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## FRONTAGE HOLDINGS CORPORATION

方達控股公司\*

(Incorporated in the Cayman Islands with limited liability)

(Stock Code: 1521)

### ANNOUNCEMENT ON ANNUAL RESULTS FOR THE YEAR ENDED DECEMBER 31, 2021

FINANCIAL HIGHLIGHTS		2021 <i>US\$ million</i>	2020 <i>US\$ million</i>	Change
Revenue		<b>184.4</b>	125.8	<b>46.6%</b>
Gross Profit		<b>66.7</b>	41.5	<b>60.7%</b>
Gross Profit Margin		<b>36.2%</b>	33.0%	
EBITDA		<b>51.6</b>	34.0	<b>51.8%</b>
EBITDA Margin		<b>28.0%</b>	27.1%	
Adjusted EBITDA <sup>(1)</sup>		<b>60.8</b>	35.0	<b>73.7%</b>
Adjusted EBITDA Margin		<b>33.0%</b>	27.8%	
Net Profit		<b>18.9</b>	17.4	<b>8.6%</b>
Net Profit Margin		<b>10.3%</b>	13.8%	
Adjusted Net Profit <sup>(2)(3)</sup>		<b>32.2</b>	20.3	<b>58.6%</b>
Adjusted Net Profit Margin		<b>17.5%</b>	16.2%	
		US\$	US\$	
Earnings per share	– Basic	<b>0.0090</b>	0.0085	<b>5.9%</b>
	– Diluted	<b>0.0087</b>	0.0083	<b>4.8%</b>
Adjusted Earnings per share	– Basic	<b>0.0155</b>	0.0100	<b>55.0%</b>
	– Diluted	<b>0.0150</b>	0.0097	<b>54.6%</b>

The Board does not recommend any payment of final dividend for the Reporting Period.

- (1) 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.
- (2) Calculation of adjusted net profit is modified and calculated as net profit for the Reporting Period, 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 to better reflect the Company's current business and operations.
- (3) 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) 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.

The Board of the Company is pleased to announce the consolidated annual results of the Group for the Reporting Period together with comparative figures for the corresponding period in 2020 as set out below:

## CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended December 31, 2021

	<i>NOTES</i>	<b>2021</b> <i>US\$'000</i>	2020 <i>US\$'000</i>
Revenue	4	<b>184,441</b>	125,811
Cost of services		<u>(117,740)</u>	<u>(84,326)</u>
Gross profit		<b>66,701</b>	41,485
Other income	6	<b>4,561</b>	6,261
Other gains and losses, net	7	<b>(1,982)</b>	(139)
Research and development expenses		<b>(2,434)</b>	(1,841)
Impairment losses (recognized)/reversal on			
– trade receivables		<b>(665)</b>	80
– unbilled revenue		<b>(108)</b>	(165)
Selling and marketing expenses		<b>(5,719)</b>	(5,066)
Administrative expenses		<b>(32,718)</b>	(18,829)
Share of profit/(loss) of associates		<b>9</b>	(68)
Finance costs	8	<u><b>(2,579)</b></u>	<u>(2,196)</u>
Profit before tax	9	<b>25,066</b>	19,522
Income tax expense	10	<u><b>(6,144)</b></u>	<u>(2,107)</u>
<b>Profit for the year</b>		<u><b>18,922</b></u>	<u>17,415</u>
<b>Other comprehensive income</b>			
<i>Items that may be reclassified subsequently to profit or loss:</i>			
Exchange differences arising from translation of foreign operations		<u><b>1,792</b></u>	<u>3,219</u>
<b>Total comprehensive income for the year</b>		<u><b>20,714</b></u>	<u>20,634</u>
<b>Profit for the year attributable to:</b>			
Owners of the Company		<b>18,428</b>	17,150
Non-controlling interests		<u><b>494</b></u>	<u>265</u>
		<u><b>18,922</b></u>	<u>17,415</u>
<b>Total comprehensive income for the year attributable to:</b>			
Owners of the Company		<b>20,166</b>	20,310
Non-controlling interests		<u><b>548</b></u>	<u>324</u>
		<u><b>20,714</b></u>	<u>20,634</u>
Earnings per share			
– Basic (US\$)	11	<u><b>0.0090</b></u>	<u>0.0085</u>
– Diluted (US\$)		<u><b>0.0087</b></u>	<u>0.0083</u>

