair value but are not fair value, such as net realizable value in IAS 2 "*Inventories*" or value in use in IAS 36 "*Impairment of Assets*".

In addition, for financial reporting purposes, fair value measurements are categorized into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

The principal accounting policies are set out below.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(a) Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each item of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Where necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on combination.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

(b) Business combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognized in profit or loss as incurred.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(b) Business combinations *(Continued)*

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value, except that:

- deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognized and measured in accordance with IAS 12 "*Income Taxes*" and IAS 19 "*Employee Benefits*", respectively;

- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with IFRS 2 "*Share-based Payment*" at the acquisition date (see the accounting policy below);

- assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5 "*Non-current Assets Held for Sale and Discontinued Operations*" are measured in accordance with that standard;

- lease liabilities are recognized and measured at the present value of the remaining lease payments (as defined in IFRS 16) as if the acquired leases were new leases at the acquisition date, except for leases for which (a) the lease term ends within 12 months of the acquisition date; or (b) the underlying asset is of low value. Right-of-use assets are recognized and measured at the same amount as the relevant lease liabilities, adjusted to reflect favorable or unfavorable terms of the lease when compared with market terms; and

- Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net amount of the identifiable assets acquired and the liabilities assumed as at acquisition date. If, after re-assessment, the net amount of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are initially measured at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets or at fair value. The choice of measurement basis is made on a transaction-by-transaction basis.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(b) Business combinations *(Continued)*

When the consideration transferred by the Group in a business combination includes a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively. Measurement period adjustments are adjustments that arise from additional information obtained during the "measurement period" (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured to fair value at subsequent reporting dates, with the corresponding gain or loss being recognized in profit or loss.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted retrospectively during the measurement period (see above), and additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

(c) Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of the business (see Note 3(b)) less accumulated impairment losses, if any.

For the purposes of impairment testing, goodwill is allocated to each of the Group's cash-generating units ("CGUs") (or group of CGUs) that is expected to benefit from the synergies of the combination, which represent the lowest level at which the goodwill is monitored for internal management purposes and not larger than an operating segment.

A CGU (or group of CGUs) to which goodwill has been allocated is tested for impairment annually or more frequently when there is indication that the unit may be impaired. For goodwill arising on an acquisition in a reporting period, the CGU (or group of CGUs) to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit (or group of CGUs).

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(c) Goodwill *(Continued)*

On disposal of the relevant CGU, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal (or any of the CGU within group of CGUs in which the Group monitors goodwill). When the Group disposes of an operation within the CGUs (or group of CGUs), the amount of goodwill disposed of is measured on the basis of the relative values of the CGUs disposed of and the portion of the CGUs (or group of CGUs) retained.

The Group's policy for goodwill arising on the acquisition of an associate is described below.

(d) Interests in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in the consolidated financial statements using the equity method of accounting. The financial statements of associates used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Under equity method, an interest in an associate is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate. Changes in net assets of the associates other than profit or loss and other comprehensive income are not accounted for unless such changes resulted in changes in ownership interest held by the Group. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net interest in the associate), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

An interest in an associate is accounted for using the equity method from the date on which the investee becomes an associate. On acquisition of the interest an associate, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognized immediately in profit or loss in the period in which the investment is acquired.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(d) Interests in associates *(Continued)*

The Group assesses whether there is an objective evidence that the interest in an associate may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

When the Group ceases to have significant influence over an associate, it is accounted for as a disposal of the entire interest in the investee with a resulting gain or loss being recognized in profit or loss.

When a group entity transacts with an associate of the Group, profits and losses resulting from the transactions with the associate are recognized in the Group's consolidated financial statements only to the extent of interests in the associate that are not related to the Group.

(e) Revenue from contracts with customers

Revenue is recognized to depict the transfer of promised services to customers in an amount that reflects the consideration to which the Group expects to be entitled in exchange for those services.

Specifically, the Group uses a 5-step approach to revenue recognition:

- Step 1: Identify the contract(s) with a customer
- Step 2: Identify the performance obligations in the contract
- Step 3: Determine the transaction price
- Step 4: Allocate the transaction price to the performance obligations in the contract
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

Revenue is recognized when, or as, obligations under the terms of a contract are satisfied, which occurs when control of the promised products or services is transferred to customers. Revenue is measured as the amount of consideration the Group expects to receive in exchange for transferring products or services to a customer ("transaction price").

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(e) Revenue from contracts with customers *(Continued)*

A performance obligation represents a good and service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

Control is transferred over time and revenue is recognized over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates or enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognized at a point in time when the customer obtains control of the distinct good or service.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

Generally, significant payment terms are disclosed within the contents of a given contract and are in the form of either milestone payment terms representing a percentage of the total budgeted contract price or corresponding directly with the value to the customer of the Group's performance.

Revenues recognized in excess of billings are recognized as unbilled revenue and disclosed in the consolidated statement of financial position as unbilled revenue. Amounts billed in accordance with contracted payment schedules but in excess of revenues earned are recognized as contract liabilities and disclosed in the consolidated statement of financial position as advances from customers.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(e) Revenue from contracts with customers *(Continued)*

Contracts are terminable by the customers either immediately or upon proper notice specified within the contracts, generally 30 days. A termination fee is generally assessed in addition to the Group being entitled to compensation equivalent to the efforts and costs incurred to satisfy any performance obligations.

To the extent the transaction price includes variable consideration, the Group estimates the amount of variable consideration that should be included in the transaction price utilizing the most likely amount to which the Group expects to be entitled. Variable consideration is included in the transaction price if, in the Group's judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur. Estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the Group's anticipated performance and all information (historical, current and forecasted) that is reasonably available. Sales, value added, and other taxes collected on behalf of third parties are excluded from revenue.

The transaction price also includes reimbursable expenses (i.e. out-of-pocket expenses, outside consultants and other reimbursable expenses). Reimbursable expenses which do not represent a transfer of goods or services to the customer are not distinct. Such reimbursable expenses are included in total transaction price for the contract and allocated to individual performance obligations which are satisfied over time.

Contracts with customers may contain multiple performance obligations. For such arrangements, the transaction price is allocated to each performance obligation based on the estimated relative standalone selling prices of the promised products or services underlying each performance obligation, inclusive of reimbursable expenses.

When the sum of the stand-alone transaction prices of those products or services exceeds the promised consideration in a contract, the Group recognizes a discount on that particular contract. If the entity does not have observable evidence that the entire discount relates to one or more, but not all performance obligations under the specific contract, the discount is proportionately applied to all performance obligations under a contract.

Contracts are often modified to account for changes in contract specifications and requirements. Contract modifications exist when the modification either creates new, or changes existing, enforceable rights and obligations. Generally, the modification is considered to be a separate contract and revenue is recognized prospectively.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(e) Revenue from contracts with customers *(Continued)*

For the services delivered to the customer based on the extent of progress towards completion of the performance obligation, the Group's performance does not create an asset with an alternative future use and the contract terms specify the Group has an enforceable right to payment for performance completed to date, revenue generated from such performance is recognized over time.

The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. Depending on which better depicts the transfer of value to the customer, the Group generally measures its progress using either cost-to-cost (input method) or units produced/services transferred to the customer to date (output method). The Group uses the known cost measure of progress when it best depicts the transfer of value to the customer which occurs as the Group incurs costs on its contract, generally related to fixed fee service contracts. Under the cost-to-cost measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenue is recorded proportionally as costs are incurred. The units produced/services transferred to the customer to date measure of progress is generally related to rate per unit contracts or contracts for the delivery of services, as the extent of progress towards completion is measured based on discrete service or time-based increments, such as samples tested or services transferred.

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued for each period, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts the estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

(f) Leases

Definition of a lease

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

For contracts entered into or modified or arising from business combinations on or after the date of initial application, the Group assesses whether a contract is or contains a lease based on the definition under IFRS 16 at inception, modification date or acquisition date, as appropriate. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(f) Leases *(Continued)*

Definition of a lease (Continued)

Allocation of consideration to components of a contract

For a contract that contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

The Group also applies practical expedient not to separate non-lease components from lease component, and instead account for the lease component and any associated non-lease components as a single lease component.

The Group as a lessee

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to leases of buildings and machinery and equipment that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. It also applies the recognition exemption for lease of low-value assets. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

Right-of-use assets

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless those costs are incurred to produce inventories.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(f) Leases (Continued)

The Group as a lessee (Continued)

Right-of-use assets (Continued)

Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any re-measurement of lease liabilities.

Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term is depreciated from commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

When the Group obtains ownership of the underlying leased assets at the end of the lease term, upon exercising purchase options, the cost of the relevant right-of-use assets and the related accumulated depreciation and impairment loss are transferred to property, plant and equipment.

The Group presents right-of-use assets as a separate line item on the consolidated statement of financial position.

Refundable rental deposits

Refundable rental deposits paid are accounted under IFRS 9 and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments and included in the cost of right-of-use assets.

Lease liabilities

At the commencement date of a lease, the Group recognizes and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(f) Leases *(Continued)*

The Group as a lessee (Continued)

Lease liabilities *(Continued)*

The lease payments include:

- fixed payments (including in-substance fixed payments) less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate at the commencement date;
- amounts expected to be paid under residual value guarantees;
- the exercise price of a purchase option reasonably certain to be exercised by the Group; and
- payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

The Group re-measures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
- the lease payments change due to changes in market rental rates following a market rent review, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(f) Leases *(Continued)*

The Group as a lessee (Continued)

Lease modifications

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group re-measures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset. When the modified contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

(g) Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the functional currency of that entity (foreign currencies) are recorded in the respective functional currency (i.e. the currency of the primary economic environment in which the entity operates) at the rates of exchange prevailing on the dates of the transactions. At the end of the reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognized in profit or loss in the period in which they arise.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(g) Foreign currencies *(Continued)*

For the purposes of presenting the consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into the presentation currency of the Group (i.e. US$) using exchange rates prevailing at the end of each reporting period. Income and expenses items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during the period, in which case, the exchange rates prevailing at the dates of transactions are used.

Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity under the heading of foreign currency translation reserve.

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In addition, in relation to a partial disposal of a subsidiary that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognized in profit or loss. For all other partial disposals (i.e. partial disposals of associates or joint arrangements that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Goodwill and fair value adjustments on identifiable assets acquired arising on an acquisition of a foreign operation are treated as assets and liabilities of that foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognized in other comprehensive income.

(h) Borrowing costs

All borrowing costs are recognized in profit or loss in the period in which they are incurred. There were no borrowing costs eligible to be capitalized into property, plant and equipment for both years.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(i) Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expense the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire property, plant and equipment are recognized as deferred revenue in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

(j) Retirement benefit costs

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

The Group participates in two defined contribution schemes:

a) A state-managed retirement benefit scheme in the PRC pursuant to which the Group pays a fixed percentage of its qualifying staff's wages as contributions to the scheme.

b) A defined contribution plan in the USA pursuant to which the Group matches 50 cents for every dollar contributed by each qualifying member of staff up to 4% of their salary. The maximum match is 2% of the qualifying member of staff's gross pay.

Payments to such retirement benefit schemes are charged as an expense when employees have rendered service entitling them to the contributions.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(k) Short-term employee benefits

Short-term employee benefits are recognized at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognized as an expense unless another IFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognized for benefits accruing to employees (such as wages and salaries, annual leave and sick leave) after deducting any amount already paid.

(l) Share-based payment transactions

Equity-settled share-based payments to employees (including directors) are measured at the fair value of the equity instruments at the grant date.

The fair value determined at the grant date of the equity-settled share-based transaction (without taking into consideration all non-market vesting condition) is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity (equity-settled share-based compensation reserve). At the end of each reporting period, the Group revises its estimates of the number of equity instruments expected to vest based on assessment of all relevant non-market vesting conditions. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimates, with a corresponding adjustment to the equity-settled share-based compensation reserve.

When the share options are exercised, the amount previously recognized in the equity-settled share-based compensation reserve will be transferred to share premium. When the share options are forfeited after the vesting date or are still not exercised at the expiry date, the amount previously recognized in the equity-settled share-based compensation reserve will be transferred to accumulated profit.

(m) Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from "profit before tax" as reported in the consolidated statement of profit or loss and other comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of each reporting period.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Taxation *(Continued)*

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. In addition, deferred tax liabilities are not recognized if the temporary difference arises from the initial recognition of goodwill.

Deferred tax liabilities are recognized for taxable temporary differences arising on investments in subsidiaries or associates except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each reporting period.

The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of each reporting period, to recover or settle the carrying amount of its assets and liabilities.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognizes the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Taxation *(Continued)*

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies IAS 12 "*Income Taxes*" requirements to right-of-use assets and lease liabilities separately. Temporary differences relating to right-of-use assets and lease liabilities are not recognized at initial recognition and over the lease terms due to application of the initial recognition exemption. Temporary differences arising from subsequent revision to the carrying amounts of right-of-use assets and lease liabilities, resulting from remeasurement of lease liabilities and lease modifications, that are not subject to initial recognition exemption are recognized on the date of remeasurement or modification.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied to the same taxable entity by the same taxation authority.

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

(n) Property, plant and equipment

Property, plant and equipment are tangible assets that are held for use in the production or supply of goods or services, or for administrative purposes. Property, plant and equipment are stated in the consolidated statement of financial position at cost less accumulated depreciation and accumulated impairment losses, if any.

Freehold lands are not depreciated and are measured at cost less accumulated impairment losses.

Property, plant and equipment in the course of construction for production, supply or administrative purposes are carried at cost, less any recognized impairment loss. Costs include any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(n) Property, plant and equipment *(Continued)*

Property, plant and equipment other than the construction in progress and the land are depreciated on a straight-line basis after taking into account of the residual value as follows:

Furniture, fixtures and equipment (including experiment equipment)	14% – 33% per annum
Transportation equipment	20% per annum
Leasehold improvement	Over the shorter of the lease term or ten years
Buildings	7% per annum

Depreciation is recognized so as to write off the cost of assets other than freehold land and properties under construction less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognized in profit or loss.

Construction in progress includes property, plant and equipment in the course of construction for production, supply or administrative purposes and are carried at cost, less any recognized impairment loss. Costs include professional fees and, for qualifying assets, borrowing costs capitalized in accordance with the Group's accounting policy. Construction in progress is classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

(o) Research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred. There were no costs incurred in relation to projects in the development phase, as defined by IAS 38 "*Intangible assets*", during both years.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(p) Intangible assets

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortization and any accumulated impairment losses, being their fair value at the date of the revaluation less subsequent accumulated amortization and any accumulated impairment losses. Amortization for intangible assets with finite useful lives is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

Intangible assets acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date (which is regarded as their cost).

Subsequent to initial recognition, intangible assets acquired in a business combination with finite useful lives are reported at costs less accumulated amortization and any accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

The intangible assets recognized by the Group and their useful economic life are as follows:

Intangible assets	**Useful economic life**
Trade name	1 year
Customer relationship	4-10 years
Software	5-10 years
Customer backlog	1-3 years
Non-competition clause	3-5 years

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from use or disposal. Gains and losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(q) Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets, intangible assets with finite useful lives to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss, if any.

The recoverable amount of property, plant and equipment, right-of-use assets, and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the CGU to which the asset belongs.

In addition, the Group assesses whether there is indication that corporate assets may be impaired. If such indication exists, corporate assets are also allocated to individual CGUs, when a reasonable and consistent basis of allocation can be identified, or otherwise they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows of the tangible asset (or the CGU) are discounted to their present value using a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset (or the CGU) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or a CGU) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a CGU, the Group compares the carrying amount of a group of CGUs, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of CGUs, with the recoverable amount of the group of CGUs. An impairment loss is recognized immediately in profit or loss.

When an impairment loss subsequently reverses, the carrying amount of the asset (or CGU or a group of CGUs) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or a CGU or a group of CGUs) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(r) Inventories

Inventories are stated at the lower of cost and net realizable value. Costs of inventories are determined on a first-in, first-out method. Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

(s) Financial instruments

Financial assets and financial liabilities are recognized when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognized and derecognized on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

Financial assets and financial liabilities are initially measured at fair value except for receivables arising from contracts with customers which are initially measured in accordance with IFRS 15 "*Revenue from customers with customers*". Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets at FVTPL are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets at FVTPL are recognized immediately in profit or loss.