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at December 31, 2021

	<i>NOTES</i>	<b>2021</b> <i>US\$'000</i>	2020 <i>US\$'000</i> (Restated)
<b>Non-current Assets</b>			
Property, plant and equipment		<b>90,715</b>	42,445
Right-of-use assets		<b>55,520</b>	39,836
Goodwill		<b>71,453</b>	24,907
Intangible assets		<b>31,693</b>	14,793
Interests in associates		<b>5,342</b>	473
Deferred tax assets		<b>7,651</b>	5,154
Financial assets at fair value through profit or loss ("FVTPL")		<b>1,568</b>	–
Restricted bank deposits	<i>14</i>	<b>300</b>	300
Other long-term deposits		<b>436</b>	417
Other non-current assets		<b>94</b>	–
		<hr/> <b>264,772</b>	<hr/> 128,325
<b>Current Assets</b>			
Inventories		<b>946</b>	724
Trade and other receivables and prepayments	<i>12</i>	<b>42,543</b>	27,251
Unbilled revenue	<i>13</i>	<b>12,299</b>	7,736
Structured deposits		<b>4,078</b>	2,452
Tax recoverable		<b>5,232</b>	4,131
Restricted bank deposits	<i>14</i>	<b>1,343</b>	8
Cash and cash equivalents	<i>14</i>	<b>144,629</b>	212,087
		<hr/> <b>211,070</b>	<hr/> 254,389
<b>Current Liabilities</b>			
Trade and other payables	<i>15</i>	<b>37,478</b>	19,781
Advances from customers	<i>16</i>	<b>23,632</b>	17,870
Bank borrowings		<b>11</b>	–
Income tax payable		<b>4,373</b>	2,475
Amounts due to shareholders		<b>210</b>	210
Lease liabilities		<b>7,289</b>	5,191
		<hr/> <b>72,993</b>	<hr/> 45,527

	<i>NOTES</i>	<b>2021</b> <i>US\$'000</i>	2020 <i>US\$'000</i> (Restated)
<b>Net Current Assets</b>		<u>138,077</u>	<u>208,862</u>
<b>Total Assets less Current Liabilities</b>		<u>402,849</u>	<u>337,187</u>
<b>Non-current Liabilities</b>			
Deferred tax liabilities		11,197	3,081
Lease liabilities		50,550	35,431
Other long-term liabilities		<u>18,018</u>	<u>9,803</u>
		<u>79,765</u>	<u>48,315</u>
<b>Net Assets</b>		<u><b>323,084</b></u>	<u><b>288,872</b></u>
<b>Capital and Reserves</b>			
Share capital	<i>17</i>	20	20
Reserves		<u>319,822</u>	<u>287,849</u>
Equity attributable to owners of the Company		319,842	287,869
Non-controlling interests		<u>3,242</u>	<u>1,003</u>
<b>Total Equity</b>		<u><b>323,084</b></u>	<u><b>288,872</b></u>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2021

## 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.

**(b) 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. 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:

	<b>As previously reported</b> <i>US\$'000</i>	<b>Adjustments</b> <i>US\$'000</i>	<b>As restated</b> <i>US\$'000</i>
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.

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

### 4. 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, Safety and Toxicology Services, ADME 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.
- 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:

	<b>2021</b> <i>US\$’000</i>	2020 <i>US\$’000</i> (Restated)
Laboratory testing	<b>82,612</b>	61,916
CMC	<b>28,052</b>	22,576
Preclinical research	<b>47,090</b>	27,366
Bioequivalence	<b>10,737</b>	7,531
Chemistry	<b>15,950</b>	6,422
	<b>184,441</b>	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.

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.

## **5. SEGMENT INFORMATION**

Operating segments are determined based on the Group's internal reports which are submitted to chief executive officer, being the chief operating decision maker ("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.

## 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 <i>US\$'000</i>	PRC <i>US\$'000</i>	Total <i>US\$'000</i>
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
	<u>125,320</u>	<u>59,121</u>	<u>184,441</u>
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)
	<u>10,385</u>	<u>14,681</u>	<u>25,066</u>
Profit before tax	<u><u>10,385</u></u>	<u><u>14,681</u></u>	<u><u>25,066</u></u>

***For the year ended December 31, 2020***

	North America <i>US\$'000</i>	PRC <i>US\$'000</i>	Total <i>US\$'000</i>
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
	<u>87,935</u>	<u>37,876</u>	<u>125,811</u>
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)
	<u>9,649</u>	<u>9,873</u>	<u>19,522</u>
Profit before tax	<u>9,649</u>	<u>9,873</u>	<u>19,522</u>

The accounting policies of reportable segments are the same as the Group's accounting policies.