The effective interest method is a method of calculating the amortized cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Financial instruments *(Continued)*

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortized cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets that meet the following conditions are subsequently measured at fair value through other comprehensive income ("FVTOCI"):

- the financial assets is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL.

Amortized cost and interest income

Interest income is recognized using the effective interest method for financial assets measured subsequently at amortized cost. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Financial instruments *(Continued)*

Financial assets (Continued)

Financial assets at FVTPL

Financial assets at FVTPL include financial assets held for trading, financial assets designated upon initial recognition at FVTPL or financial assets mandatorily required to be measured at fair value. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at FVTPL, irrespective of the business model, whereby changes in fair value, interest income calculated using the effective interest rate method and foreign exchange gains and losses are recognized in profit or loss. Notwithstanding the criteria for debt instruments to be classified at amortized cost, as described above, debt instruments may be designated at FVTPL on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Impairment of financial assets and other items subject to impairment assessment under IFRS 9

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including trade, note and other receivables, restricted bank deposits and cash and cash equivalents) and other items (unbilled revenue) which are subject to impairment under IFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Financial instruments *(Continued)*

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 *(Continued)*

The Group always recognizes lifetime ECL for trade receivables and unbilled revenue. The ECL on these assets are assessed collectively using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk since initial recognition, the Group recognizes lifetime ECL. The assessment of whether lifetime ECL should be recognized is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Financial instruments *(Continued)*

Financial assets (Continued)

Significant increase in credit risk *(Continued)*

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, for example, a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor;
- an actual or expected significant adverse change in the regulatory, economic or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the aforegoing, the Group assumes that the credit risk on a debt instrument has not increased significantly since initial recognition if the debt instrument is determined to have low credit risk at the reporting date. A debt instrument is determined to have low credit risk if (i) it has a low risk of default; (ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term; and (iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfill its contractual cash flow obligations.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

3. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(s) Financial instruments (Continued)

Financial assets (Continued)

Definition of default

For internal credit risk management, the Group considers an event of default to have occurred when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above analysis, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

(a) significant financial difficulty of the issuer or the borrower;

(b) a breach of contract, such as a default or past due event;

(c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider; or

(d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganization.

Write-off policy

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of accounts receivables, when the amounts are over two years past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries made are recognized in profit or loss.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Financial instruments *(Continued)*

Financial assets (Continued)

Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

Where ECL is measured on a collective basis to cater for cases where evidence at the individual instrument level may not yet be available, the financial instruments are grouped on the following basis:

- Nature of financial instruments (i.e. the Group's trade receivables, other receivables are each assessed as a separate group. Long-term note receivable is assessed for ECL on an individual basis);
- Past-due status;
- Nature, size and industry of debtors; and
- External credit ratings where available.

The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortized cost of the financial asset.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount through a loss allowance account.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Financial instruments *(Continued)*

Financial assets (Continued)

Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss.

Financial liabilities and equity instruments

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Financial liabilities

All financial liabilities are subsequently measured at amortized cost using the effective interest method or at FVTPL.

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is contingent consideration of an acquirer in a business combination to which IFRS 3 applies.

Financial liabilities subsequently measured at amortized cost

Financial liabilities, including trade and other payables, bank borrowings, amounts due to shareholders and lease liabilities, are subsequently measured at amortized cost, using the effective interest method.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Financial instruments *(Continued)*

Financial liabilities and equity instruments (Continued)

Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, canceled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

(t) Provisions and contingent liabilities

Provisions are recognized for liabilities of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, which it is probable will result in an outflow of economic benefits that can be reliably estimated.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, the existence of which will only be confirmed by the occurrence or nonoccurence of one or more future events, are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

(u) Related parties

(i) A person or a close member of that person's family is related to the Group if that person:

(a) has control or joint control over the Group;

(b) has significant influence over the Group; or

(c) is a member of key management personnel of the Group or the Company's parent.

3. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(u) Related parties *(Continued)*

(ii) An entity is related to the Group if any of the following conditions apply:

(a) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(b) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

(c) Both entities are joint ventures of the same third party.

(d) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(e) The entity is a post-employment benefit plan for the benefit of the employees of the Group or an entity related to the Group.

(f) The entity is controlled or jointly controlled by a person identified in (i)(a).

(g) A person identified in (i)(a) has significant influence over the entity or is a member of key management personnel of the entity (or of a parent of the entity).

(h) The entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the Company's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity and include:

(i) that person's children and spouse or domestic partner;

(ii) children of that person's spouse or domestic partner; and

(iii) dependents of that person or that person's spouse or domestic partner.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in Note 3, the directors are required to make judgments, estimates and assumptions about the carrying amounts of assets that are not readily apparent from other sources. The estimates and underlying assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and further periods.

Critical judgments in applying accounting policies

The following are the critical judgments, apart from those involving estimations (see below), that the directors have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements.

(a) Judgments in determining the performance obligations and timing of satisfaction of performance obligations for revenue recognition

(i) Performance obligation determination:

In making their judgments, the directors consider the detailed criteria for recognition of revenue set out in IFRS 15. In determining performance obligations, the directors consider whether the customer benefits from each service on its own and whether it is distinct in the context of the contract. Specifically, when concluding a contract has multiple performance obligations, the directors consider that the individual performance obligation is regularly sold separately and the service is separately identifiable from other promises within the contract.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(Continued)*

Critical judgments in applying accounting policies *(Continued)*

(a) Judgments in determining the performance obligations and timing of satisfaction of performance obligations for revenue recognition *(Continued)*

(ii) Timing of satisfaction of performance obligations:

Significant judgment is required by the directors in determining the timing of satisfaction of performance obligations. In making their judgment, the directors have considered the detailed criteria for recognition of revenue set out in IFRS 15 and in particular, whether the Group has satisfied the performance obligation over time or at a point in time with reference to the detailed terms of transaction as stipulated in the contracts entered into with its customers. The Group has also considered the relevant local laws that apply to those relevant contracts. Based on the assessment of the directors, the terms of the relevant sales contracts create an enforceable right to payment for the Group. Accordingly, the services provided by the Group with no alternative use are considered to be performance obligation satisfied over time.

For the performance obligations that are satisfied over time and the Group uses the output method to determine revenue recognition, the key judgment is that the units produced or services transferred to date relative to the remaining units or services promised under the contract best depict the Group's performance in transferring control of goods or services.

For the performance obligations that are satisfied over time and the Group uses the input method to determine revenue recognition, management has a judgment that the use of known cost measure of progress best depicts the transfer of value of goods or services to the customer. This key judgment involves calculation of performance to date. On partially completed contracts, the Group recognizes revenue based on stage of completion of the project which is estimated by comparing the costs incurred on the project with the total costs expected to complete the project.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(Continued)*

Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets within the next financial year.

(a) Estimated impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the recoverable amount of the CGU (or group of CGUs) to which goodwill has been allocated, which is the higher of the value in use or fair value less costs of disposal. The value-in-use calculation requires the Group to estimate the future cash flows expected to arise from the CGU (or a group of CGUs) and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, or change in facts and circumstances which results in downward revision of future cash flows, a material impairment loss/further impairment loss may arise.

(b) Estimated loss allowance of trade receivables and unbilled revenue

Upon the application of IFRS 9, management estimates the amount of loss allowance for ECL on trade receivables and unbilled revenue based on the credit risk of trade receivables and unbilled revenue. The loss allowance amount is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows after taking into consideration of expected future credit loss of the trade receivables and unbilled revenue. The assessment of the credit risk of the trade receivables and unbilled revenue involves high degree of estimation and uncertainty. When the actual future cash flows are different from expected, a material impairment loss or a material reversal of impairment loss may arise, accordingly.

4. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY *(Continued)*

Key sources of estimation uncertainty *(Continued)*

(c) Estimated impairment of property, plant and equipment, right-of-use assets and intangible assets

Property, plant and equipment, right-of-use assets and intangible assets are stated at cost less accumulated depreciation/amortization and impairment, if any. In determining whether an asset is impaired, the Group has to exercise judgment and make estimation, particularly in assessing: (1) whether an event has occurred or any indicators that may affect the asset value; (2) whether the carrying value of an asset can be supported by the recoverable amount, in the case of value in use, the net present value of future cash flows which are estimated based upon the continued use of the asset; and (3) the appropriate key assumptions to be applied in estimating the recoverable amounts including cash flow projections and an appropriate discount rate. When it is not possible to estimate the recoverable amount of an individual asset (including right-of-use assets), the Group estimates the recoverable amount of the CGU to which the assets belongs. Changing the assumptions and estimates, including the discount rates or the growth rate in the cash flow projections, could materially affect the net present value used in the impairment test.

5. REVENUE

The Group's revenue streams are categorized as follows:

– Laboratory testing services (formerly known as "Bioanalytical services") consist of providing method development and validation as well as sample analysis services and central laboratory services.

– Chemistry, Manufacturing and Control ("CMC") services involve assisting the customers with drug product development, analysis, and clinical trial materials' delivery and supply.

– Preclinical research services consist of Drug Metabolism and Pharmacokinetic ("DMPK") services and Safety and Toxicology Services, absorption, distribution, metabolism and excretion and compound screening services. The services include study designs, execution of studies, and interpretation of the data through structural optimization in early discovery, pharmacokinetic studies in rodents, non-GLP bioanalytical studies, etc. It also includes in-vitro and in-vivo studies, to help identify toxicology issues and devise testing plans to address the determination of a safe starting dose in humans in clinical studies.

5. REVENUE *(Continued)*

– Bioequivalence services consist of bioequivalence studies designed, coordinated, and reported by the Group to the customers.

– Chemistry services consist of providing contract research and custom synthesis services for biopharmaceutical company specializing in drug discovery and development.

The financial information of "Safety and Toxicology" as disclosed in the comparative figures has been combined with DMPK to conform with the presentation of the current year for the purpose of reporting to the chief operating decision maker ("CODM").

An analysis of the Group's revenue is as follows:

	2021 *US$'000*	2020 *US$'000* (Restated)
Laboratory testing	82,612	61,916
CMC	28,052	22,576
Preclinical research	47,090	27,366
Bioequivalence	10,737	7,531
Chemistry	15,950	6,422
	184,441	125,811

All revenue of the Group listed above are recognized over time as the Group's performance does not create an asset with an alternative future use since the Group cannot redirect the asset for use on another customer, and the contract terms specify the Group has an enforceable right to payment for performance completed to date.

Transaction Price Allocated to Future Performance Obligations

IFRS 15 requires that the Group to disclose the aggregate amount of transaction price that is allocated to each performance obligation that has not yet been satisfied as at year-end. The guidance provides certain practical expedients that limit this requirement and, therefore, for the vast majority of contracts, the Group does not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which revenue is recognized at the amount to which the Group has the right to invoice for services performed.

5. REVENUE *(Continued)*

Transaction Price Allocated to Future Performance Obligations *(Continued)*

For the service contracts for which the Group does not recognize revenue at the amount to which the Group has the right to invoice for services performed, management has assessed whether there are any contracts with an original expected length greater than one year. While contracts do occasionally extend beyond one year, the timing of the services performed is contingent upon when the customer provides items for testing, and is not subject to a contractual term. Accordingly, for these contracts management is unable to determine whether the original contract term will exceed one year and has not disclosed the related unsatisfied performance obligations.

6. SEGMENT INFORMATION

Operating segments are determined based on the Group's internal reports which are submitted to chief executive officer, being the CODM of the Group for the purpose of performance assessment and resources allocation. This is also the basis upon which the Group is organized and managed.

The Group's consolidated revenue and results are primarily attributable to the markets in the USA and Canada (together as "North America") and the PRC (country of domicile) and all of the Group's consolidated assets and liabilities are either located in North America or the PRC.

No segment assets and liabilities are presented as they were not regularly provided to the CODM for the purpose of performance assessment and resources allocation.

The following are the Group's reportable segments under IFRS 8 "*Operating Segments*":

– North America segment, including laboratory testing, CMC, preclinical research and chemistry services in the USA and Canada;

– PRC segment, including laboratory testing, CMC, preclinical research, bioequivalence and chemistry services in the PRC.

6. SEGMENT INFORMATION *(Continued)*

Segment revenues and results

The following is an analysis of the Group's revenue by reportable segments from continuing operations.

For the year ended December 31, 2021

	North America US$'000	PRC US$'000	Total US$'000
Revenue			
– Laboratory testing	54,677	27,935	82,612
– CMC	20,995	7,057	28,052
– Preclinical research	46,101	989	47,090
– Bioequivalence	–	10,737	10,737
– Chemistry	3,547	12,403	15,950
	125,320	59,121	184,441
Cost of services	(80,796)	(36,944)	(117,740)
Other income	1,296	3,265	4,561
Other gains and losses, net	(1,667)	(315)	(1,982)
Research and development expenses	–	(2,434)	(2,434)
Impairment losses recognized on trade receivables and unbilled revenue	(217)	(556)	(773)
Selling and marketing expenses	(4,424)	(1,295)	(5,719)
Administrative expenses	(27,300)	(5,418)	(32,718)
Share of profit of associates	–	9	9
Finance costs	(1,827)	(752)	(2,579)
Profit before tax	10,385	14,681	25,066

6. SEGMENT INFORMATION *(Continued)*

Segment revenues and results *(Continued)*

For the year ended December 31, 2020

	North America *US$'000*	PRC *US$'000*	Total *US$'000*
Revenue (restated)			
– Laboratory testing	40,862	21,054	61,916
– CMC	17,635	4,941	22,576
– Preclinical research	27,337	29	27,366
– Bioequivalence	–	7,531	7,531
– Chemistry	2,101	4,321	6,422
	87,935	37,876	125,811
Cost of services	(61,975)	(22,351)	(84,326)
Other income	4,190	2,071	6,261
Other gains and losses, net	59	(198)	(139)
Research and development expenses	–	(1,841)	(1,841)
Impairment losses recognized on trade receivables and unbilled revenue	(83)	(2)	(85)
Selling and marketing expenses	(4,216)	(850)	(5,066)
Administrative expenses	(14,528)	(4,301)	(18,829)
Share of loss of associates	(68)	–	(68)
Finance costs	(1,665)	(531)	(2,196)
Profit before tax	9,649	9,873	19,522

The accounting policies of reportable segments are the same as the Group's accounting policies described in Note 3.

6. SEGMENT INFORMATION *(Continued)*

Other segment information

Amounts included in the measure of segment profit or loss:

For the year ended December 31, 2021

	North America US$'000	PRC US$'000	Total US$'000
Depreciation of property, plant and equipment	(8,861)	(4,429)	(13,290)
Depreciation of right-of-use assets	(4,005)	(2,228)	(6,233)
Amortization of intangible assets	(3,734)	(653)	(4,387)
Interest income	1,114	771	1,885
Loss on disposal of property, plant and equipment	–	(2)	(2)

For the year ended December 31, 2020

	North America US$'000	PRC US$'000	Total US$'000
Depreciation of property, plant and equipment	(3,435)	(2,156)	(5,591)
Depreciation of right-of-use assets	(2,997)	(1,316)	(4,313)
Amortization of intangible assets	(1,857)	(570)	(2,427)
Interest income	3,835	308	4,143
Loss on disposal of property, plant and equipment	–	(53)	(53)

6. SEGMENT INFORMATION *(Continued)*

Geographical information

The Group's operations and non-current assets are located in North America and the PRC.

An analysis of the Group's revenue from external customers, analyzed by the customer's respective country/region of operation, is presented below:

	2021 *US$'000*	2020 *US$'000*
Revenue from external customers		
– USA	115,007	78,082
– PRC	51,401	33,984
– Rest of the world	18,033	13,745
	184,441	125,811

Information about the Group's non-current assets by geographical location of the assets are presented below:

	2021 *US$'000*	2020 *US$'000* *(Restated)*
Non-current assets excluding financial assets and deferred tax assets		
– North America	180,067	91,938
– PRC	74,750	30,516
	254,817	122,454

Information about major customers

Revenue from customers contributing over 10% of the total revenue of the Group are as follows:

	2021 *US$'000*	2020 *US$'000*
Company A	26,055	19,710

7. OTHER INCOME

	2021 US$'000	2020 US$'000
Interest income	1,885	4,143
Government grants related to income *(note)*	1,337	942
Income from rendering service	1,339	1,176
	4,561	6,261

Note: During the year ended December 31, 2020, the Group recognized government grants of US$286,000 in respect of COVID-19-related subsidies, of which US$56,000 relates to Canada Emergency Wage Subsidy program provided by the Canadian government and US$230,000 relates to Bureau of Workman's Compensation provided by the USA government. The remaining government grants have been received for the Group's contribution to the local high-tech industry and economy. These grants are unconditional and accounted for as immediate financial support with neither future related costs expected to be incurred nor related to any assets.