## Other segment information

Amounts included in the measure of segment profit or loss:

### *For the year ended December 31, 2021*

	North America <i>US\$'000</i>	PRC <i>US\$'000</i>	Total <i>US\$'000</i>
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)
	<u>–</u>	<u>(2)</u>	<u>(2)</u>

### *For the year ended December 31, 2020*

	North America <i>US\$'000</i>	PRC <i>US\$'000</i>	Total <i>US\$'000</i>
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)
	<u>–</u>	<u>(53)</u>	<u>(53)</u>

## 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 <i>US\$'000</i>	2020 <i>US\$'000</i>
Revenue from external customers		
– USA	115,007	78,082
– PRC	51,401	33,984
– Rest of the world	18,033	13,745
	<u>184,441</u>	<u>125,811</u>

Information about the Group's non-current assets by geographical location of the assets are presented below:

	<b>2021</b> <i>US\$'000</i>	2020 <i>US\$'000</i> (Restated)
Non-current assets excluding financial assets and deferred tax assets		
– North America	<b>180,067</b>	91,938
– PRC	<b>74,750</b>	30,516
	<b>254,817</b>	122,454

#### **Information about major customers**

Revenue from customers contributing over 10% of the total revenue of the Group are as follows:

	<b>2021</b> <i>US\$'000</i>	2020 <i>US\$'000</i>
Company A	<b>26,055</b>	19,710

#### **6. OTHER INCOME**

	<b>2021</b> <i>US\$'000</i>	2020 <i>US\$'000</i>
Interest income	<b>1,885</b>	4,143
Government grants related to income ( <i>note</i> )	<b>1,337</b>	942
Income from rendering service	<b>1,339</b>	1,176
	<b>4,561</b>	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.

## 7. OTHER GAINS AND LOSSES, NET

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Net foreign exchange loss	(127)	(133)
Fair value change on financial liabilities measured at FVTPL	(1,725)	18
Loss on disposal of property, plant and equipment	(2)	(53)
Others	(128)	29
	<u>(1,982)</u>	<u>(139)</u>

## 8. FINANCE COSTS

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Interest expense on lease liabilities	2,579	2,190
Interest expense on bank borrowings	–	6
	<u>2,579</u>	<u>2,196</u>

## 9. PROFIT BEFORE TAX

Profit before tax has been arrived at after charging:

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
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
	<u>83,771</u>	<u>52,142</u>
Auditors' remuneration	<u>279</u>	<u>217</u>

## 10. INCOME TAX EXPENSE

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
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)
	<u>3,791</u>	<u>1,102</u>
Deferred tax:		
– Current year	2,353	1,005
Total income tax expense	<u>6,144</u>	<u>2,107</u>

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 December 22, 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 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 to 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.

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.

## 11. 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 <i>US\$'000</i>	2020 <i>US\$'000</i>
Earnings:		
Earnings for the purpose of calculating basic and diluted earnings per share	<u>18,428</u>	<u>17,150</u>
<b>Number of Shares:</b>		
	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	<u>13,746,236</u>	<u>–</u>
Weighted average number of ordinary shares for the purpose of calculating diluted earnings per share	<u>2,115,687,598</u>	<u>2,078,537,878</u>



**12. TRADE AND OTHER RECEIVABLES AND PREPAYMENTS**

	<b>2021</b> <i>US\$'000</i>	2020 <i>US\$'000</i>
Trade receivables		
– third parties	<b>37,465</b>	25,522
– related parties	<b>242</b>	311
Less: loss allowance for trade receivables	<b>(3,684)</b>	(3,006)
	<b>34,023</b>	22,827
Other receivables		
– third parties	<b>1,983</b>	1,149
– related parties	<b>590</b>	1,012
Less: loss allowance for other receivables	<b>–</b>	(70)
	<b>2,573</b>	2,091
Note receivables		
– third parties	<b>105</b>	584
Prepayments		
– third parties	<b>3,627</b>	1,727
Value added tax recoverable	<b>2,215</b>	22
	<b>42,543</b>	27,251

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 <i>US\$'000</i>	2020 <i>US\$'000</i>
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
	<u>34,023</u>	<u>22,827</u>

### 13. UNBILLED REVENUE

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Unbilled revenue		
– third parties	12,651	7,786
– related parties	224	409
Less: loss allowance for unbilled revenue	<u>(576)</u>	<u>(459)</u>
	<u>12,299</u>	<u>7,736</u>

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.

### 14. CASH AND CASH EQUIVALENTS/RESTRICTED BANK DEPOSITS

Cash and cash equivalents comprise 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.

## 15. TRADE AND OTHER PAYABLES

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i> (Restated)
Trade payables		
– third parties	11,425	7,113
– related parties	38	297
	<u>11,463</u>	<u>7,410</u>
Bills payable		
– third parties	3,469	–
Other payables		
– third parties	1,495	3,682
– related parties	5	–
	<u>1,500</u>	<u>3,682</u>
Contingent consideration payables	9,618	2,400
Consideration payables	750	982
Salary and bonus payables	10,228	4,621
Other taxes payable	450	686
	<u><u>37,478</u></u>	<u><u>19,781</u></u>

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 <i>US\$'000</i>	2020 <i>US\$'000</i>
Within 90 days	8,002	6,960
91 days to 1 year	3,447	219
Over 1 year	14	231
	<u>11,463</u>	<u>7,410</u>

## 16. ADVANCES FROM CUSTOMERS

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i>
Advances from customers		
– third parties	23,247	17,499
– related parties	385	371
	<u>23,632</u>	<u>17,870</u>

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.

Revenue of US\$11,206,000 was recognized in 2021 (2020: US\$7,130,000) were included in the advances from customers at the beginning of the year.

## 17. SHARE CAPITAL

	Number of shares	Amount <i>US\$</i>
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
	<u>5,000,000,000</u>	<u>50,000</u>
	Number of shares	Amount <i>US\$</i>
		Shown in the consolidated financial statements as <i>US\$'000</i>
Issued and Fully Paid:		
As at January 1, 2020	2,007,640,910	20,078
Exercise of share options ( <i>Note</i> )	29,837,000	298
	<u>2,037,477,910</u>	<u>20,376</u>
As at December 31, 2020 and January 1, 2021	2,037,477,910	20,376
Exercise of share options ( <i>Note</i> )	13,977,500	140
	<u>2,051,455,410</u>	<u>20,516</u>
As at December 31, 2021	2,051,455,410	20,516

*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.

## 18. FINANCIAL INSTRUMENTS

### Categories of financial instruments

	2021 <i>US\$'000</i>	2020 <i>US\$'000</i> (Restated)
<b>Financial assets</b>		
Financial assets at amortized cost	182,973	237,897
Financial assets at FVTPL	<u>5,646</u>	<u>2,452</u>
<b>Financial liabilities</b>		
Financial liabilities at amortized cost	75,242	52,906
Financial liabilities at FVTPL	<u>27,636</u>	<u>12,203</u>

### *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.

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 <i>US\$'000</i>	2020 <i>US\$'000</i>
<b>Assets</b>		
US\$	5,501	1,726
EUR	<u>31</u>	<u>–</u>
<b>Liabilities</b>		
US\$	<u>504</u>	<u>136</u>

## 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 US\$'000	One to five years US\$'000	Over five years US\$'000	Total undiscounted cash flows US\$'000	Carrying amount US\$'000
<b>As at December 31, 2021</b>						
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		<u>34,676</u>	<u>44,270</u>	<u>26,835</u>	<u>105,781</u>	<u>102,878</u>
<b>As at December 31, 2020 (restated)</b>						
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		<u>20,166</u>	<u>20,047</u>	<u>27,171</u>	<u>67,384</u>	<u>65,109</u>

## 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.

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.

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.

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.

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.

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.

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.

## 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  $-20^{\circ}\text{C}$  and  $-70^{\circ}\text{C}$  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.

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.

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.

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.

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.
- **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.
- **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.

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.

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.

## **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.

### **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).

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 Lab’s 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 Business*

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.

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.

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.

### **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 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
	<u>184,441</u>	<u>125,811</u>

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	%
<b>Revenue</b>				
– USA	115,007	62.3%	78,082	62.1%
– China	51,401	27.9%	33,984	27.0%
– Rest of the world <i>(Note)</i>	18,033	9.8%	13,745	10.9%
<b>Total</b>	<b>184,441</b>	<b>100%</b>	<b>125,811</b>	<b>100%</b>

*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.

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.