8. OTHER GAINS AND LOSSES, NET

	2021 US$'000	2020 US$'000
Net foreign exchange loss	(127)	(133)
Fair value change on financial liabilities measured at FVTPL *(Note 32)*	(1,725)	18
Loss on disposal of property, plant and equipment	(2)	(53)
Others	(128)	29
	(1,982)	(139)

9. FINANCE COSTS

	2021 US$'000	2020 US$'000
Interest expense on lease liabilities	2,579	2,190
Interest expense on bank borrowings	–	6
	2,579	2,196

10. PROFIT BEFORE TAX

Profit before tax has been arrived at after charging:

	2021 US$'000	2020 US$'000
Staff costs (including directors' emoluments):		
– Salaries and other benefits	73,659	49,803
– Share-based payment expense	7,517	935
– Retirement benefit scheme contributions	2,595	1,404
	83,771	52,142
Auditors' remuneration	279	217

11. INCOME TAX EXPENSE

	2021 US$'000	2020 US$'000
Current tax:		
– PRC Enterprise Income Tax ("EIT")	1,882	1,578
– US Federal Tax	156	(214)
– US State Tax	1,155	(13)
Under/(over) provision of EIT, US Federal Tax and US State Tax in prior year	598	(249)
	3,791	1,102
Deferred tax:		
– Current year *(Note 21)*	2,353	1,005
Total income tax expense	6,144	2,107

11. INCOME TAX EXPENSE *(Continued)*

Frontage Laboratories, Inc. ("Frontage Labs"), a wholly owned subsidiary of the Group in the USA, is subject to Federal and State Income taxes, the effective combined income tax rate is 25.59% for the year ended December 31, 2021 (2020: 24.27%). The Tax Cuts and Jobs Act (the "2017 Tax Act") was signed into law on 22 December 2017. The 2017 Tax Act includes a tax on the mandatory deemed repatriation of accumulated previously untaxed foreign earnings (the "Transition Tax"). The USA entities are subject to Transition Tax for the years ended December 31, 2021 and December 31, 2020, which is included in the Federal tax expense above.

BRI Biopharmaceutical Research, Inc. ("BRI"), a wholly owned subsidiary of the Group, as a non-Canadian-controlled private corporation ("CCPC") and engaged in active business in British Columbia, Canada, has been subject a flat tax rate of 27%.

Under the law of the PRC on Enterprise Income Tax (the "EIT Law") and Implementation Regulation of the EIT Law, the EIT rate of the PRC subsidiaries is 25% unless subject to tax exemption set out below.

Frontage Laboratories (Shanghai) Co., Ltd. ("Frontage Shanghai"), a wholly owned subsidiary of the Group in the PRC, was accredited as a "High and New Technology Enterprise" in November 2020 and therefore is entitled to a preferential tax rate of 15% for a three-year period commencing from the beginning of 2020.

Frontage Laboratories (Suzhou) Co., Ltd. ("Frontage Suzhou"), a 75% owned subsidiary of the Group in the PRC, was accredited as a "High and New Technology Enterprise" in November 2018 and therefore is entitled to a preferential tax rate of 15% for a three-year period commencing from the beginning of 2018. Frontage Suzhou renewed its status in November 2021, and is entitled to a preferential tax rate of 15% for a three-year period commencing from the beginning of 2021.

Acme Biopharma Co. (Shanghai) Ltd. ("Acme Shanghai"), a wholly owned subsidiary of the Group in the PRC, was accredited as an "Advanced Technology Enterprise" in December 2019 and therefore is entitled to a preferential tax rate of 15% for a three-year period commencing from the beginning of 2019.

Wuhan Heyan Biomedical Technology Co., Ltd. ("Heyan Biotech"), a 70% owned subsidiary of the Group in the PRC, was accredited as a "High and New Technology Enterprise" in December 2020 and therefore is entitled to a preferential tax rate of 15% for a three-year period commencing from the beginning of 2020.

11. INCOME TAX EXPENSE *(Continued)*

The group entities incorporated in Hong Kong are subject to Hong Kong profits tax at a rate of 16.5% on the estimated assessable profits for the years ended December 31, 2021 and 2020. On March 21, 2018, the Hong Kong Legislative Council passed the Inland Revenue (Amendment) (No. 7) Bill 2017 (the "Bill") which introduces the two-tiered profits tax rates regime. The Bill was signed into law on March 28, 2018 and was gazette on the following day. Under the two-tiered profits tax rates regime, the first HK$2,000,000 of profits of qualifying corporations will be taxed at 8.25%, and profits above HK$2,000,000 will be taxed at 16.5%. The two-tiered profits tax rates regime is applicable to the Group's Hong Kong subsidiaries with estimated assessable profits for its annual reporting periods ending on or after April 1, 2018.

The group entities incorporated in the Cayman Islands are not subject to income or capital gains tax under the law of the Cayman Islands.

The income tax expense for the year can be reconciled to profit before tax per the consolidated statement of profit or loss and other comprehensive income as follows:

	2021 US$'000	2020 US$'000
Profit before tax	25,066	19,522
Tax charge at effective combined income tax rate of 25.59% (2020: 24.27%)	6,415	4,738
Tax effect of share of (profit)/loss of associates	(2)	17
Tax effect of income that is exempted from taxation	–	(181)
Tax effect of expenses not deductible for tax purpose	1,670	631
Utilization of tax losses and deductible temporary difference previously not recognized	(544)	(464)
Under/(over) provision in respect of prior year	598	(249)
Effect of research and development expenses that are additionally deducted	(441)	(335)
Tax at concessionary rate	(1,194)	(1,013)
Effect on deferred tax assets or liabilities resulting from change in applicable tax rate	71	753
Effect of different tax rate of subsidiaries operating in other jurisdiction	(429)	(4)
Excess deduction from stock-based compensation	–	(1,786)
Income tax expense	6,144	2,107

12. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS

Details of the emoluments paid or payable to the directors and the chief executive officer of the Company (including emoluments for their services as managerial level employees of group entities prior to becoming the directors) for the services provided to the Group during the year are as follows:

	2021 *US$'000*	2020 *US$'000*
Executive Director and Chief Executive Officer:		
Dr. Song Li *(note)*		
– director's fee	–	–
– salaries and other benefits	735	–
– performance-based bonus	142	–
– retirement benefits scheme contributions	–	–
– share-based compensation	711	–
	1,588	–
Executive Director:		
Dr. Zhihe Li *(note)*		
– director's fee	–	–
– salaries and other benefits	347	340
– performance-based bonus	69	51
– retirement benefits scheme contributions	3	4
– share-based compensation	488	66
	907	461
Non-executive Director:		
Mr. Jun Gao		
– director's fee	23	22
– salaries and other benefits	–	–
– performance-based bonus	–	–
– retirement benefits scheme contributions	–	–
– share-based compensation	12	29
	35	51

12. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS *(Continued)*

	2021 *US$'000*	2020 *US$'000*
Independent Non-executive Directors:		
Mr. Yifan Li		
– director's fee	48	45
– salaries and other benefits	–	–
– performance-based bonus	–	–
– retirement benefits scheme contributions	–	–
– share-based compensation	–	–
	48	45
Mr. Erh Fei Liu		
– director's fee	48	45
– salaries and other benefits	–	–
– performance-based bonus	–	–
– retirement benefits scheme contributions	–	–
– share-based compensation	–	–
	48	45
Dr. Jingsong Wang		
– director's fee	48	45
– salaries and other benefits	–	–
– performance-based bonus	–	–
– retirement benefits scheme contributions	–	–
– share-based compensation	–	–
	48	45

Note:

Dr. Song Li was appointed as executive director and chief executive officer, and Dr. Zhihe Li resigned from such position but continues to serve as an executive director, on February 10, 2021.

12. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS *(Continued)*

The performance-based bonus is discretionary based on the performance of the individual and the Group.

The executive director's emoluments shown above were for his service in connection with the management of the affairs of the Company and the Group.

The non-executive director's emoluments shown above were for his services as director of the Company.

The independent non-executive directors' emoluments shown above were for their services as directors.

During the year, certain directors were granted share options, in respect of their services to the Group under the share option scheme of the Company. Details of the share option scheme are set out in Note 34 to the Group's consolidated financial statements.

During the years ended December 31, 2021 and 2020, no emoluments were paid by the Group to the directors as an inducement to join or upon joining the Group or as compensation for loss of office. None of the directors have waived any emoluments.

13. FIVE HIGHEST PAID INDIVIDUALS

The five individuals with the highest emoluments in the Group during the year included 2 directors (2020: none) of the Company, details of whose remuneration are set out in Note 12 above. The emoluments of the five highest paid individuals during the year were as follows:

	2021 *US$'000*	2020 *US$'000*
Salaries and other benefits	2,111	1,748
Performance-based bonus	446	419
Retirement benefits scheme contributions	16	19
Share-based compensation	2,540	348
	5,113	2,534

13. FIVE HIGHEST PAID INDIVIDUALS *(Continued)*

The emoluments of the five highest paid individuals were within the following bands:

	Number of Individuals 2021	2020
HK$3,000,001 to HK$3,500,000	–	2
HK$3,500,001 to HK$4,000,000	–	1
HK$4,000,001 to HK$4,500,000	–	1
HK$4,500,001 to HK$5,000,000	–	1
HK$6,000,001 to HK$6,500,000	1	–
HK$6,500,001 to HK$7,000,000	1	–
HK$7,000,001 to HK$7,500,000	1	–
HK$7,500,001 to HK$8,000,000	1	–
HK$12,000,001 to HK$12,500,000	1	–
	5	5

Included in the five highest paid individuals is Dr. Song Li, a substantive shareholder of the Company. His emoluments during the year ended December 31, 2021 were US$1,588,000 (2020: US$564,000).

14. EARNINGS PER SHARE

The calculation of the basic and diluted earnings per share attribute to owners of the Company is based on the following data:

	2021 *US$'000*	2020 *US$'000*
Earnings:		
Earnings for the purpose of calculating basic and diluted earnings per share	18,428	17,150

Number of Shares:

	2021	2020
Weighted average number of ordinary shares for the purpose of calculating basic earnings per share	2,049,299,538	2,012,359,226
Effect of dilutive potential ordinary shares:		
Share options	52,641,824	66,178,652
Share awards	13,746,236	–
Weighted average number of ordinary shares for the purpose of calculating diluted earnings per share	2,115,687,598	2,078,537,878

15. DIVIDENDS

No dividend was paid or proposed for ordinary shareholders of the Company during the year ended December 31, 2021, nor has any dividend been proposed since the end of the reporting period (2020: nil).

16. PROPERTY, PLANT AND EQUIPMENT

	Furniture, fixtures and equipment *US$'000*	Transportation equipment *US$'000*	Leasehold improvement *US$'000*	Buildings *US$'000*	Land *US$'000*	Construction in progress *US$'000*	Total *US$'000*
COST							
As at January 1, 2020	41,250	146	5,297	3,138	1,830	2,827	54,488
Additions	8,728	125	2,266	–	–	5,526	16,645
Acquisition of subsidiaries *(Note 41)*	1,054	–	224	–	–	–	1,278
Transferred from right-of-use assets upon exercise of purchase option *(Note 17)*	2,871	–	–	–	–	–	2,871
Disposals	(988)	(68)	–	–	–	–	(1,056)
Exchange adjustments	1,926	12	161	–	–	35	2,134
As at December 31, 2020 and January 1, 2021	54,841	215	7,948	3,138	1,830	8,388	76,360
Additions	15,189	–	2,663	42	–	41,072	58,966
Acquisition of subsidiaries *(Note 41)*	1,230	–	–	–	–	–	1,230
Transferred from right-of-use assets upon exercise of purchase option *(Note 17)*	1,816	–	–	–	–	–	1,816
Disposals	(558)	–	–	–	–	–	(558)
Transferred from construction in progress	3,895	–	12,113	–	–	(16,008)	–
Exchange adjustments	577	5	79	–	–	311	972
As at December 31, 2021	76,990	220	22,803	3,180	1,830	33,763	138,786

16. PROPERTY, PLANT AND EQUIPMENT (Continued)

	Furniture, fixtures and equipment US$'000	Transportation equipment US$'000	Leasehold improvement US$'000	Buildings US$'000	Land US$'000	Construction in progress US$'000	Total US$'000
DEPRECIATION AND IMPAIRMENT							
As at January 1, 2020	(23,332)	(53)	(2,538)	(307)	–	–	(26,230)
Provided for the year	(4,720)	(13)	(592)	(266)	–	–	(5,591)
Transferred from right-of-use assets upon exercise of purchase option *(Note 17)*	(1,872)	–	–	–	–	–	(1,872)
Eliminated on disposals	892	1	–	–	–	–	893
Exchange adjustments	(1,089)	(2)	(24)	–	–	–	(1,115)
As at December 31, 2020 and January 1, 2021	(30,121)	(67)	(3,154)	(573)	–	–	(33,915)
Provided for the year	(10,531)	(35)	(2,457)	(267)	–	–	(13,290)
Transferred from right-of-use assets upon exercise of purchase option *(Note 17)*	(1,005)	–	–	–	–	–	(1,005)
Eliminated on disposals	414	–	–	–	–	–	414
Exchange adjustments	(262)	(2)	(11)	–	–	–	(275)
As at December 31, 2021	(41,505)	(104)	(5,622)	(840)	–	–	(48,071)
NET BOOK VALUES							
As at December 31, 2021	35,485	116	17,181	2,340	1,830	33,763	90,715
As at December 31, 2020	24,720	148	4,794	2,565	1,830	8,388	42,445

17. RIGHT-OF-USE ASSETS

The Group as lessee

Right-of-use assets

	Leased properties US$'000	Experiment equipment US$'000	Office equipment US$'000	Total US$'000
As at January 1, 2020				
Carrying amount	15,094	5,853	139	21,086
As at December 31, 2020 and January 1, 2021				
Carrying amount	30,234	9,475	127	39,836
As at December 31, 2021				
Carrying amount	**39,492**	**15,892**	**136**	**55,520**
For the year ended December 31, 2020				
Depreciation charge	3,178	1,091	44	4,313
For the year ended December 31, 2021				
Depreciation charge	**4,252**	**1,930**	**51**	**6,233**

	2021 US$'000	2020 US$'000
Expense relating to short-term leases and other leases with lease terms end within 12 months of the date of initial application of IFRS 16	**59**	13
Expense relating to leases of low-value assets, excluding short-term leases of low value assets	**–**	1
Total cash outflow for leases	**7,748**	5,816
Additions to right-of-use assets	**22,445**	22,385
Transferred to property, plant and equipment upon exercise of purchase option *(Note 16)*	**(811)**	(999)

17. RIGHT-OF-USE ASSETS *(Continued)*

The Group as lessee *(Continued)*

Right-of-use assets (Continued)

For both years, the Group leases various offices equipment, and machineries for its operations. Lease contracts are entered into for fixed term of 3 years to 25 years (2020: 3 years to 25 years). Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancelable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

The Group regularly enters into short-term leases for office equipment. As at December 31, 2021 and 2020, the portfolio of short-term leases is similar to the portfolio of short-term leases to which the short-term lease expense disclosed above.

Restrictions or covenants on lease

In addition, lease liabilities of US$57,839,000 (2020: US$40,622,000) are recognized with related right-of-use assets of US$55,520,000 (2020: US$39,836,000) as at December 31, 2021. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

Leases committed

As at December 31, 2021, the Group entered into a new lease for machineries that have not yet commenced, with non-cancelable period of 5 years (2020: 5 years), excluding period under extension options, the total future undiscounted cash flows over the non-cancelable period amounted to US$220,000 (2020: US$664,000).

18. GOODWILL

	US$'000
COST AND CARRYING VALUES	
At January 1, 2020	6,250
Arising on acquisition of subsidiaries (restated)	18,372
Exchange adjustments	285
At December 31, 2020 (restated) and January 1, 2021	24,907
Arising on acquisition of subsidiaries	46,411
Exchange adjustments	135
At December 31, 2021	71,453

Goodwill acquired through business combinations is allocated to the following CGUs for impairment testing:

- Quintara Discovery, Inc. ("Quintara") CGU;
- Acme CGU;
- Frontage Suzhou CGU;
- Heyan Biotech CGU;
- Frontage Labs CGU;
- Biotranex, LLC ("Biotranex") CGU;
- BRI CGU; and
- RMI Laboratories, LLC ("RMI") CGU.

18. GOODWILL *(Continued)*

The carrying amount of goodwill allocated to each of the CGUs are as follows:

	2021 US$'000	2020 US$'000 (Restated)
Quintara CGU	43,287	–
Acme CGU	16,833	16,833
Frontage Suzhou CGU	4,336	4,237
Heyan Biotech CGU	2,437	–
Frontage Labs CGU *(note)*	1,995	–
Biotranex CGU	1,539	1,539
BRI CGU	1,026	1,025
RMI CGU *(note)*	–	1,273
	71,453	24,907

Note:

During the year ended December 31, 2021, there has been a change in the identified CGUs resulting from the integration of RMI to Frontage Labs's business in order to improve operation efficiency. The amount under Frontage Labs CGU as at December 31, 2021 has also comprised goodwill arising from acquisition of Ocean Ridge Business (see Note 41(a)). Management expected that the benefit of expected synergies of RMI and Ocean Ridge Business shall be achieved from integrating into the Group's existing business under Frontage Labs. Such integration resulted in the reallocation of goodwill to the new CGU named Frontage Labs CGU as there has been a change to the way in which goodwill is monitored internally.

For the purpose of impairment testing, goodwill is allocated to the CGUs which represents the lowest level within the Group at which goodwill is monitored for internal management purpose.

The recoverable amounts of CGUs have been determined based on value-in-use calculations using pretax cash flow projections, which is based on financial budgets approved by management.

Assumptions were used in the value-in-use calculations of CGUs as at December 31, 2021. The following describes each key assumption on which management has based its cash flow projections to undertake impairment testing of goodwill.

18. GOODWILL *(Continued)*

The cash flow projections were based on financial budgets covering a period approved by management as follows:

	2021	2020
Quintara CGU	5 years	N/A
Acme CGU	5 years	5 years
Frontage Suzhou CGU	5 years	5 years
Heyan Biotech CGU	5 years	N/A
Frontage Labs CGU	5 years	N/A
Biotranex CGU	5 years	5 years
BRI CGU	5 years	5 years
RMI CGU	N/A	5 years

The cash flow projections beyond the 5-year period are extrapolated using expected growth rates of revenue as follows:

	2021 %	2020 %
Quintara CGU	3	N/A
Acme CGU	3	3
Frontage Suzhou CGU	3	3
Heyan Biotech CGU	3	N/A
Frontage Labs CGU	3	N/A
Biotranex CGU	3	3
BRI CGU	3	3
RMI CGU	N/A	3

This growth rate is based on the relevant industry growth forecast and does not exceed the average long-term growth rate for the relevant industry.

The discount rates applied to the cash flow projections are as follows:

	2021 %	2020 %
Quintara CGU	20	N/A
Acme CGU	20	20
Frontage Suzhou CGU	20	22
Heyan Biotech CGU	20	N/A
Frontage Labs CGU	20	N/A
Biotranex CGU	20	20
BRI CGU	20	20
RMI CGU	N/A	21

18. GOODWILL (Continued)

The discount rates used are pretax and reflect specific risk relating to the relevant units.

The discount rate is the expected return of the Group's assets that reflects current market assessments of the time value of money and the specific risk associated with the CGU, after taking into account the weighted average cost of equity and debt.

Other key assumptions for the value-in-use calculations related to the estimation of cash inflows/outflows include budgeted sales and gross margins, such estimation is based on the CGU's past performance and management's expectations for the market development.

19. INTANGIBLE ASSETS

	Trade name US$'000	Customer relationship US$'000	Software US$'000	Customer backlog US$'000	Non-competition clause US$'000	Total US$'000
COST						
As at January 1, 2020	100	4,214	1,904	888	776	7,882
Additions	–	–	528	–	–	528
Acquisition of subsidiaries (restated) *(Note 41)*	–	5,700	–	700	2,500	8,900
Exchange adjustments	–	110	92	48	1	251
As at December 31, 2020 (restated) and January 1, 2021	100	10,024	2,524	1,636	3,277	17,561
Additions	–	–	252	–	–	252
Acquisition of subsidiaries *(Note 41)*	–	16,215	–	–	4,769	20,984
Exchange adjustments	–	32	39	17	1	89
As at December 31, 2021	100	26,271	2,815	1,653	8,047	38,886
AMORTIZATION AND IMPAIRMENT						
As at January 1, 2020	(100)	(48)	(49)	(65)	(39)	(301)
Provided for the year	–	(700)	(493)	(720)	(514)	(2,427)
Exchange adjustments	–	(7)	(18)	(15)	–	(40)
As at December 31, 2020 and January 1, 2021	(100)	(755)	(560)	(800)	(553)	(2,768)
Provided for the year	–	(2,147)	(418)	(592)	(1,230)	(4,387)
Exchange adjustments	–	(3)	(11)	(24)	–	(38)
As at December 31, 2021	(100)	(2,905)	(989)	(1,416)	(1,783)	(7,193)
NET BOOK VALUES						
As at December 31, 2021	–	23,366	1,826	237	6,264	31,693
As at December 31, 2020 (restated)	–	9,269	1,964	836	2,724	14,793

20. INTERESTS IN ASSOCIATES

	2021 US$'000	2020 US$'000
Cost of unlisted investments in associates	5,533	1,180
Share of post-acquisition losses	(191)	(707)
	5,342	473

The Group had interests in the following principal associates at the end of reporting period:

Name of associates	Place of incorporation/ establishment	Registered capital	Proportion of ownership interest/voting rights held by the Group as at December 31, 2021	2020	Principal Activities
FJ Pharma LLC *(note (a))*	USA	US$2,000,000	–	49%	Contract pharmacology services
Frontage Clinical Services, Inc. ("Frontage Clinical")	USA	US$1,500	11.91%	11.91%	Contract development organization services
Chenghong Pharmaceutical (Weihai) Co., Ltd. 誠弘製藥（威海）有限責任公司 ("Chenghong Pharmaceutical") *(notes (b), (c))*	PRC	RMB23,333,334	48.57%	–	Chemistry services

Notes:

(a) FJ Pharma LLC was dissolved during the year ended December 31, 2021.

(b) On November 18, 2021, the Group entered into a subscription agreement to subscribe 48.57% of the enlarged equity interests in Chenghong Pharmaceutical for a cash consideration of RMB34,000,000 (equivalent to approximately US$5,333,000). The directors considered that the Group has significant influence over this entity based on the following factors: (1) the Group has appointed 1 director to the board of directors (total 5 directors), with the other 4 directors appointed by the other shareholders; and (2) the appointed director actively participates in the policy-making process of the entity and the decision making of relevant activities are based on simple majority voting.

(c) The English names of the associates registered in the PRC represent the best efforts made by management of the Company to translate their Chinese names as they do not have official English names.

All of these associates are accounted for using the equity method in these consolidated financial statements.

20. INTERESTS IN ASSOCIATES *(Continued)*

Aggregate information of associates that are not individually material

	2021 US$'000	2020 US$'000
Aggregate carrying amount of the Group's associates in the consolidated financial statements	5,342	473
Share of profits/(losses) and total comprehensive income of associates	9	(68)

21. DEFERRED TAXATION

For the purpose of presentation in the consolidated statement of financial position, certain deferred tax assets and liabilities have been offset. The following is a summary of the deferred tax balances for financial reporting purposes:

	2021 US$'000	2020 US$'000 (Restated)
Deferred tax assets	7,651	5,154
Deferred tax liabilities	(11,197)	(3,081)
	(3,546)	2,073

21. DEFERRED TAXATION *(Continued)*

The followings are the major deferred tax assets and liabilities recognized and movements thereon before offsetting:

	Impairment allowance US$'000	Stock compensation US$'000	Accelerated tax depreciation US$'000	Advances from customers US$'000	Intangible assets US$'000	Others US$'000	Total US$'000
As at January 1, 2020	897	7,311	(2,054)	523	(1,359)	1,645	6,963
(Charged)/credited to profit or loss	(137)	34	(2,007)	(179)	361	923	(1,005)
Charged to reserves	–	(1,370)	–	–	–	–	(1,370)
Acquisition of subsidiaries (restated) *(Note 41)*	–	–	(12)	–	(1,960)	(537)	(2,509)
Exchange adjustments	7	–	–	–	(2)	(11)	(6)
As at December 31, 2020 (restated) and January 1, 2021	767	5,975	(4,073)	344	(2,960)	2,020	2,073
Credited/(charged) to profit or loss	284	(376)	(4,610)	671	863	815	(2,353)
Credited to reserves	–	2,038	–	–	–	–	2,038
Acquisition of subsidiaries *(Note 41)*	–	–	(232)	–	(4,922)	(149)	(5,303)
Exchange adjustments	6	–	–	–	(7)	–	(1)
As at December 31, 2021	1,057	7,637	(8,915)	1,015	(7,026)	2,686	(3,546)

As at December 31, 2021, the Group had unused tax losses of US$2,482,000 (2020: US$2,590,000) available to offset against future profits. As at December 31, 2021, unused tax losses of US$2,482,000 (2020: US$2,590,000) had been recognized in deferred tax assets.

Deferred taxation has not been provided for in the consolidated financial statements in respect of temporary differences attributable to accumulated profits of the PRC subsidiaries amounting to US$47,550,000 as at December 31, 2021 (2020: US$36,383,000) as the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

22. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2021 US$'000	2020 US$'000
Non-current assets		
Financial assets at FVTPL		
– Unlisted equity investments	1,568	–

23. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS

	2021 US$'000	2020 US$'000
Trade receivables		
– third parties	37,465	25,522
– related parties	242	311
Less: loss allowance for trade receivables	(3,684)	(3,006)
	34,023	22,827
Other receivables		
– third parties	1,983	1,149
– related parties	590	1,012
Less: loss allowance for other receivables	–	(70)
	2,573	2,091
Note receivables		
– third parties	105	584
Prepayments		
– third parties	3,627	1,727
Value added tax recoverable	2,215	22
	42,543	27,251

Details of the trade and other receivables due from related parties are set out in Note 40.

23. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS *(Continued)*

The Group allows a credit period ranging from 30 to 90 days to its customers. The following is an aging analysis of trade receivables (net of loss allowance), presented based on the invoice dates, at the end of the reporting period:

	2021	2020
	US$'000	*US$'000*
Within 90 days	**26,141**	19,672
91 to 180 days	**3,770**	1,475
181 days to 1 year	**2,877**	910
Over 1 year	**1,235**	770
	34,023	22,827

As at December 31, 2021, included in the Group's trade receivables balance are debtors with aggregate gross carrying amount of US$22,672,000 (2020: US$11,729,000) which are past due at the reporting date. Out of the past due balances, US$5,136,000 (2020: US$2,203,000) has been past due 90 days or more and is considered as recoverable based on historical receivable experience on the past due status of these customers and no evidence indicating that these customers were in a significant financial difficulty.

Movements in lifetime ECL that has been recognized for trade receivables in accordance with the simplified approach set out in IFRS 9 for the year are set out below:

	US$'000
As at January 1, 2020	(3,353)
Reversal of ECL *(note)*	80
Write off	305
Exchange adjustments	(38)
As at December 31, 2020 and January 1, 2021	(3,006)
ECL provided	(665)
Write off	5
Exchange adjustments	(18)
As at December 31, 2021	**(3,684)**

Note: Reversal of allowance of ECL is due to the Group's recovery of receivables.

Details of impairment assessment of trade and other receivables are set out in Note 36.

23. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS *(Continued)*

Trade and other receivables that are denominated in currencies other than the functional currencies of the respective group entities are set out below:

	2021	2020
	US$'000	*US$'000*
US$	**768**	946
Euro ("EUR")	**24**	–

24. UNBILLED REVENUE

	2021	2020
	US$'000	*US$'000*
Unbilled revenue		
– third parties	**12,651**	7,786
– related parties	**224**	409
Less: loss allowance for unbilled revenue	**(576)**	(459)
	12,299	7,736

Generally, significant payment terms are disclosed within the contents of a given contract and are in the form of either milestone payment terms representing a percentage of the total budgeted contract price or corresponding directly with the value to the customer of the Group's performance. Revenues recognized in excess of billings are recognized as contract assets and disclosed in the consolidated statement of financial position as unbilled revenue.

Details of the unbilled revenue due from related parties are set out in Note 40.

24. UNBILLED REVENUE *(Continued)*

Movements in lifetime ECL that has been recognized for unbilled revenue in accordance with the simplified approach set out in IFRS 9 for the year are set out below:

	US$'000
As at January 1, 2020	(253)
ECL provided	(165)
Exchange adjustments	(41)
As at December 31, 2020 and January 1, 2021	(459)
Reversal of ECL	(108)
Exchange adjustments	(9)
As at December 31, 2021	**(576)**

Details of the impairments assessment are set out in Note 36.

Unbilled revenue that are denominated in currencies other than the functional currencies of the respective group entities are set out below:

	2021 ***US$'000***	2020 *US$'000*
US$	**1,778**	780
EUR	**7**	–

25. STRUCTURED DEPOSITS

The Group entered into series of structured contracts with banks and other financial institutions in the PRC. The investments are yield enhancement deposits with expected but not guaranteed rates of return. The expected rates of return is 3.15% (2020: 1.5% to 3.147%) per annum for the year ended December 31, 2021, which were determined by reference to the returns of the underlying investments. The directors considered the structured deposits shall be classified as financial assets at FVTPL and the amount paid for the structured deposits approximates its fair value at the end of each reporting period.

26. CASH AND CASH EQUIVALENTS/RESTRICTED BANK DEPOSITS

Cash and cash equivalents comprise of cash held by the Group and short-term bank deposits with an original maturity of three months or less. The bank deposits carry interest at market rates which ranged from 0.3% to 3.25% per annum as at December 31, 2021 (2020: from 0.15% to 0.35% per annum).

During 2015, the Group entered into a lease agreement for the property at Secaucus, NJ, as part of the lease agreement, a cash deposit of US$550,000 was required as a guarantee over the property and the required cash deposit was reduced to US$300,000 in 2018. The deposit is required for the duration of the lease agreement, which ends in 2027. And thus the US$300,000 remained on the consolidated statement of financial position as at December 31, 2021 and 2020 as other long-term deposits.

On March 3, 2021, a cash deposit of RMB1,000,000 (equivalent to approximately US$157,000) was required by Shanghai Customs District P.R. China in the PRC for import value-added tax in China, and the amount is restricted. As at December 31, 2021, the remaining amount in the escrow account was RMB1,000,000 (equivalent to approximately US$157,000) (2020: nil), which has been included in restricted bank deposits.

As at December 31, 2021, certain bank deposits with balances of approximately RMB5,259,000 (equivalent to approximately US$825,000) were pledged to secure bills payable of approximately RMB22,118,000 (equivalent to approximately US$3,469,000).

As at 31 December 2021, a cash deposit of US$353,000 was required by Pennsylvania dept of environmental protection, Bureau of radiation protection in the USA for radiology license in USA, and the amount is restricted. As at December 31, 2021, the remaining amount in the collateral account was US$353,000 (2020: nil), which has been included in restricted bank deposits.

Cash and cash equivalents that are denominated in currencies other than the functional currencies of the respective group entities are set out below:

	2021 ***US$'000***	2020 *US$'000*
US$	**2,955**	1,075

27. TRADE AND OTHER PAYABLES

	2021 US$'000	2020 US$'000 (Restated)
Trade payables		
– third parties	11,425	7,113
– related parties *(note (a))*	38	297
	11,463	7,410
Bills payable		
– third parties *(note (b))*	3,469	–
Other payables		
– third parties	1,495	3,682
– related parties	5	–
	1,500	3,682
Contingent consideration payables *(Note 32)*	9,618	2,400
Consideration payables *(Note 32)*	750	982
Salary and bonus payables	10,228	4,621
Other taxes payable	450	686
	37,478	19,781

Notes:

(a) Details of the trade and other payables due to related parties are set out in Note 40.

(b) As at December 31, 2021, bills payable were arranged with banks under secured credit facilities. The Group's bills payable were secured by pledged deposits of approximately RMB5,259,000 (equivalent to US$825,000).