## **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.

## **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.

## 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 were primarily due to 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 US\$' 000	2020 US\$' 000 (Restated)
<b>Net Profit</b>	<u>18,922</u>	<u>17,415</u>
Add: Share-based compensation expense	7,517	935
Loss/(gain) arising on financial liabilities measured as fair value through profit or loss <i>(Note)</i>	1,725	(18)
Amortization of acquired intangible assets from mergers and acquisitions	<u>4,074</u>	<u>2,014</u>
<b>Adjusted Net Profit</b>	<u><u>32,238</u></u>	<u><u>20,346</u></u>
<b>Adjusted Net Profit Margin</b>	<u><u>17.5%</u></u>	<u><u>16.2%</u></u>

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.

*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.

## **EBITDA**

The EBITDA<sup>1</sup> 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<sup>2</sup> 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.

## **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.

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

<sup>2</sup> 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.

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.

### **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 prepayment 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.

## **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.

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)
	<hr/>	<hr/>
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
	<hr/>	<hr/>
Cash and cash equivalents at the end of the year	<b>144,629</b>	<b>212,087</b>

## 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.

### ***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.

### **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.

## **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.

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.

## **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
<b>Total</b>	<b>193.2</b>	<b>100%</b>	<b>137.5</b>	<b>140.4</b>	<b>55.7</b>	

## FINAL DIVIDEND

The Board does not recommend any payment of a final dividend for the Reporting Period (2020: Nil).

## ANNUAL GENERAL MEETING

The AGM of the Company will be held on Thursday, May 26, 2022 and the notice of the AGM will be published and dispatched to the Shareholders in accordance with the Company's articles of association and the Listing Rules in due course.

## **CLOSURE OF REGISTER OF 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.

## **PURCHASE, SALE OR REDEMPTION OF THE 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.

## **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.

## **CORPORATE GOVERNANCE CODE**

During the Reporting Period, the Company has followed the principles and complied with all the 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.

Pursuant to code provision C.2.1 of the CG Code, 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, an executive Director, performed these two roles in the Company. The Board believes that vesting the roles of the chairman and chief executive officer of the Company in the same person can help to 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 considers that the deviation from code provision C.2.1 of the CG Code is appropriate in the circumstances of the Company.

Pursuant to code provision F.2.2 of the CG Code, the chairman of the board should attend the annual general meeting. Dr. Song Li, the chairman of the Board in 2021, 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 arrangements were 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, the current chairman of the Board, will use his best endeavors to attend all future Shareholders’ meetings of the Company.

## **REVIEW OF ANNUAL RESULTS BY THE AUDIT AND RISK MANAGEMENT COMMITTEE**

The Audit and Risk Management Committee has reviewed together with the Company’s management and BDO Limited, the Company’s external auditor, the accounting principles and policies, internal controls, risk management and financial reporting adopted by the Group, and the audited consolidated financial statements of the Group for the Reporting Period. The Audit and Risk Management Committee is satisfied that the audited consolidated financial statements of the Group for the Reporting Period were prepared in accordance with the applicable accounting standards and fairly present the Group’s financial position and results for the Reporting Period.

## **SCOPE OF WORK OF BDO LIMITED**

The figures in respect of the Group’s consolidated statement of financial position, consolidated statement of profit or loss and other comprehensive income and the related notes thereto for the Reporting Period as set out in the preliminary announcement have been agreed by the Group’s auditor, BDO Limited, to the amounts set out in the Group’s audited consolidated financial statements for the Reporting Period. The work performed by BDO Limited in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the Hong Kong Institute of Certified Public Accountants and consequently no assurance has been expressed by BDO Limited on this announcement.

## **PUBLICATION OF THE 2021 ANNUAL RESULTS ANNOUNCEMENT AND 2021 ANNUAL REPORT**

This annual results announcement is published on the websites of the Stock Exchange ([www.hkexnews.hk](http://www.hkexnews.hk)) and the Company ([www.frontagelab.com](http://www.frontagelab.com)). The annual report of the Company for the Reporting Period containing all the information required under the Listing Rules will be published on the aforesaid websites of the Stock Exchange and the Company and will be dispatched to the Shareholders in due course.

## 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
“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 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
“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
“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

By Order of the Board  
**Frontage Holdings Corporation**  
**Dr. Song Li**  
*Chairman*

Hong Kong, March 28, 2022

*As at the date of this announcement, the Board comprises Dr. Song Li and Dr. Zhihe Li as executive Directors; Mr. Jun Gao as non-executive Director; and Mr. Yifan Li, Mr. Erh Fei Liu and Dr. Jingsong Wang as independent non-executive Directors.*

\* *For identification purpose only*