Payment terms with suppliers are mainly on credit ranging from 30 to 90 days from the invoice date. The following is an aging analysis of trade payables, presented based on invoice date, at the end of each reporting period:

	2021 US$'000	2020 US$'000
Within 90 days	8,002	6,960
91 days to 1 year	3,447	219
Over 1 year	14	231
	11,463	7,410

27. TRADE AND OTHER PAYABLES *(Continued)*

Trade and other payables that are denominated in currencies other than the functional currencies of the respective group entities are set out below:

	2021	2020
	US$'000	*US$'000*
US$	**3**	7

28. ADVANCES FROM CUSTOMERS

	2021	2020
	US$'000	*US$'000*
Advances from customers		
– third parties	**23,247**	17,499
– related parties	**385**	371
	23,632	17,870

Advances from customers that are denominated in currencies other than the functional currencies of the respective group entities are set out below:

	2021	2020
	US$'000	*US$'000*
US$	**501**	129

Amounts received in accordance with contracted payment schedules but in excess of revenues earned are recognized as contract liabilities and disclosed in the consolidated statement of financial position as advances from customers. Changes in advances from customers primarily relate to the Group's performance of services under the related contracts.

Details of the advances from customers which are related parties are set out in Note 40.

Revenue of US$11,206,000 was recognized in 2021 (2020: US$7,130,000) that were included in the advances from customers at the beginning of the year.

29. BANK BORROWINGS

Bank Loans

	2021 US$'000	2020 US$'000
Secured and unguaranteed bank loans	11	–

	2021 US$'000	2020 US$'000
Within one year and shown under current liabilities	11	–

Bank Facilities

The Group has used certain restricted bank deposits, to aggregate banking facilities of RMB120,000,000 (equivalent to approximately US$18,821,000) acquired from the bankers, of which RMB22,118,000 (equivalent to approximately US$3,469,000) and RMB70,000 (equivalent to approximately US$11,000) were utilized as bills payable and borrowing respectively, as at December 31, 2021.

The Group had aggregated banking facilities of RMB97,812,000 (equivalent to approximately US$15,341,000) (2020: nil) which were unutilized as at December 31, 2021.

30. AMOUNTS DUE TO SHAREHOLDERS

The amounts due to shareholders as at December 31, 2021 and 2020 represent dividend payable that the then shareholders declared prior to the year 2020.

31. LEASE LIABILITIES

	2021 US$'000	2020 US$'000
Within one year	7,289	5,191
Within a period of more than one year but not exceed two years	7,187	4,774
Within a period of more than two years but not exceed five years	17,810	12,251
More than five years	25,553	18,406
	57,839	40,622
Less: Amounts due for settlement with 12 months shown under current liabilities	(7,289)	(5,191)
Amounts due for settlement after 12 months shown under non-current liabilities	50,550	35,431

32. OTHER LONG-TERM LIABILITIES

	2021 US$'000	2020 US$'000 (Restated)
Contingent consideration payables related to:		
– Acquisition of Quintara *(Note (e))*	11,420	–
– Acquisition of Acme *(Note (a))*	5,458	7,828
– Acquisition of Biotranex *(Note (c))*	192	358
– Acquisition of BRI *(Note (d))*	223	338
– Acquisition of RMI *(Note (b))*	725	1,279
	18,018	9,803

Notes:

(a) As at December 31, 2021, the amount represented contingent consideration payable arising from the acquisition of Acme in an amount of US$5,458,000 (2020: US$7,828,000 (restated)). The contingent consideration payable was re-measured at fair value and a fair value loss of US$669,000 (2020: nil) was recorded (see Note 8). Further, an amount of US$2,964,000 (2020: US$2,025,000 (restated)) was recorded as short-term contingent consideration payable as this amount falls due within one year (see Note 27).

(b) As at December 31, 2021, the amount represented contingent consideration payable arising from the acquisition of RMI in an amount of US$725,000 (2020: US$1,279,000). The contingent consideration payable was re-measured at fair value and a fair value loss of US$196,000 (2020: fair value gain of US$18,000) was recorded (see Note 8). Further, an amount of US$750,000 (2020: US$982,000) was recorded as short-term consideration payable as this amount falls due within one year (see Note 27).

(c) As at December 31, 2021, the amount represented contingent consideration payable arising from the acquisition of Biotranex in an amount of US$192,000 (2020: US$358,000). The contingent consideration payable was re-measured at fair value and a fair value loss of US$172,000 (2020: nil) was recorded (see Note 8). Further, an amount of US$198,000 (2020: US$60,000) was recorded as short-term contingent consideration payable as this amount falls due within one year (see Note 27).

(d) As at December 31, 2021, the amount represented contingent consideration payable arising from the acquisition of BRI in an amount of CAD286,000 (equivalent to US$223,000) (2020: CAD430,000 (equivalent to US$338,000)). The contingent consideration payable was re-measured at fair value and a fair value loss of CAD354,000 (equivalent to US$282,000) (2020: nil) was recorded (see Note 8). Further, an amount of CAD400,000 (equivalent to US$314,000) (2020: CAD402,000 (equivalent to US$315,000)) was recorded as short-term contingent consideration payable as this amount falls due within one year (see Note 27).

(e) As at December 31, 2021, the amount represented contingent consideration payable arising from the acquisition of Quintara in an amount of US$11,420,000. The contingent consideration payable was re-measured at fair value and a fair value loss of US$406,000 was recorded (see Note 8). Further, an amount of US$6,142,000 was reclassified as short-term contingent consideration payable as this amount falls due within one year (see Note 27).

33. SHARE CAPITAL

	Number of shares	Amount US$
Ordinary shares of US$0.00001 each		
Authorized:		
As at January 1, 2020, December 31, 2020, January 1, 2021 and December 31, 2021	5,000,000,000	50,000

	Number of shares	Amount US$	Shown in the consolidated financial statements as US$'000
Issued and Fully Paid:			
As at January 1, 2020	2,007,640,910	20,078	20
Exercise of share options *(Note)*	29,837,000	298	–
As at December 31, 2020 and January 1, 2021	2,037,477,910	20,376	20
Exercise of share options *(Note)*	13,977,500	140	–
As at December 31, 2021	**2,051,455,410**	**20,516**	**20**

Note: During the year ended December 31, 2021, 13,977,500 (2020: 29,837,000) share options were exercised, with a deduction from equity-settled share based compensation reserve of US$808,000 (2020: US$1,454,000) and an increase of US$3,060,000 (2020: US$4,849,000) in share premium. Please refer to Note 34 for details.

34. SHARE OPTION PAYMENT

2021 share awards scheme

On January 22, 2021 (the "Adoption Date"), the board of directors approved the adoption of the share award scheme ("2021 Frontage Share Award Scheme") to recognize the contributions by certain employees of the Group, to give incentives thereto in order to retain them for the continual operation and development of the Group and to attract suitable personnel for further development of the Group. Under the 2021 Frontage Share Award Scheme, the directors may grant up to 1% of the issued share capital of the Company on the Adoption Date of the 2021 Frontage Share Award Scheme. Each award granted has a contractual terms of 10 years and vesting on the one anniversary year after grant date.

34. SHARE OPTION PAYMENT *(Continued)*

2021 share awards scheme *(Continued)*

On January 25, 2021, the board of directors has resolved to grant a total of 22,950,500 awarded shares.

Set out below are details of the movements of the outstanding awarded shares granted under the 2021 Frontage Share Scheme during the current year:

	2021 Number
Outstanding at beginning of year	–
Granted during the year	22,950,500
Forfeited during the year	(1,461,000)
Outstanding at end of year	21,489,500

Each award share granted generally vested over a four-year period with an agreed award vesting on the one anniversary year after grant date.

The estimated fair value was approximately US$16,120,000 for the awarded shares. The fair value was calculated by reference to the closing share price of the Company at the date of grant, which was HK$6.02 (equivalent to US$0.78) per share.

Changes in variables and assumptions may result in changes in the fair values of the share awards.

The Group recognized total expense of approximately US$7,048,000 for the year ended December 31, 2021 in relation to share award granted under the 2021 Frontage Share Award Scheme.

Pre-IPO share incentive plans

Frontage Labs, a wholly-owned subsidiary of the Group, adopted 2 Pre-IPO share incentive plans respectively in 2008 and 2015 (collectively referred as "Pre-IPO share incentive plans") for the primary purpose of attracting, retaining and motivating the directors of Frontage Labs and employees of the Group. Under such plans, the directors of Frontage Labs may grant up to 9,434,434 share options under the 2008 share incentive plan and 12,000,000 share options under the 2015 share incentive plan to eligible employees, including the directors of Frontage Labs and employees of the Group, to subscribe for shares in Frontage Labs. Each option granted has a contractual terms of 5 to 10 years and vesting on the one anniversary year after grant date.

34. SHARE OPTION PAYMENT *(Continued)*

Pre-IPO share incentive plans *(Continued)*

On April 17, 2018, the Company, Frontage Labs and corresponding employees have entered into an agreement pursuant to which Frontage Labs has assigned, and the Company has assumed, the rights and obligations of Frontage Labs under the Pre-IPO share incentive plans.

On February 28, 2019, the Company granted a total 7,990,000 share options under the 2015 share incentive plan to the eligible employees at an exercise price of US$2.00.

On May 11, 2019, upon the completion of the capitalization issue, the number of options granted to an eligible employee under the Pre-IPO share incentive plans was adjusted to ten times of the original number of options held by that grantee. Accordingly, the exercise price was adjusted to 10% of the original exercise price.

Set out below are details of the movements of the outstanding options granted during the years ended December 31, 2021 and 2020 by taking into account of the capitalization issue:

	2021		2020	
	Weighted average exercise price *(US$)*	Number	Weighted average exercise price *(US$)*	Number
Outstanding as at beginning of year	0.16	81,463,000	0.15	115,650,000
Forfeited during the year	0.20	(487,500)	0.20	(4,275,000)
Exercised during the year	0.16	(13,977,500)	0.11	(29,837,000)
Lapsed during the year	–	–	0.20	(75,000)
Outstanding as at end of year	0.16	66,998,000	0.16	81,463,000
Options exercisable		66,998,000		64,150,500
Weighted average contractual life (years)		2.88		3.95

The exercise price of options outstanding ranges from US$0.016 to US$0.200.

The weighted average closing price of the shares of the Company immediately before the dates on which the option were exercised was HK$4.59 (equivalent to US$0.59) (2020: HK$4.51 (equivalent to US$0.65).

Each option granted generally vests over a three-year period with an agreed award vesting on the one anniversary year after grant date.

34. SHARE OPTION PAYMENT *(Continued)*

Pre-IPO share incentive plans *(Continued)*

The Group recognized total expenses of approximately US$469,000 for the year ended December 31, 2021 (2020: US$935,000) in relation to share options granted by the Company.

2018 share incentive plan

On May 11, 2019, the board of directors approved an incentive plan to grant share options, restricted share units and any other types of award to eligible employees, included the directors and the employees of the Group. The total number of shares in respect of which the awards may be granted pursuant to the 2018 share incentive plan and any other equity-based incentive plans of the Company, being 10% of the shares of the Company. No awards have been granted under the 2018 share incentive plan by December 31, 2021 (2020: nil).

35. CAPITAL MANAGEMENT

The Group manages its capital to ensure that entities comprising the Group will be able to continue as going concern while maximizing the return to shareholders through the optimization of the debt and equity balance.

The capital structure of the Group consists of loans from a related party, consideration payable on acquisition of subsidiaries, bank borrowings (net of cash and cash equivalents), lease liabilities and equity attributable to owners of the Company (comprising capital and reserves).

The directors review the capital structure on a continuous basis taking into account the cost of capital and the risks associated with each class of capital.

The Group monitors the following key covenant ratios which were applied to the credit facilities in use during the relevant periods, to ensure compliance with the agreed target ratios as required by the underlying agreements.

The Group will balance its overall capital structure through the payment of dividends, new share issues as well as the issue of new debts.

36. FINANCIAL INSTRUMENTS

Categories of financial instruments

	2021 *US$'000*	2020 *US$'000* (Restated)
Financial assets		
Financial assets at amortized cost	182,973	237,897
Financial assets at FVTPL	5,646	2,452
Financial liabilities		
Financial liabilities at amortized cost	75,242	52,906
Financial liabilities at FVTPL	27,636	12,203

Financial risk management objectives and policies

The Group's major financial assets and liabilities include trade, notes and other receivables, restricted bank deposits, structure deposits, cash and cash equivalents, other long-term deposits, financial assets at FVTPL, trade and other payables, bank borrowings, other long-term liabilities, amounts due to shareholders and lease liabilities. Details of these financial instruments are disclosed in the respective notes. The risks associated with these financial instruments and the policies on how to mitigate these risks are set out below. Management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

Market risk

The Group's activities expose it primarily to currency risk, interest rate risk and price risk. There had been no change in the Group's exposure to these risks or the manner in which it managed and measured the risks during each of the reporting period.

Currency risk

As disclosed in Note 1, the functional currency of the PRC operating subsidiaries is RMB. The PRC operating subsidiaries have foreign currency sales and purchases, which expose the Group to foreign currency risk. The carrying amounts of relevant group entities' assets and liabilities other than their functional currency are disclosed in the respective notes.

The PRC operating subsidiaries are mainly exposed to foreign currency of US$ and EUR. The Group does not use any derivative contracts to hedge against its exposure to currency risk.

36. FINANCIAL INSTRUMENTS *(Continued)*

Financial risk management objectives and policies *(Continued)*

Currency risk (Continued)

The carrying amounts of the Group's foreign currency denominated monetary assets (trade receivables, cash and cash equivalents and unbilled revenue) and liabilities (trade payables and advances from customers) at the end of each reporting period are as follows:

	2021 *US$'000*	2020 *US$'000*
Assets		
US$	5,501	1,726
EUR	31	–
Liabilities		
US$	504	136

Sensitivity analysis

The following table details the Group's sensitivity to a 5% increase and decrease in RMB against US$, the foreign currency with which the Group may have a material exposure. No sensitivity analysis has been disclosed for the EUR denominated assets/liabilities as the impact on profit is immaterial. 5% represents management's assessment of the reasonably possible change in foreign exchange rate. The sensitivity analysis uses outstanding foreign currency denominated monetary items as a base and adjusts their translation at the end of each reporting period for a 5% change in foreign currency rate. A positive (negative) number below indicates an increase (a decrease) in profit where RMB strengthens 5% against US$. For a 5% weakening of RMB against US$, there would be an equal and opposite impact on profit.

	2021 *US$'000*	2020 *US$'000*
Impact on profit or loss		
US$	(250)	(80)

36. FINANCIAL INSTRUMENTS *(Continued)*

Sensitivity analysis *(Continued)*

Interest rate risk

The Group is exposed to fair value interest rate risk in relation to restricted bank deposits, long-term note receivable, lease liabilities, loans from a related party and consideration payables on acquisition of subsidies. Borrowing agreements include a mix of fixed and variable rate loans, the exposure in relation to fixed rate agreements is considered to be minimal.

The Group is also exposed to cash flow interest rate risk in relation to variable rate bank borrowings. The Group's cash flow interest rate risk is mainly concentrated on the fluctuation of the Prime Rate and LIBOR benchmark rates. For the variable rate bank borrowings, the Group currently does not have an interest rate hedging policy to mitigate interest rate risk; nevertheless, management monitors interest rate exposure and will consider hedging significant interest rate risk should the need arise.

The directors considered that such exposure is insignificant and no sensitivity analysis is presented.

Price risk

The Group is exposed to equity price risk through its investment in equity securities measured at FVTPL (see Note 22).

The Group has appointed a special team to monitor the price risk and will consider hedging the risk exposure should the need arise.

The directors considered that such exposure is insignificant and no sensitivity analysis is presented.

36. FINANCIAL INSTRUMENTS *(Continued)*

Sensitivity analysis *(Continued)*

Credit risk and impairment assessment

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. At the end of each reporting period, the Group's maximum exposure to credit risk which cause a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from the carrying amount of the respective recognized financial assets as stated in the consolidated statement of financial position.

In order to minimize credit risk, the Group has tasked its finance team to develop and maintain the Group's credit risk grading to categorize exposures according to their degree of risk of default.

Management uses publicly available financial information and the Group's own historical repayment records to rate its major customers and other debtors. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate exposure is spread amongst approved counterparties.

For trade receivables and unbilled revenue, the Group has applied the simplified approach in IFRS 9 to measure the loss allowance at lifetime ECL. The Group determines the ECL on these items by using a provision matrix within lifetime ECL (not credit impaired) estimated based on the financial quality of debtors and historical credit loss experience based on the past due status of the debtors, adjusted as appropriate to reflect current conditions and estimates of future economic conditions. The Group's current credit risk grading framework comprises the following categories:

36. FINANCIAL INSTRUMENTS *(Continued)*

Sensitivity analysis *(Continued)*

Credit risk and impairment assessment (Continued)

Category	Description
Current	The counterparty has an invoice that is current at reporting date
Within 90 days	The counterparty has an invoice that is past due within 90 days of the reporting date
91 to 180 days	The counterparty has an invoice that is past due within 91 to 180 days of the reporting date
181 days to 1 year	The counterparty has an invoice that is past due within 181 days to 1 year at reporting date
Over 1 year	The counterparty has an invoice that is past due over 1 year at reporting date

The following table details the risk profile of trade receivables and unbilled revenue:

As at December 31, 2021

	Not credit impaired		Credit impaired			
North America operation	**Current**	**Within 90 days**	**91 to 180 days**	**181 days to 1 year**	**Over 1 year**	**Total**
ECL rate	1.56%	3.02%	12.68%	20.50%	65.51%	8.41%
Gross carrying amount (US$'000)	16,975	9,523	2,420	2,278	2,273	33,469
Lifetime ECL (US$'000)	(264)	(288)	(307)	(467)	(1,489)	(2,815)
	16,711	9,235	2,113	1,811	784	30,654

	Not credit impaired		Credit impaired			
PRC operation	**Current**	**Within 90 days**	**91 to 180 days**	**181 days to 1 year**	**Over 1 year**	**Total**
ECL rate	5.06%	5.56%	12.86%	20.78%	83.72%	8.44%
Gross carrying amount (US$'000)	10,935	5,144	140	255	639	17,113
Lifetime ECL (US$'000)	(553)	(286)	(18)	(53)	(535)	(1,445)
	10,382	4,858	122	202	104	15,668

36. FINANCIAL INSTRUMENTS *(Continued)*

Sensitivity analysis *(Continued)*

Credit risk and impairment assessment (Continued)

As at December 31, 2020

	Not credit impaired		Credit impaired			
		Within	91 to	181 days	Over	
North America operation	Current	90 days	180 days	to 1 year	1 year	Total
ECL rate	2.54%	4.02%	23.81%	31.85%	82.50%	10.29%
Gross carrying amount (US$'000)	15,612	5,752	1,424	829	1,663	25,280
Lifetime ECL (US$'000)	(396)	(231)	(339)	(264)	(1,372)	(2,602)
	15,216	5,521	1,085	565	291	22,678

	Not credit impaired		Credit impaired			
		Within	91 to	181 days	Over	
PRC operation	Current	90 days	180 days	to 1 year	1 year	Total
ECL rate	4.19%	4.70%	12.70%	40.00%	78.70%	9.87%
Gross carrying amount (US$'000)	6,687	1,276	126	30	629	8,748
Lifetime ECL (US$'000)	(280)	(60)	(16)	(12)	(495)	(863)
	6,407	1,216	110	18	134	7,885

For the purposes of impairment assessment, other receivables and other financial assets that are subject to impairment are considered to have low credit risk as the counterparties to these items have a high credit rating. Accordingly, for the purpose of impairment assessment for these assets, the loss allowance is measured at an amount equal to 12m ECL. In determining the ECL for other receivables and other financial assets that are subject to impairment, the directors have taken into account the historical default experience and the future prospects of the industries and/or considering various external sources of actual and forecast economic information, as appropriate, in estimating the probability of default of each of the other receivables and other financial assets that are subject to impairment occurring within their respective loss assessment time horizon, as well as the loss upon default in each case. The directors considered that the ECL allowance is insignificant as at December 31, 2021 and 2020.

36. FINANCIAL INSTRUMENTS *(Continued)*

Sensitivity analysis *(Continued)*

Credit risk and impairment assessment (Continued)

In order to minimize the credit risk, management has designated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up actions are taken to recover overdue debts. In addition, the directors review the recoverability of each significant trade debt at the end of each reporting period to ensure that adequate impairment losses are made for irrecoverable amounts. In this regard, the directors consider that the Group's credit risk is significantly reduced.

The Group has concentration of credit risk with respect to trade receivables as 37.3% of the total trade receivables was due from the Group's top five customers as at December 31, 2021 (2020: 22.38%).

The Group has concentration of credit risk on liquid funds which are deposited with several banks. However, the credit risk on bank balances is limited because majority of the counterparties are banks with good reputation or banks with good credit rating.

36. FINANCIAL INSTRUMENTS *(Continued)*

Sensitivity analysis *(Continued)*

Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of cash and cash equivalents and unused banking facilities deemed adequate to finance the Group's operations and mitigate the effects of fluctuations in cash flows.

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities based on the agreed repayment terms. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows.

	Weighted average effective interest rate	On demand or less than one year	One to five years	Over five years	Total undiscounted cash flows	Carrying amount
	%	*US$'000*	*US$'000*	*US$'000*	*US$'000*	*US$'000*
As at December 31, 2021						
Trade and other payables	N/A	26,800	–	–	26,800	26,800
Bank borrowings	4.45%	11	–	–	11	11
Lease liabilities	5.02%	7,655	26,252	26,835	60,742	57,839
Amounts due to shareholders	N/A	210	–	–	210	210
Other long-term liabilities	N/A	–	18,018	–	18,018	18,018
Total		34,676	44,270	26,835	105,781	102,878
As at December 31, 2020 (restated)						
Trade and other payables	N/A	14,474	–	–	14,474	14,474
Lease liabilities	5.49%	5,482	10,244	27,171	42,897	40,622
Amounts due to shareholders	N/A	210	–	–	210	210
Other long-term liabilities	N/A	–	9,803	–	9,803	9,803
Total		20,166	20,047	27,171	67,384	65,109

36. FINANCIAL INSTRUMENTS *(Continued)*

Fair value measurements of financial instruments

Some of the Group's financial instruments are measured at fair value for financial reporting purposes. In estimating the fair value, the Group uses market-observable data to the extent it is available. Where Level 1 inputs are not available, the Group engages third party qualified valuers to perform the valuation.

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis

Some of the Group's financial assets and financial liabilities are measured at fair value at the end each reporting period.

Financial assets at fair value

The financial assets subsequently measured at fair value represents structured deposits and unlisted equity investments.

The fair value of structured deposits is determined using Level 2 inputs. The fair value of financial assets in Level 2 is determined by discounted cash flow as at the end of the reporting period.

The fair value of unlisted equity investments is determined using Level 3 inputs.

Latest transaction prices/consideration for shares transfer in similar equity interest was used to capture the fair value of the financial assets. The significant unobservable input is consideration due to timing, condition of sale and terms of agreements, size and nature of similar business to derive estimated value.

Financial liability at fair value

The financial liability subsequently measured at fair value on Level 3 fair value measurement represents contingent consideration relating to the acquisition of Quintara, Acme, Biotranex, RMI and BRI (see Note 32).

The fair value of contingent consideration for business combination is determined using Level 3 inputs.

Discounted cash flow method was used to capture the present value of the expected future economic benefits that will flow out of the Group arising from the contingent consideration, based on an appropriate discount rate. The significant unobservable inputs are discount rate and probability-adjusted revenues and profits.

36. FINANCIAL INSTRUMENTS *(Continued)*

Fair value measurements of financial instruments *(Continued)*

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Continued)

Detail of reconciliation of financial liabilities at FVTPL measured at Level 3 fair value measurement are set out below:

	Unlisted equity investment *US$'000*	Contingent consideration for business combinations *US$'000*
As at January 1, 2020	–	2,926
Acquisition through business combinations (restated)	–	10,271
Changes in fair value	–	(18)
Transfer to consideration payables	–	(982)
Exchange adjustments	–	6
As at December 31, 2020 (restated) and January 1, 2021	–	12,203
Changes in fair value	–	1,725
Acquisition	1,568	–
Acquisition through business combination	–	17,156
Payment of contingent consideration	–	(2,698)
Transfer to consideration payables	–	(750)
As at December 31, 2021	1,568	27,636

Notes:

(a) Discount rate

A 1% increase/decrease in the discount rate while holding all other variables constant would decrease/increase the fair value of the contingent consideration for business combination by US$330,000/US$338,000 as at December 31, 2021 in the Group.

(b) Probability-adjusted revenues

A 5% increase/decrease in the probability-adjusted revenues while holding all other variables constant would increase/decrease the fair value of the contingent consideration for business combination by nil/US$847,000 as at December 31, 2021 in the Group.

Financial instruments not measured at fair value on a recurring basis

Financial instruments not measured at fair value on a recurring basis includes cash and cash equivalents, trade and other receivables, restricted bank deposits, long-term note receivable, trade and other payables, bank borrowings, and amounts due to shareholders.

36. FINANCIAL INSTRUMENTS *(Continued)*

Fair value measurements of financial instruments *(Continued)*

Financial instruments not measured at fair value on a recurring basis (Continued)

The fair value of these financial assets and financial liabilities measured at amortized cost is determined in accordance with generally accepted pricing models based on discounted cash flow analysis.

The directors consider that the carrying amounts of financial assets and financial liabilities recorded at amortized cost in the consolidated financial statements approximate their fair values.

37. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Bank borrowings *(Note 29)* *US$'000*	Lease liabilities *(Note 31)* *US$'000*	Amounts due to shareholders *(Note 30)* *US$'000*	Total *US$'000*
As at January 1, 2020	500	20,402	210	21,112
Financing cash flows				
– Repayment of bank borrowings	(500)	–	–	(500)
– Interest paid on bank borrowings	(6)	–	–	(6)
– Repayment of lease liabilities	–	(3,612)	–	(3,612)
– Interest paid on lease liabilities	–	(2,190)	–	(2,190)
Non-cash changes				
– Acquisition of subsidiaries	–	1,447	–	1,447
– Interest expenses	6	2,190	–	2,196
– New leases	–	22,385	–	22,385
As at December 31, 2020 and January 1, 2021	–	40,622	210	40,832
Financing cash flows				
– Proceeds from bank borrowings	11	–	–	11
– Repayment of lease liabilities	–	(5,228)	–	(5,228)
– Interest paid on lease liabilities	–	(2,579)	–	(2,579)
Non-cash changes				
– Interest expenses	–	2,579	–	2,579
– New leases	–	22,445	–	22,445
As at December 31, 2021	11	57,839	210	58,060

38. CAPITAL COMMITMENTS

The Group had capital commitments under non-cancelable contracts at the end of each reporting period as follows:

	2021 *US$'000*	2020 *US$'000*
Acquisition of subsidiaries *(Note 44)*	76,000	–
Acquisition of FVTPL	2,353	–
Acquisition of property, plant and equipment	7,342	9,954
	85,695	9,954

39. RETIREMENT BENEFIT PLANS

The employees of the Group's subsidiaries in the PRC are members of the state-managed retirement benefits schemes operated by the PRC government. The PRC subsidiaries are required to contribute a certain percentage of payroll costs to the retirement benefits schemes to fund the benefits. The only obligation of the Group with respect to the retirement benefits schemes is to make the specified contributions.

A defined contribution plan in the USA pursuant to which the Group matches 50 cents for every dollar contributed by each qualifying member of staff up to 4% of their salary. The maximum match is 2% of the qualifying member of staff's gross pay.

The total cost charged to profit or loss in respect of the above-mentioned schemes amounted to approximately US$2,595,000 for the year ended December 31, 2021 (2020: US$1,404,000).

40. RELATED PARTY TRANSACTIONS AND BALANCES

Other than as disclosed elsewhere in these consolidated financial statements, the Group has following transactions and balances with related parties:

(1) Related party transactions:

(a) Laboratory and Bioequivalence service income from related parties

	Relationship	2021 *US$'000*	2020 *US$'000*
Hangzhou Tigermed	Ultimate holding company	465	359
Frontage Clinical	Associate	125	51
Taiwan TigerMed Consulting Co., Ltd. ("Taiwan TigerMed")	Fellow subsidiary	–	9
Frontida BioPharm Inc. ("Frontida") *(Note i)*	Entity controlled by a substantial shareholder	9	4
		599	423

40. RELATED PARTY TRANSACTIONS AND BALANCES *(Continued)*

(1) Related party transactions: *(Continued)*

(b) Fees paid to related parties for Laboratory service, Biometrics service, Electronic Data Capture Software service and Clinical Site Management Organization service

	Relationship	2021 US$'000	2020 US$'000
Frontage Clinical	Associate	123	585
Tigermed-BDM	Fellow subsidiary	–	95
Jyton-Kannel Medical Technology Co., Ltd.	Fellow subsidiary	12	13
Hangzhou Tigermed	Ultimate holding company	68	1
Jiaxing Tigermed Data Management Co., Ltd.	Fellow subsidiary	357	1
		560	695

(c) Administrative services provided to related parties

	Relationship	2021 US$'000	2020 US$'000
Frontage Clinical	Associate	201	269
Frontida *(Note i)*	Entity controlled by a substantial shareholder	–	85
FJ Pharma LLC	Associate until January 11, 2021	–	3
Hangzhou Tigermed	Ultimate holding company	92	–
		293	357

40. RELATED PARTY TRANSACTIONS AND BALANCES *(Continued)*

(2) Related party balances:

As at the end of each reporting period, the Group had balances with related parties as follows:

	Relationship	2021 US$'000	2020 US$'000
Trade receivables			
Frontage Clinical	Associate	139	142
Frontida *(Note i)*	Entity controlled by a substantial shareholder	81	82
Hangzhou Tigermed	Ultimate holding company	13	78
Taiwan TigerMed	Fellow subsidiary	9	9
		242	311
Other receivables			
Frontida *(Note i)*	Entity controlled by a substantial shareholder	246	606
Frontage Clinical	Associate	344	406
		590	1,012
Unbilled revenue			
Hangzhou Tigermed	Ultimate holding company	222	407
Shanghai Tigermed Technology Co., Ltd.	Fellow subsidiary	2	2
		224	409

40. RELATED PARTY TRANSACTIONS AND BALANCES *(Continued)*

(2) Related party balances: *(Continued)*

	Relationship	2021 US$'000	2020 US$'000
Trade payables			
Tigermed-BDM	Fellow subsidiary	–	281
Jyton-Kannel Medical Technology Co., Ltd.	Fellow subsidiary	–	7
Hangzhou Simo Laboratories Co., Ltd.	Fellow subsidiary	–	8
Hangzhou Tigermed	Ultimate holding company	9	1
Jiaxing Tigermed Data Management Co., Ltd.	Fellow subsidiary	29	–
		38	297
Other payables			
Frontage Clinical	Associate	5	–
Advances from customers			
Hangzhou Tigermed	Ultimate holding company	385	369
Frontida *(Note i)*	Entity controlled by a substantial shareholder	–	2
		385	371

Notes:

(i) Frontida is considered as a related party of the Group because Dr. Song Li, the substantive shareholder of the Company, is Frontida's controlling shareholder.

(ii) The English names of the entities registered in the PRC represent the best efforts made by management of the Company to translate their Chinese names as they do not have official English names.

(iii) All the above balances with related parties are repayable on demand, unsecured and interest free.

40. RELATED PARTY TRANSACTIONS AND BALANCES *(Continued)*

(3) Compensation of key management personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group.

The remuneration of the directors and other members of key management of the Group during the years are as follows:

	2021 *US$'000*	2020 *US$'000*
Salaries and other benefits	3,586	3,000
Share-based compensation	3,120	496
Performance-based bonus	741	534
Retirement benefits scheme contributions	42	37
	7,489	4,067

The remuneration of key management is determined with reference to the performance of the individuals and market trends.

41. ACQUISITION OF BUSINESSES

(a) Acquisition of Ocean Ridge Business in 2021

On April 13, 2021, the Group entered into an agreement with Ocean Ridge Biosciences, LLC ("Ocean Ridge") to acquire the business relating to development of novel therapeutics, including services related to biofluid profiling, RNA sequencing, bioinformatics, exosomes, microbiomics, oncopanels, cell-free DNA bisulfite sequencing, gene expression microarray, multiplex protein profiling and formalin-fixed, paraffin-embedded tissues (the "Ocean Ridge Business"), for a consideration of US$1,000,000 (the "Ocean Ridge Acquisition"). In completing the Ocean Ridge Acquisition, the Group will expand the Group's capabilities to provide genomic services to the health care and life science industries and academic institutions. The acquisition has been accounted for as acquisition of business using the acquisition method.

The purchase price has been preliminarily allocated based on the estimated fair value of net assets acquired and liabilities assumed at the date of the acquisition. The preliminary purchase price allocation is subject to further refinement and may require adjustments to arrive at the final purchase price allocation. These adjustments will primarily relate to intangible assets and income tax-related items. Management expects the purchase price allocation to be completed in the second quarter of 2022.

41. ACQUISITION OF BUSINESSES *(Continued)*

(a) Acquisition of Ocean Ridge Business in 2021 *(Continued)*

Details of the preliminary fair value of identifiable assets and liabilities, purchase consideration and goodwill recognized are as follows:

	Fair value
	US$'000
Property, plant and equipment	107
Intangible assets	157
Other long-term deposits	14
Net assets acquired	278

	US$'000
Cash consideration paid	1,000
Less: Fair value of net assets acquired	(278)
Goodwill	722
Net cash outflows arising on acquisition of a subsidiary:	
Cash consideration paid	1,000
	1,000

Acquisition-related costs, which were immaterial, have been excluded from the consideration transferred and have been recognized directly as an expense in the current interim period within the administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

Goodwill arose in the acquisition of Ocean Ridge Business because the cost of the combination included a control premium. In addition, the consideration paid for the combination effectively included amounts in relation to the benefit of expected synergies, revenue growth and future market development. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria for the identifiable intangible assets.

None of the goodwill arising on the acquisition is expected to be deductible for tax purposes.

No pro forma information for the acquisition of Ocean Ridge Business is prepared as the acquisition was completed in April 2021 and the directors of the Company are of the opinion that there is no significant changes to the Group's revenue or profit for the current year had the acquisition been completed on 1 January 2021.

41. ACQUISITION OF BUSINESSES *(Continued)*

(b) Acquisition of Quintara in 2021

On July 9, 2021, the Group acquired entire equity interests of Quintara for consideration of US$72,000,000 (the "Quintara Acquisition"). Quintara is principally engaged in providing contract research organization services, including in vitro absorption, distribution, metabolism and excretion profiling, bioanalysis services, and assay development and compound screening services, to the pharmaceutical, biotechnology, medical device or diagnostic industries. In completing the Quintara Acquisition, the Group will expend the Group's drug discovery services. The acquisition has been accounted for as acquisition of business using the acquisition method.

The total consideration of the Quintara Acquisition is subject to downward adjustment in respect of the guarantee of a maximum of US$18,900,000. For details, please refer to the announcement of the Company dated June 28, 2021.

The expected future economic benefits that will flow out of the Group arising from such arrangement are considered as a contingent consideration. The contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in the business combination.

The purchase price has been preliminarily allocated based on the estimated fair value of net assets acquired and liabilities assumed at the date of the acquisition. The preliminary purchase price allocation is subject to further refinement and may require adjustments to arrive at the final purchase price allocation. These adjustments will primarily relate to intangible assets and income tax-related items. Management expects the purchase price allocation to be completed in the third quarter of 2022.

41. ACQUISITION OF BUSINESSES *(Continued)*

(b) Acquisition of Quintara in 2021 *(Continued)*

Details of the preliminary fair value of identifiable assets and liabilities, purchase consideration and goodwill recognized are as follows:

	Fair value
	US$'000
Property, plant and equipment	1,016
Intangible assets	20,522
Trade and other receivables	2,564
Unbilled revenue	493
Tax recoverable	98
Cash and cash equivalents	4,040
Trade and other payables	(2,254)
Advances from customers	(6)
Deferred tax liabilities	(5,259)
Net assets acquired	21,214

	US$'000
Cash consideration paid	47,345
Contingent consideration	17,156
Total transferred consideration	64,501
Less: Fair value of net assets acquired	(21,214)
Goodwill	43,287
Net cash outflow arising on acquisition of a subsidiary:	
Cash consideration paid	47,345
Less: Cash and cash equivalents acquired	(4,040)
	43,305

41. ACQUISITION OF BUSINESSES *(Continued)*

(b) Acquisition of Quintara in 2021 *(Continued)*

Acquisition-related costs amounting to US$240,000 are excluded from the consideration transferred and have been recognized as an expense in the current year, within the administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

The fair value of trade and other receivables at the date of acquisition amounted to US$2,564,000. The gross contractual amounts of those trade and other receivables acquired amounted to US$2,564,000 at the date of acquisition. The best estimate at acquisition date of the contractual cash flows not expected to be collected was nil.

Goodwill arose in the acquisition of Quintara because the cost of the combination included a control premium. In addition, the consideration paid for the combination effectively included amounts in relation to the benefit of expected synergies, revenue growth and future market development. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria for the identifiable intangible assets.

None of the goodwill arising on the acquisition is expected to be deductible for tax purposes.

Included in the profit for the year is US$2,804,000 attributable to the additional business generated by Quintara. Revenue for the year includes US$10,201,000 generated from Quintara.

Had the acquisition been completed on January 1, 2021, revenue for the current year of the Group would have been US$193,236,000, and profit for the current year of the Group would have been US$16,544,000. The pro-forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed on January 1, 2021, nor is it intended to be a projection of future results.

In determining the 'pro-forma' revenue and profit of the Group had Quintara been acquired at the beginning of the current year, the directors calculated amortization of intangible assets acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognized in the pre-acquisition financial statements.

41. ACQUISITION OF BUSINESSES *(Continued)*

(c) Acquisition of Heyan Biotech in 2021

On August 31, 2021, the Group entered into a subscription and share purchase agreement to subscribe and acquire 70% of the enlarged equity interests in Heyan Biotech for a cash consideration of RMB41,067,000 (equivalent to approximately US$6,349,000) (the "Heyan Biotech Acquisition"). Heyan Biotech and its subsidiary is principally engaged in providing drug discovery services such as drug activity screening and kinase function test. In completing the Heyan Biotech Acquisition, it can enhance the Group's one-stop service capacity and capability in the field of drug discovery and development. The acquisition has been accounted for as acquisition of business using the acquisition method.

The purchase price has been preliminarily allocated based on the estimated fair value of net assets acquired and liabilities assumed at the date of the acquisition. The preliminary purchase price allocation is subject to further refinement and may require adjustments to arrive at the final purchase price allocation. These adjustments will primarily relate to intangible assets and income tax-related items. Management expects the purchase price allocation to be completed in the third quarter of 2022.

Details of the preliminary fair value of identifiable assets and liabilities, purchase consideration and goodwill recognized are as follows:

	Fair value
	US$'000
Property, plant and equipment	107
Deferred tax assets	2
Intangible assets	305
Trade and other receivables	197
Cash and cash equivalents	5,155
Trade and other payables	(59)
Advances from customers	(1)
Income tax payable	(22)
Deferred tax liabilities	(46)
Non-controlling interests	(1,691)
Net assets acquired	3,947

41. ACQUISITION OF BUSINESSES (Continued)

(c) Acquisition of Heyan Biotech in 2021 (Continued)

	US$'000
Cash consideration paid	6,349
Less: Fair value of net assets acquired	(3,947)
Goodwill	2,402
Net cash outflow arising on acquisition of a subsidiary:	
Cash consideration paid	6,349
Less: Cash and cash equivalents acquired	(5,155)
	1,194

Acquisition-related costs amounting to US$7,000 are excluded from the consideration transferred and have been recognized as an expense in the current year, within the administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

The fair value of trade and other receivables at the date of acquisition amounted to US$197,000. The gross contractual amounts of those trade and other receivables acquired amounted to US$197,000 at the date of acquisition. The best estimate at acquisition date of the contractual cash flows not expected to be collected was nil.

The non-controlling interests Heyan Biotech recognized at the acquisition date was measured at 30% in the recognized amount of the acquiree's identifiable net assets.

Goodwill arose in the acquisition of Heyan Biotech because the cost of the combination included a control premium. In addition, the consideration paid for the combination effectively included amounts in relation to the benefit of expected synergies, revenue growth and future market development. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria for the identifiable intangible assets.

None of the goodwill arising on the acquisition is expected to be deductible for tax purposes.

41. ACQUISITION OF BUSINESSES *(Continued)*

(c) Acquisition of Heyan Biotech in 2021 *(Continued)*

Included in the profit for the year is US$50,000 attributable to the additional business generated by Heyan Biotech. Revenue for the year includes US$451,000 generated from Heyan Biotech.

Had the acquisition been completed on January 1, 2021, revenue for the current year of the Group would have been US$185,327,000, and profit for the current year of the Group would have been US$19,008,000. The pro-forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed on January 1, 2021, nor is it intended to be a projection of future results.

In determining the 'pro-forma' revenue and profit of the Group had Heyan Biotech been acquired at the beginning of the current year, the directors calculated amortization of intangible assets acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognized in the pre-acquisition financial statements.

(d) Acquisition of Biotranex in 2020

On March 31, 2020, the Group acquired 100% equity interests in Biotranex for a consideration of US$2,600,000 (the "Biotranex Acquisition") from an independent third party. Biotranex, an innovative biotech service company located in Monmouth Junction, New Jersey, USA, is principally engaged in providing a broad spectrum of drug metabolism and pharmacokinetic studies for pharmaceutical and biotechnology companies. Biotranex has been acquired with the objective of providing more comprehensive DMPK services. The acquisition has been accounted for as acquisition of business using the acquisition method.

The total consideration of the Biotranex Acquisition is subject to downward adjustment in respect of the guarantee to a maximum of US$600,000 if:

(a) the audited EBITDA for the nine months ending December 31, 2020 is less than US$105,000 (the "Biotranex FY2020 Profit Target");

(b) the audited EBITDA of Biotranex in fiscal year of 2021 is less than US$400,000 (the "Biotranex FY2021 Profit Target"); and

(c) the audited EBITDA of Biotranex in fiscal year of 2022 is less than US$500,000 (the "Biotranex FY2022 Profit Target").

41. ACQUISITION OF BUSINESSES *(Continued)*

(d) Acquisition of Biotranex in 2020 *(Continued)*

In case if the total audited EBITDA from April 1, 2020 to December 31, 2022 is less than US$1,005,000 (the "Biotranex Profit Target") but is equal to or exceeds US$495,000, the total consideration of the Biotranex Acquisition is subject to downward adjustment based on the difference the audited profit and the Biotranex Profit Target.

The total consideration shall be satisfied by way of cash by the Group in the following manners:

(a) initial consideration as to US$1,250,000 payable by completion;

(b) second consideration as to a maximum of US$375,000 payable within 6 months after the completion of the Biotranex Acquisition;

(c) third consideration as to a maximum of US$200,000 (if the Biotranex FY2020 Profit Target is attained) is payable by March 31, 2021;

(d) fourth consideration as to a maximum of US$200,000 (if the Biotranex FY2021 Profit Target is attained) is payable by March 31, 2022;

(e) fifth consideration as to a maximum of US$200,000 (if the Biotranex FY2022 Profit Target is attained) is payable by March 31, 2023; and

(f) final consideration as to a maximum of US$375,000 if the payment is mutually agreed by the Group and the seller.

The expected future economic benefits that will flow out of the Group arising from such arrangement are considered as a contingent consideration. The contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in the business combination.

41. ACQUISITION OF BUSINESSES *(Continued)*

(d) Acquisition of Biotranex in 2020 *(Continued)*

Details of the fair value of the identifiable assets and liabilities acquired, purchase consideration and goodwill recognized are as follows:

	Fair value
	US$'000
Property, plant and equipment	34
Intangible assets	600
Trade and other receivables	143
Bank balances and cash	137
Trade and other payables	(35)
Net assets acquired	879
Cash	2,000
Contingent consideration	418
Total transferred	2,418
Less: Fair value of net assets acquired	(879)
Goodwill arising on acquisition	1,539
Net cash outflows arising on acquisition of a subsidiary:	
Consideration paid in cash	2,000
Less: bank balances and cash acquired	(137)
	1,863

Acquisition-related costs amounting to US$10,000 have been excluded from the consideration transferred and have been recognized directly as an expense in the current year within the administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

The fair value of trade and other receivables at the date of acquisition amounted to US$143,000. The gross contractual amounts of those trade and other receivables acquired amounted to US$143,000 at the date of acquisition. The best estimate at acquisition date of the contractual cash flows not expected to be collected was nil.

41. ACQUISITION OF BUSINESSES *(Continued)*

(d) Acquisition of Biotranex in 2020 *(Continued)*

Goodwill arising on the acquisition of Biotranex represents a buyer-specific synergy value where the Group intends to integrate DMPK services to its overall business portfolio and it broadens the Group's comprehensive solution offerings to its client. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria for identifiable intangible assets.

None of the goodwill arising on this acquisition is expected to be deductible for tax purposes.

Included in the profit for the year ended December 31, 2020 is US$180,000 attributable to the additional business generated by Biotranex. Revenue for the year ended December 31, 2020 includes US$1,077,000 generated from Biotranex.

Had the acquisition been completed on January 1, 2020, revenue for the year ended December 31, 2020 of the Group would have been US$126,087,000, and profit for the year ended December 31, 2020 of the Group would have been US$17,556,000. The pro-forma information is for illustrative purposes only and is not necessarily an indication of revenue and results of operations of the Group that actually would have been achieved had the acquisition been completed on January 1, 2020, nor is it intended to be a projection of future results.

In determining the 'pro-forma' revenue and profit of the Group had Biotranex been acquired at the beginning of the year ended December 31, 2020, the directors calculated amortization of intangible assets acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognized in the pre-acquisition financial statements.

(e) Acquisition of Acme in 2020

On July 2, 2020, the Group acquired entire equity interests of Acme for consideration of US$27,397,000 from independent third parties. Acme primarily provides contract research and custom synthesis services for biopharmaceutical companies specializing in drug discovery and development. In completing the Acme Acquisition, the Group will expand the Group's capabilities of organic synthesis, medicinal chemistry, and process research and development, and will enable the Group to capture growth in the drug discovery and early stage development and other ancillary services. The acquisition has been accounted for as acquisition of business using acquisition method.

The total consideration of the Acme Acquisition is subject to downward adjustment in respect of the guarantee to a maximum of US$11,000,000. For details, please refer to the announcement of the Company dated August 6, 2020.

41. ACQUISITION OF BUSINESSES *(Continued)*

(e) Acquisition of Acme in 2020 *(Continued)*

The expected future economic benefits that will flow out of the Group arising from such arrangement are considered as a contingent consideration. The contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in the business combination.

During the year ended December 31, 2020, the Group acquired entire equity interests of Acme of which the valuations have not been completed and the respective fair values of the identifiable net assets and goodwill were determined provisionally. During the year ended December 31, 2021 (within measurement period), the Group made certain fair value adjustments, with reference to the finalized independent valuation issued in May 2021, to the carrying amounts of intangible assets and deferred taxation of Acme, as well as contingent liabilities and goodwill arising from the transaction as a result of completing the initial accounting.

Details of the fair value of identifiable assets and liabilities, purchase consideration and goodwill recognized are as follows:

	Fair value ***US$'000***
	(Restated)
Property, plant and equipment	1,244
Right-of-use assets	1,344
Intangible assets	8,300
Trade and other receivables	2,385
Unbilled revenue	72
Tax recoverable	2
Cash and cash equivalents	1,529
Trade and other payables	(973)
Advances from customers	(3)
Income tax payable	(527)
Lease liabilities	(1,447)
Deferred tax liabilities	(2,509)
Net assets acquired	9,417

41. ACQUISITION OF BUSINESSES *(Continued)*

(e) Acquisition of Acme in 2020 *(Continued)*

	US$'000
	(Restated)
Cash consideration paid	16,397
Contingent consideration	9,853
Total transferred consideration	26,250
Less: Fair value of net assets acquired	(9,417)
Goodwill	16,833
Net cash outflow arising on acquisition of a subsidiary:	
Cash consideration paid	16,397
Less: Cash and cash equivalents acquired	(1,529)
	14,868

Compared with the preliminary purchase price allocation disclosed in Note 43 to the Group's consolidated financial statements for the year ended December 31, 2020, the following items were restated:

	As previously stated ***US$'000***	**Adjustments** ***US$'000***	**As restated** ***US$'000***
Goodwill	14,034	2,799	16,833
Intangible assets	8,500	(200)	8,300
Deferred tax liabilities	(2,554)	45	(2,509)
Contingent consideration	(7,209)	(2,644)	(9,853)

Acquisition-related costs amounting to US$1,000 are excluded from the consideration transferred and have been recognized as an expense in the current year, within the administrative expenses in the consolidated statement of profit or loss and other comprehensive income.

The fair value of trade and other receivables at the date of acquisition amounted to US$2,385,000. The gross contractual amounts of those trade and other receivables acquired amounted to US$2,385,000 at the date of acquisition. The best estimate at acquisition date of the contractual cash flows not expected to be collected was nil.

41. ACQUISITION OF BUSINESSES *(Continued)*

(e) Acquisition of Acme in 2020 *(Continued)*

Goodwill arose in the acquisition of Acme because the cost of the combination included a control premium. In addition, the consideration paid for the combination effectively included amounts in relation to the benefit of expected synergies, revenue growth and future market development. These benefits are not recognized separately from goodwill because they do not meet the recognition criteria for the identifiable intangible assets.

None of the goodwill arising on the acquisition is expected to be deductible for tax purposes.

Included in the profit for the year ended December 31, 2020 is loss of US$23,000 attributable to the additional business generated by Acme. Revenue for the year ended December 31, 2020 includes US$6,677,000 generated from Acme.

Had the acquisition been completed on January 1, 2020, revenue for the year ended December 31, 2020 of the Group would have been US$133,637,000, and profit for the year ended December 31, 2020 of the Group would have been US$18,841,000.

In determining the 'pro-forma' revenue and profit of the Group had Acme been acquired at the beginning of the year ended December 31, 2020, the directors have calculated amortization of intangible assets acquired on the basis of the fair values arising in the initial accounting for the business combination rather than the carrying amounts recognized in the pre-acquisition financial statements.

42. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY

General information of subsidiaries

	As at December 31,	
	2021	2020
	US$'000	*US$'000*
Unlisted shares, at cost	**28,421**	28,421

42. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY *(Continued)*

General information of subsidiaries *(Continued)*

Details of the subsidiaries directly and indirectly held by the Company at the end of the reporting period are set out below:

Name of subsidiaries	Place of incorporation/ establishment and business and nature of legal entity	Authorized share capital/ registered capital	Paid-up capital	Equity interest attributable to the Group as at December 31, 2021 %	2020 %	Principal activities
Directly held:						
Frontage Labs	USA, limited company	US$20,000	US$16,215	100	100	Bioanalytical, CMC and DMPK services
Indirectly held:						
Frontage Shanghai	PRC, limited liability company	US$4,355,050	US$4,355,050	100	100	Bioanalytical and bioequivalence services
Croley Martell Holdings, Inc.	USA, limited company	US$2,000	US$1,000	100	100	Investing holding
Concord Holdings, LLC	USA, limited liability company	–	–	100	100	Investing holding
Concord Biosciences, LLC	USA, limited liability company	–	–	100	100	Safety and Toxicology services
Frontage Laboratories (Luohe) Co., Ltd. ("Frontage Luohe")	PRC, limited liability company	RMB50,000,000	RMB500,000	100	100	CMC
Frontage Suzhou	PRC, limited liability company	RMB10,000,000	RMB10,000,000	75	75	CMC
RMI	USA, limited liability company	–	US$100	100	100	DMPK
11736655 Canada Ltd.	Canada, limited company	Unlimited	CAD5,000,000	100	100	Investing holding
BRI	Canada, limited company	–	CAD$700	100	100	DMPK
Biotranex *(note (i))*	USA, limited liability company	–	US$712,531	100	100	DMPK
Suzhou Frontage New Drug Development Co., Ltd *(note (ii))*	PRC, limited liability company	US$60,000,000	US$24,500,000	100	100	DMPK

42. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY *(Continued)*

General information of subsidiaries *(Continued)*

Name of subsidiaries	Place of incorporation/ establishment and business and nature of legal entity	Authorized share capital/ registered capital	Paid-up capital	Equity interest attributable to the Group as at December 31, 2021 %	2020 %	Principal activities
Acme *(note (iii))*	USA, limited company	US$10,000	US$10,000	100	100	Chemistry services
Acme Shanghai *(note (iii))*	PRC, limited liability company	US$2,000,000	US$750,000	100	100	Chemistry services
Hoya Global Limited *(note (iii))*	Hong Kong, limited company	US$500,000	US$500,000	100	100	Investing holding
Frontage International Limited *(note (iv))*	Hong Kong, limited company	HK$10,000	HK$10,000	100	100	Investing holding
Quintara *(note (v))*	USA, limited company	US$10,000	US$10,000	100	–	Preclinical research
Heyan Biotech *(note (vi))*	PRC, limited liability company	RMB1,955,557	RMB1,955,557	70	–	Preclinical research
Wuhan Yanyou Pharmaceutical Co., Ltd. *(note (vi))*	PRC, limited liability company	RMB500,000	RMB500,000	70	–	Preclinical research
Frontlink Pharmaceutical Technologies (Suzhou) Co., Ltd. *(note (vii))*	PRC, limited liability company	RMB50,000,000	RMB6,000,000	100	–	CMC
Frontline Laboratories (Shanghai) Co., Ltd. *(note (viii))*	PRC, limited liability company	RMB50,000,000	RMB35,000,000	100	–	Laboratories testing

42. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY *(Continued)*

General information of subsidiaries *(Continued)*

Notes:

(i) On March 31, 2020, the Group acquired 100% of the equity interests of Biotranex, details of which are set out in Note 41(d).

(ii) On August 3, 2020, the Group set up Suzhou Frontage New Drug Development Co., Ltd.

(iii) On July 2, 2020, the Group acquired 100% of the equity interests of Acme, details of which are set out in Note 41(e).

(iv) On June 24, 2020, the Group set up Frontage International Limited.

(v) On July 9, 2021, the Group acquired 100% of the equity interests of Quintara, details of which are set out in Note 41(b).

(vi) On August 31, 2021, the Group acquired 70% of the equity interests of Heyan Biotech and its subsidiary, details of which are set out in Note 41(c).

(vii) The Group set up Frontlink Pharmaceutical Technologies (Suzhou) Co., Ltd.

(viii) The Group set up Frontline Laboratories (Shanghai) Co., Ltd.

43. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	As at December 31,	
	2021	2020
	US$'000	US$'000
Non-current Assets		
Unlisted investments in subsidiaries	28,421	28,421
Deferred tax assets	5,478	3,620
	33,899	32,041
Current Assets		
Bank balances and cash	89,820	152,668
Trade and other receivables and prepayments	44	97
Amount due from subsidiaries	107,933	41,887
	197,797	194,652
Current Liabilities		
Trade and other payables	265	221
Income tax payable	202	870
	467	1,091
Net Current Assets	197,330	193,561
Total Assets less Current Liabilities	231,229	225,602
Capital and Reserves		
Share capital	20	20
Reserves	231,209	225,582
Total Equity	231,229	225,602

On behalf of the directors

Dr. Song Li, DIRECTOR **Dr. Zhihe Li, DIRECTOR**

43. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY *(Continued)*

Reserves movement of the Company	Share premium US$'000	Accumulated losses US$'000	Equity-settled share-based compensation reserve US$'000	Total US$'000
At January 1, 2020	221,614	(9,030)	5,044	217,628
Profit and total comprehensive income for the year	–	2,623	–	2,623
Exercise of share options *(Note 34)*	4,157	–	(762)	3,395
Recognition of deferred tax assets related to equity-settled share-based compensation	–	–	1,001	1,001
Recognition of equity-settled share-based compensation *(Note 34)*	–	–	935	935
At December 31, 2020 and January 1, 2021	225,771	(6,407)	6,218	225,582
Loss and total comprehensive expense for the year	–	(5,964)	–	(5,964)
Exercise of share options *(Note 34)*	2,857	–	(605)	2,252
Recognition of deferred tax assets related to equity-settled share-based compensation	–	–	1,822	1,822
Recognition of equity-settled share-based compensation *(Note 34)*	–	–	7,517	7,517
At December 31, 2021	228,628	(12,371)	14,952	231,209

44. EVENTS AFTER REPORTING PERIOD

On December 29, 2021 (New York time), Frontage Labs entered into a Membership Interest Purchase Agreement (the "Agreement") with (i) shareholders of Experimur LLC ("OpCo") and of Experimur Properties LLC ("PropertyCo") ("collectively as the Sellers"), (ii) Nabil Hatoum (being Sellers' Representative), (iii) Experimur Holdings, and (iv) OpCo, Experimur Intermediate LLC ("Experimur Intermediate"), and PropertyCo (collectively as the "Targets"), pursuant to which Sellers agreed to sell and Frontage Labs agreed to purchase 100% of the equity interests of OpCo, Experimur Intermediate and PropertyCo for a cash consideration of up to US$76,000,000 in accordance with the terms and conditions of the Agreement.

The acquisition was completed on January 10, 2022 (New York time). Immediately following the completion of acquisition, the Targets have become indirect subsidiaries of the Company and the financial results, assets and liabilities of the Targets will be consolidated into the consolidated financial statements of the Group.

For details, please refer to the Company's announcements dated December 30, 2021 and January 11, 2022.

In the moment, it is not practicable to provide an estimate of financial effect of the above acquisition until the Group performed a detailed review.

DEFINITIONS

"2008 Share Incentive Plan"	the pre-IPO share incentive plan approved by Frontage Labs in 2008 and assumed by the Company on April 17, 2018
"2015 Share Incentive Plan"	the pre-IPO share incentive plan approved by Frontage Labs in 2015 and assumed by the Company on April 17, 2018
"2017 Tax Act" or "Transition Tax"	The Tax Cuts and Jobs Act was signed into law on December 22, 2017, has resulted in significant changes to the U.S. corporate income tax system. These changes reduce tax rates and modify policies, credits and deductions for businesses. The 2017 Tax Act also transitions the U.S. international taxation from a worldwide system to a modified territorial system and includes base erosion prevention measures on non-U.S. earnings, which could result in subjecting certain earnings of Frontage Shanghai to U.S. taxation. These changes are effective beginning in 2018. The 2017 Tax Act also includes a tax on the mandatory deemed repatriation of accumulated previously untaxed foreign earnings of Frontage Shanghai (the "Transition Tax")
"2018 Share Incentive Plan"	the post-IPO share incentive plan adopted by the Company on May 11, 2019
"2021 Share Award Scheme"	the "2021 Share Award Scheme" constituted by the rules adopted on January 22, 2021, in its present form or as amended from time to time in accordance with the provisions therein
"ACME"	Acme Biosciences, Inc., a corporation incorporated under the laws of Delaware, U.S. on January 16, 2001, and a subsidiary of Frontage Labs
"ADME"	absorption, distribution, metabolism and excretion
"Articles of Association"	the articles of association of the Company, as amended from time to time
"Audit and Risk Management Committee"	the audit and risk management committee of the Board
"Award Participants"	the selected participants who were awarded the Awarded Shares under the 2021 Share Award Scheme

"Awarded Shares"	the 22,950,500 Shares granted by the Company to the Award Participants pursuant to the terms of the 2021 Share Award Scheme
"Biotranex"	Biotranex, LLC, a company established under the laws of New Jersey, USA on February 19, 2009, and a subsidiary of Frontage Labs
"Board of Directors" or "Board"	the board of directors of the Company from time to time
"CAD"	Canadian Dollars, the lawful currency of Canada
"CG Code"	the Corporate Governance Code as set out in the Listing Rules
"CMC"	stands for Chemistry, Manufacturing and Controls. The Group's portfolio of CMC services spans from drug discovery to the post-approval phase, including lead compound quantification and analytical testing for the discovery phase, formulation development, Good Laboratory Practice toxicology batch studies, release and product testing, stability testing, Clinical Trial Materials and Good Manufacturing Practice manufacturing, extractability and leachability studies and commercial product release following approval of an application
"CODM"	the chief operating decision maker of the Group
"Company"	Frontage Holdings Corporation, a company incorporated under the laws of the Cayman Islands with limited liability on April 16, 2018
"Connected Award Participants"	the Award Participants who are connected with the Company or connected persons of the Company
"COVID-19"	the novel coronavirus (COVID-19), a coronavirus identified as the cause of an outbreak of respiratory illness
"CRO"	Contract research organization
"Director(s)"	the director(s) of the Company from time to time

"DMPK"	Drug Metabolism and Pharmacokinetics, refers to studies designed to determine the absorption and distribution of an administered drug, the rate at which a drug takes effect, the duration a drug maintains its effects and what happens to the drug after being metabolized by the body
"Earnout Consideration"	cash payable in three years installments to be determined based upon the Surviving Entity's Adjusted EBITDA (as defined in the Company's announcement dated June 28, 2021)
"EIT"	PRC Enterprise Income Tax
"EIT Law"	Enterprise Income Tax Law of the PRC
"EMA"	the European Medicines Agency
"FDA"	the U.S. Food and Drug Administration
"Frontage Labs"	Frontage Laboratories, Inc., a company incorporated under the laws of Pennsylvania, United States on April 21, 2004 and the wholly-owned subsidiary of the Company
"Frontage Shanghai"	Frontage Laboratories (Shanghai) Co., Ltd., a company established in the PRC on August 2, 2005 and a subsidiary of the Company
"Frontage Suzhou"	Frontage Laboratories (Suzhou) Co, Ltd., a company established in the PRC on January 7, 2014, and a subsidiary of the Company
"Global Offering"	the Hong Kong Public Offering (as defined in the Prospectus) and the International Offering (as defined in the Prospectus)
"GLP"	Good Laboratory Practice, a quality system of management controls for research laboratories and organizations to try to ensure the uniformity, consistency, reliability, reproducibility, quality and integrity of chemical and pharmaceuticals non-clinical safety tests
"Group", "We", "Our" or "Us"	the Company and its subsidiaries

"Hangzhou Tigermed"	Hangzhou Tigermed Consulting Co., Ltd., a company established in the PRC on December 15, 2004 with its shares being listed on ChiNext market of the Shenzhen Stock Exchange with stock code 300347 and on the Main Board of the Hong Kong Stock Exchange with stock code 3347, which is one of the controlling shareholders of the Company
"Heyan" or "Heyan Biotech"	Wuhan Heyan Biotech Co., LTD., a company established in the PRC and a subsidiary of the Company
"HK$"	Hong Kong dollars, the lawful currency of Hong Kong
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"Hongkong Tigermed"	Hongkong Tigermed Co., Limited, a company incorporated under the laws of Hong Kong with limited liability on September 14, 2011 and which is a wholly-owned subsidiary of Hangzhou Tigermed and one of the controlling shareholders of the Company
"IFRSs"	International Financial Reporting Standards
"IPO"	initial public offering
"Listing"	the listing of the Shares on the Main Board of the Stock Exchange
"Listing Rules"	the Rules Governing the Listing of Securities on the Stock Exchange, as amended or supplemented from time to time
"Model Code"	the Model Code for Securities Transactions by Directors of Listed Issues contained in Appendix 10 to the Listing Rules
"NMPA"	the National Medical Products Administration of the PRC
"Non-connected Award Participants"	the Award Participants who are not connected with the Company or connected persons of the Company
"Ocean Ridge"	Ocean Ridge Biosciences, Inc.
"PRC" or "China"	the People's Republic of China, but for the purposes of this report only, except where the context requires, references to the PRC or China exclude Hong Kong, Macau and Taiwan

"Pre-IPO Share Incentive Plans"	the 2008 Share Incentive Plan and the 2015 Share Incentive Plan
"Prospectus"	the prospectus of the Company dated May 17, 2019
"Quintara"	Quintara Discovery, Inc., a corporation incorporated under the laws of California, U.S. on May 17, 2013
"R&D"	research and development
"Remuneration Committee"	the remuneration committee of the Board
"Reporting Period"	the year ended December 31, 2021
"RMB"	Renminbi, the lawful currency of the PRC
"RMI"	RMI Laboratories, LLC, a limited liability company established under the laws of Pennsylvania, United States on September 22, 2008, and a subsidiary of the Company
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended or supplemented from time to time
"Share(s)"	ordinary shares(s) with nominal value USD0.00001 each in the issued share capital of the Company
"Shareholder(s)"	holder(s) of Shares
"Stock Exchange" or "Hong Kong Stock Exchange"	The Stock Exchange of Hong Kong Limited
"US$" or "USD"	United States Dollars, the lawful currency of the U.S.
"USA", the "United States" or the "U.S."	the United States of America
"%"	per cent

In this report, the terms "associate", "connected person", "controlling shareholder" and "subsidiary" shall have the meanings given to such terms in the Listing Rules, unless the context otherwise requires.